Negotiating Tuberculosis in Pakistan:
Social Capital Analysis of Barriers and Resources

By

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2020

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This is to certify that the research work presented in this thesis, entitled **"Negotiating Tuberculosis in Pakistan: Social Capital Analysis of Barriers and Resources"** was conducted by **Mr. Majid Hussain Alias Ghalib Hussain,** under the supervision of Dr. Anwar Mohyuddin, Assistant Professor Department of Anthropology, Quaid-i-Azam University, Islamabad.

No part of this thesis has been submitted anywhere else for any other degree. This thesis is submitted to the Department of Anthropology, Quaid-i-Azam University, Islamabad, in the partial fulfillment of the requirements for the degree of Doctor of Philosophy in the Field of Anthropology, Department of Anthropology, Quaid-i-Azam University, Islamabad.

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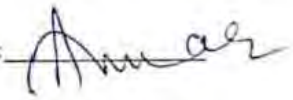
Signature: 

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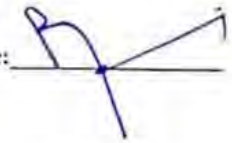
Signature: 

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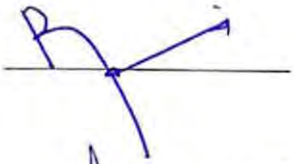

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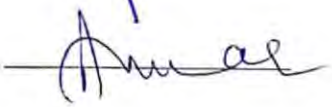

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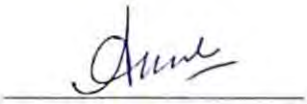

Acknowledgment

I must start by thanking Almighty Allah who gave me courage and strength and enabled me to overcome various hurdles that came in my way during the process of research and thesis writing.

I would need hundred more pages to list all those who deserve my highest gratitude for their invaluable support and intellectual input for my research from beginning to final completion of this thesis.

This work could not have been accomplished without the continuous inspiration, help and guidance of my worthy supervisor Dr. Anwaar Mohyuddin. His supervision and healthy feedback motivated me to pursue this degree. He took continued interest in capacity of mentor for me throughout the process of fieldwork and thesis writing.

I admire and appreciate unconditional support of Judith Littleton and William Sax at the time of synopsis writing. They actively contributed and guided me through their critical feedback.

I must thank to the people of Murree who were very generous and supporting. They shared their stories, opinions, histories and sufferings with me in a very candid manner. Though I am not sure if they left some secrets hidden, they greeted me with open arms each time I visited them. It had been the biggest challenge for me to live among them with honor and dignity, and try to write about their lives and narrative. This would not have been possible without their personal interest.

The names of respondents mentioned in this thesis, apart from a few high officials, are not real as I was not permitted by them for showing their identity. I am very grateful to the administration of all hospitals of Murree especially THQ hospital and Samli Hospital, where I was supported to a great degree for initial contact with my respondents. My key-informants were very kind and assisted me at every step of study.

Harvard community has been a source of insight and great help. Salmaan Keshavjee has been a model to understand anthropology and global health. Salmaan read my chapters with interest and encouraged me on the aspect of clarifications. Aaron Shakow read and re-read my work to clarify my sense of writing and thesis organization. Aaron was very generous with his time and camaraderie, his thinking and mentorship has deeply shaped and challenged both the questions I asked and the sources I searched for tentative answers. Andrew James McDowell has been invaluable conversation partner and help to organize my scattered ideas.

The lectures of Paul Farmer, Arthur Kleinman, Anne Becker and Salmaan Keshavjee in class of SW-25 helped in re-thinking about TB in a global to local perspective. The Friday Seminar in Anthropology must be named as well.

A note of thanks for my Pakistani and American friends at Boston Naeem, Saboor, Ali Shah Gee, Rizwan Jagani and Heather Toner for their support during hours of home sickness. Saira Orakzai, a Pakistani Postdoc fellow at Harvard, was also supportive during times when I used to lose patience. Sohail Mujhaid's contribution is more than a usual aid.

This dissertation is also the result of significant financial outlay. Although there was no grant awarded to conduct this field study but a little financial support from Quaid-I-Azam University was valuable to manage some of the field cost. Prime Minister Fee Reimbursement Programme made me feel relaxed regarding semester dues, and supported to some degree. Higher Education Commission of Pakistan made my dream come true for organizing a visit to Harvard University to write the thesis. Department of Global Health and Social Medicine of Harvard Medical School awarded stipends that made my life easy in Boston.

A continuous social, psychological and academic support and encouragement from Rasheed Baig, Haroon Bhutta and Dr. Irfan Qasrani has played a great part to successfully complete the long journey of Ph.D. Enormous support by Yasir Baig in quantitative part of the study is highly appreciated. Faiz Rasool, Abdul Samad, Naeem Dhareja and other friends supported this study in various ways that need acknowledgement.

I would like to thank Dr. Aneela Sultana (In-Charge, Department of Anthropology) for her kind cooperation and inspiration throughout the process of research. I also owe my gratitude to other faculty members at Department of Anthropology especially Dr. Waheed Iqbal Chaudhry, Dr. Muhammad Ilyas Bhatti, Dr. Rao Nadeem Alam, Dr. Inam Ullah Leghari, Dr. Sadia Abid, Dr. Ikram Badshah and Mr. Muhammad Waqas Saleem for their encouragement. I am also thankful to Mr. Sajjad Haider (Fieldwork Supervisor) for his continuous backing.

I pay gratitude to my MSc. supervisor Mr. Tariq Mehmood who nourished my research skill and ability. My gratefulness for my M.Phil supervisor Professor Dr. Hafeez-Ur-Rehman, former Chairman of the deparment, for his all blessings and enabling me with art of Enghnography.

I also feel indebted to my family for their unabated support to me with all their affection and prayers especially my father, mother, and brothers. They had always been praying for my safe travel in Murree and successful completion of PhD.

This has been a group effort. Energized and intellectual from people in Murree, Islamabad, Lahore, Auckland, Heidelberg, Cambridge and Boston have helped to formulate initial thoughts on what will be life time work. I will carry them with me and do my best to live with generosity they have shown to me.

Last but not the least I owe my sincere gratitude to Mr. Sohail Ahmed and Professor Abdul Ghaffar who put in long hours of his invaluable time to proofread and edited my thesis and put it in the present shape.

Majid Hussain Alias Ghalib Hussain

Abstract

"Negotiating Tuberculosis" is the outcome of sixteen months field work which examines existing barriers and available resources for reaching TB centers of Murree Punjab, Pakistan. During this study, I engaged staff from National and Provincial Tuberculosis Control Programmes, local healthcare structure besides formal and informal biomedical providers and TB patients to know that how the initiatives of TB control program interacts with social life in Murree within the concept of social capital, political economy of health, geography and environment. The major argument of this study is that how global TB policies are being implemented through a local healthcare structure that is fragmented in various indicators.

This research was conducted in two phases. The first phase was to interact with TB patients in OPD of Samli Hospital where convenient sampling was used and 93 TB patients showed their willingness to become part of study. Multi-dimensional Poverty Index and social capital measurement tools were applied to measure the level of deprivation and social capital. For the second phase, a sample of 20 TB patients was selected through judgmental sampling for in-depth study through life history method. Qualitative methods such as participant observation, informal discussions, key-informants interviews, FGDs and in-depth interviews were conducted to understand the research problem.

Overall, healthcare structure of Murree had not enough human resources and facilities to develop the trust of people for initial screening of TB. The overburdening of government hospitals was the result of political economy of health through which local healthcare structure was not developed. The unclear population growth had failed to implement global TB control programme through a broken healthcare structure. In such a situation, social capital is the only tool to get easy access to doctor and TB diagnostic facility but it is not the property of poor segments of Murree. The utilization of social capital had resulted in inequalities and placed barriers for the poor to get equal access to available health facilities to cure their TB.

A fargile doctor-patient relationship was based in various forms of powers exhibition and it had turned into low level of trust among the poor segments who had no financial capacity to visit doctors on their private clinics regularly. This power-based relationship was one of the barriers for visiting government healthcare facilities. The

political economy of health gained attention of doctors towards private practice and the poor had more trust in a quack. This situation turned into health risk for the poor and marginalized segments of Murree.

The poverty and political economy were the major barriers to develop social capital among the poor and due to their low level of social capital, they could not find equal access to distribution of social goods and services. There is always a contextual background for the development of health seeking behavior. Long standing poverty, political economy, geography, environment and least trust in government healthcare facility developed a low health seeking/prioritizing behavior among the poor segments of Murree due to which they initiated from household remedies to cure every disease. This behavior was the cause of following different pathways for finally reaching a government TB center that remained a barrier for timely TB diagnosis.

Abbreviations

ACR	Annual Confidential Report
ADB	Asian Development Bank
AM	Amplitude Modulation
BHU	Basic Health Unit
BISP	Benazir Income Support Program
CHWs	Community Health Workers
CMH	Combined Military Hospital
DCO	District Coordination Officer
DG	Director General
DMS	Deputy Medical Superintendent
DOTS	Directly Observed Treatment Short-Course
EPI	Expanded Programme on Immunization
FATA	Federally Administered Tribal Areas
FCPS	Fellow of College of Physicians and Surgeons
FGD	Focused Group Discussion
FIR	First Information Report
FM	Frequency Modulation
FP	Family Planning
GHQ	General Headquarters
GNP	Gross National Product
GPs	General Practitioners
HIV	Human Immunodeficiency Virus
ICT	Islamabad Capital Territory
IFIs	International Financial Institutions
IMAs	International Medicaid Agencies
IMDC	Islamabad Medical and Dental College
IMDC	Islamabad Muzaffarabad Dual Carriageway
IPL	International Poverty Line
KP	Khyber Pakhtunkhwa
LHS	Lady Health Supervisor
LHW	Lady Health Worker
LPG	Liquefied Petroleum Gas
MBBS	Bachelor of Medicine, Bachelor of Surgery, or in Latin *Medicinae Baccalaureus, Baccalaureus Chirurgiae*
MCH	Mother & Child Care Health
MDR-TB	Multi-drug-resistant tuberculosis
MFM	Modern Facilitation Mechanism
MGDs	Millennium Development Goals
MLC	Medico Legal Certificate
MNA	Member of National Assembly
MNCH	Maternal and Newborn Child Health
MO	Medical Officer
MoH	Ministry of Health
MPA	Member of Provincial Assembly
MPI	Multidimensional Poverty Index
MS	Medical Superintendent
NIH	National Institute of Health

NPFP&PHC	National Program for Family Planning & Primary Health Care
NTP	National TB Control Programme
OPD	Outdoor Patient Department
PHC	Primary Health Care
PIMS	Pakistan Institute of Medical Sciences
PMDC	Pakistan Medical and Dental Council
PML-N	Pakistan Muslim League Nawaz
PMT	Proxy Means Testing
PPM	Public-Private Mix
PPPP	Pakistan People's Party Parliamentarian
PPSC	Punjab Public Service Commission
PSDP	Public Sector Development Programme
PSLM	Pakistan Social and Living Standards Measurement
PTI	Pakistan Tehreek-e-Insaf
PTP	Punjab Tuberculosis Control Program
PTPs	Provincial Tuberculosis Control Programs
RHC	Rural Health Center
SAP	Structural Adjustment Programs
SMO	Senior Medical Officer
TB	Tuberculosis
TBAs	Traditional Birth Attendants
THQ	Tehsil Headquarters Hospital
TV	Television
UC	Union Councils
UNICEF	United Nations International Children's Emergency Fund
USA	United States of America
WB	World Bank
WHO	World Health Organization
WMO	Woman Medical Officer
XDR-TB	Extensively drug-resistant tuberculosis
YDA	Young Doctors Association

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Chapter 1

INTRODUCTION

1.1 The Background

The prevalence of Tuberculosis[1] (TB) is not a new phenomenon in Pakistan. TB is the biggest infectious killer of adults worldwide. It has remained an unacceptable burden for the developing countries and according to the statistics of World Health Organization (WHO, 2011, 2012, 2013a, 2015a, 2016b, 2017a) TB has been the most common disease as at an average 1.5 million people were infected and over 50,000 annual deaths were recorded officially during these years in Pakistan. TB has caused human losses and sufferings that have overwhelmingly affected the poor and marginalized people of low and middle-income developing countries and Global TB report of (WHO, 2017a) has rated Pakistan as one of the most vulnerable countries in Asian Region and reportedly 10.4 million cases of TB were estimated while 1.8 million people died all over the world. Highlighting the sorrows of Pakistan it would be enough to mention that the Father of Nation Quaid-I-Azam Muhammad Ali Jinnah died of TB in 1948. In 2012 burden of all types of TB cases in Pakistan was 231 per 100,000 population (Fatima, Harris, et al., 2014; WHO, 2012), whereas in 2016 this figure jumped to 268 (WHO, 2016a). Worldwide Pakistan ranked 5th among high-burden TB countries in 2012 with 0.3 – 0.5 million incident of TB cases, and during the same year 273,097 all types of new cases were registered (Fatima, Harris, et al., 2014; WHO, 2012) and number of new and relapse TB cases registered in 2015 were 323,267 (WHO, 2016a).

Since its creation, WHO evolved and implemented various plans to address longstanding historical issue of TB that has killed millions of people (Johnston, 1995; McMillen, 2015; Roberts, 2009), but history reveals (Barnes, 2000; Daniel, 2006) that many efforts has been made to overcome TB failed in their approach for its control. As also discussed by (McMillen, 2015) the failure of WHO to control TB was the result of inconsistency of its various programs, inefficient scientific and social research, and suspension of funds. I have presented history of TB and TB control in Pakistan in chapter four that has highlighted the case of suspension of funds to

[1] Though TB afflicts the body in many forms, the majority of cases are pulmonary. I have limited my scope only to pulmonary TB.

Pakistan by International donors in 1980s and political commitment of Pakistan to overcome TB.

Currently, WHO is motivated to root out TB from the world through its Directly Observed Treatment Short-Course (DOTS) program and criticizing DOTS in their studies (Farmer et al., 2013; Johnston, 1995; Keshavjee & Farmer, 2012; McMillen, 2015; Roberts, 2009) have identified its inbuilt flaws, as for decades it facilitated only pulmonary TB patients and deliberately skipped all other types of TB diseases including HIV/TB co-infection disease, extra pulmonary TB, Multi-drug-resistant tuberculosis (MDR-TB), extensively drug-resistant tuberculosis (XDR-TB), TB patients of under 14 years of age and latent TB disease that remained historically a real time challenge.

The ethnographic data presented in later chapters of this dissertation has supported this argument that over a period of time, population of Pakistan has grown manifold, whereas its healthcare structure has not been upgraded as per an emerging requirement and that is the reason for non-provision of satisfactory health care to its growing masses. The functioning and effectiveness of any healthcare program have a direct and positive relationship with health seekers which determines patients' level of trust. The healthcare facilities face a serious shortage of medical staff and medicine, thus rendering the health facility no more than non-functional entity. According to the discussion and analysis in chapter four and six, Healthcare Structure in Murree under Government of Punjab lost its trust among the respondents of this study. Global strategy of DOTS to eliminate TB was introduced by WHO in 1993 (McMillen, 2015) – being considered highly effective and a game changer for the entire world to mitigate TB through which only pulmonary TB patients were being facilitated – is being implemented in Pakistan through National TB Control Programme (NTP) that is working in close collaboration with Provincial TB Control Programmes (PTPs). The functioning of DOTS program in Pakistan through a disfigured and crippled health care system was observed in Murree. Whereas a good functioning primary health care system is crucial in the implementation of DOTS (Mulenga et al., 2010). First half of chapter four presents an ethnographic description of existing Healthcare Structure of Murree with reference to Punjab TB Control Programme (PTP) and

second half of the chapter analyzes operationalization of five key components of DOTS.

Health has multiple determinants as discussed by (IOM, 2006; M. Marmot & Richard G, 2005) and for this triangular study healthcare structure; geography and political economy and social capital are being considered as determinants to document the status of healthcare delivery system in Murree. A study on TB conducted in New Zealand by (Park & Littleton, 2008) argue that in some context anthropologists need to go beyond ethnography through being involved in multidisciplinary approaches to research problem for finding health determinants in terms of history, geography, political economy, political ecology and media analysis are important along with socio-cultural studies, medical research and laboratory sciences on epidemiology.

The current study elaborates inter and intra relationship among these determinants by answering most important questions. Firstly, questions regarding availability of quality healthcare on healthcare centers of Murree that includes Tehsil Headquarters Hospital (THQ), Rural Health Center (RHC), Basic Health Units (BHUs) and Samli TB Sanitarium (Samli Hospital); equal access to modern diagnostic technologies for TB diagnosis; patient facilitation in indoor and outdoor facilities of government hospitals; operationalization of five indicators of DOTS though existing government healthcare structure; and methods of giving awareness to masses about the causes and symptoms of TB through public outreach campaigns are required to be answered to know the functioning of healthcare structure of Murree. Secondly, answers to the questions about social status and economic limitations for access of people to resources for health and education; failure of TB patients to respond fully to the treatment; biological and cultural reasons for the spread of TB; existence of such transmission of TB among the poor and marginalized groups; and health seeking behavior of the poor segments of society reveal the contribution of geography and political economy to shape or determine the status of health in the cultural background of Murree. Thirdly, the questions regarding utilization of social capital among TB patients for sharing TB related knowledge/information and inclination for seeking better TB treatment; and promoting social behavior towards TB patients and TB households are helping to discover the importance of social capital for defining status of Health. The constraints and construction of health 'choices' and 'desires' of

the poor people in relation to TB are required to be explored within the cultural and economic context of Pakistan and its TB programme.

In Pakistan, 75 % of the TB patients are those who fall in the category of earning age group e.g. 14 – 49 (WHO, 2011, 2017a). TB affects the lungs of the patient with a troubled breathing and work capability of the individual is decreased. The patient becomes weak due to the attack of TB virus Mycobacterium. Temporarily he is unable to carry out any physical activity and becomes an economic burden on the family. This study aims to focus upon the capacity of masses to negotiate TB by utilizing their social capital and to observe the effects of macro-level policies of neoliberalism under the political economy of health upon the poor and marginalized segments of Murree on micro level.

1.2 The Research Question

This study scientifically identifies existing reasons for the spread of TB by focusing on healthcare structure that is inadequate to provide quality healthcare. Inappropriate locations of first care health facilities and politically controlled health sector are barriers to smooth healthcare delivery system that retards health seeking behavior among the poor and marginalized segments of society. Social capital is a double edged sword i.e. a barrier and resource for getting equal and easy access to healthcare structure of Murree. So, the reasons for the spread of TB in Murree include lack of trust of TB patients in public health facilities; low community participation in community spaces; the correlation between inequalities and access to facilities and utilization of social capital and finally the families confining the TB patients to isolation due to the social stigmas related to TB. This problem is divided into two parts. On one hand, there is a problem of Government's inadequate physical healthcare system and on the other hand, the methods of DOTS – being operationalized through a malfunctional health care system – are not a permanent solution to root out this problem.

1.3 Statement of the Problem

The dire need of the day is to provide proper diagnosis, sputum testing, health facilities and timely medication to TB patients in Pakistan. Awareness about the causes and symptoms of the disease are an essential feature to cope with TB. The

desired progress in TB control is lacking in developing countries particularly in Pakistan, because of weakness of government healthcare system that is not providing highly effective, modern diagnostic technology, proper supply of drugs and vaccines and proper information about the disease. So, it is facing hardships to fully overcome the prevalence and transmission of the disease. There is a necessity to understand socio-cultural, environmental and economic system background of the patients within which TB has continued to flourish.

After this field research, the assumption has come true that among the poor and marginalized people, most of the TB patients were unaware of the prevalence of disease. On one hand, TB patients were themselves carrying the disease while on the other hand these patients were the cause of transmission and spread of TB at their residences and workplaces. It is not really the cause, but the locus where all of the causes were manifest themselves. It is through the ethnography of these people that has helped to see how local and international forces on a large-scale have played their part leading to a malfunctional health care system, as manifest by the available TB care and prevention.

Because of certain types of inequalities and government inadequate funding to health system in Murree, the diagnostic technologies and treatments were not accessible to the poor people. Lack of state-citizen relationship, low health preference behavior among the patients, poor economic conditions of families and least knowledge about healthcare were primary reasons for the increase in default rate and compromising health behavior among poor TB patients. They were mostly found to continue their income generating activities even though suffering from TB on a priority basis in order to meet the basic needs of family. Lack of rest during the course of TB treatment and lethargic attitude to visit the hospital regularly for treatment caused the epidemic to prolong. The course of pulmonary TB treatment was for six months, but due to the afore-mentioned reasons the poor segments of the society had developed a casual attitude and unfortunately took their health for granted. Moreover, a vast majority of patients did not know their right to seeking health services made available by state nor the level of state-citizen relations. This discussion takes another turn where: (1) TB patients are poor; and (2) they do not possess basic literacy level to understand about right/obligations of the government. Both these factors had limited

patients' understanding of what they could demand from the state. In some ways, they were too poor to utilize the services provided by the public sector organization.

It is observed that TB DOTS program in Pakistan is facing barriers to eradicate TB disease because of not engaging Community Health Workers (CHW) and least trust of masses in government health care centers. In the context of this argument, there is a critical need for: (1) a higher literacy level in community and understanding of TB treatment, (2) an effective program to cure TB, and (3) support to help patients for completion of 6 month drugs intake. In order to get Millennium Development Goals (MDGs) through the application of these indicators, there is need of a reassuring right epidemic control strategy, requiring a new unit of clinical interventions where families and communities should be engaged rather than individuals. The families need an actual treatment. A certain level of that can help them to understand the intake of drugs and its importance in their recovery rather than top-down approach of DOTS. The strategy of DOTS can make treatment convenient and accessible for poor patients. DOTS is not patient-centric that is required to be reviewed and it is the responsibility of government to address all such existing barriers for TB treatment. The community participation has a significant value to deal with the social disparities and equal access and participation regardless of socio-economic and ethnic values (Kano et al., 2009). The poor segment of the society must have their entitlement to health and easy access to health delivery.

1.4 Operationalization of the Concepts

In a critical review on social capital (Story, 2013) states that limited evidence is available from developing countries on conceptualization of social capital and the relationship between different forms of social capital and health. Majority of the study on social capital were conducted in the industrialised country context (Harpham et al., 2002; Ichiro Kawachi et al., 2007). This is the major hindrance to explore the phenomena of social capital and health relationship in Murree. It indicates that this in a unique study in the context of TB patients of Murree.

Social capital is defined in the dictionary as, *"the networks of relationships among people"* (Stevenson, 2010). The term of Social capital used by (R. G. Wilkinson, 1996) and later on well defined by (Glaeser et al., 2002) as *"social skills of a human*

being, or human capacity to negotiate and solve the joint problems". In this research, the concept of social capital was observed both in its tangible e.g. public and community spaces and intangible forms e.g. human capacity to negotiate. Besides this (Villalonga-Olives & Kawachi, 2014) has split social capital into cognitive and structural. The spaces were identified where generally social capital develops. The social capital is being considered as an asset for individual and groups through which they seek favors and keep certain expectations from others with reference to their individual and collective problems in general and health-related issues in particular. During this study, social support, inequality, social circumstances, social cohesion, bonding, bridging, linking, and networking concepts of social capital were applied to find answers to existing problems.

Poverty a problematic concept to define in absolute or relative terms – is simply the state of lacking material possessions, of having little or no means to remain alive (Borgatta & Montgomery, 2000; Greenwald, 1994). Generally, poverty is linked with income or assets and International Poverty Line (IPL) was 1.90 US$ per day (World Bank, 2016). Poverty can be measured in various ways. According to Asian Development Bank (ADB) in Pakistan, 29.5 % populations live below the national poverty line (Asian Development Bank, 2017). There are different methods to measure poverty (Duncan, 1999; Leon & Walt, 2001), but in this research, Multidimensional Poverty Index (MPI) method was used to determine the level of deprivation. This method has been described in detail and elaborated in chapter three. MPI comprised three basic indicators; health; education; and living conditions. The overall score of these indicators describes the level of poverty. In this research, the working definition of poverty was elaborated by analyzing data collected through MPI. So, people financially sound but deprived of either of the above indicators were also considered to be poor.

Social exclusion is prohibition from the prevailing social system and its rights and privileges, typically as a result of poverty or the fact of belonging to a minority social group (Cattell, 2001; Li, 2015; Stevenson, 2010). In this research income, occupation, caste, class, education, religious beliefs, political and genealogical exclusion from existing social system were considered to be indicators for social exclusion which does affect the socio-economic, political and religious life of the respondents. Such

sort of exclusion affects the level of social capital of the poor segments of the society. Chapter two "Literature Review" further explains the concept of social exclusion.

Geography is simply defined as physical feature of earth and its atmosphere where human activity gets affected through it (Stevenson, 2010) along with distribution of populations and resources, political and economic activities, and the nature and relative arrangement of places and physical features (Borgatta & Montgomery, 2000; R. G. Wilkinson, 1996). In this research, the concept of geography has been applied with regards to the environment within which TB continues to flourish and that affects the socio-economic life of residents of Murree in general and TB patients in particular. The concept of geography was applied to study the relative arrangement of places e.g. location and distance of government healthcare facility centers, education institutions and workplaces from residential areas and physical features of Murree including the landscape and road infrastructure.

The barrier is generally perceived as physical resistance or obstacle, but it is also a mental image that over a period of time develops social barriers to access healthcare (Barnard & Spencer, 2010; Ember & Ember, 2004). During this study, following the earlier described concept of barriers, a list of barriers among the poor TB patients that prevented a strong relationship with government hospitals to seek better health care which includes; economic poverty; cultural and social norms for TB; social stigma of TB; low health literacy; low level of health preferential behavior; low level of social capital; illiteracy; distance from government health centers; lack of trust in government healthcare centers; and least community participation.

The resource holds a very vast description. Resource can belong to a group or an individual that generally include money, material, assets, social capital, knowledge, personal attribute, capabilities etc., that is most commonly considered to be "stock or supply" which can support an individual or a group to function effectively, easy solution to problems and easy access (Borgatta & Montgomery, 2000; J. S. Coleman, 1988; Greenwald, 1994; Stevenson, 2010). In this research, the concept of resource was applied to study the accumulation, management and utilization of money, materials, social capital, personal abilities, attributes, capabilities and other assets to get easy access to hospital, getting health-related knowledge and information,

negotiating health issues particularly TB on their community spaces, workplaces, and residential areas.

Power is a well-known concept which can be observed with its number of forms in every sphere of daily life and most commonly it is linked with force (Borgatta & Montgomery, 2000). Power is the fundamental concept of social science (Russell, 1938). The simplest definition of power is to exercise one's will, ability or capacity to influence or direct the behavior of others (Bhatt, 2011; Borgatta & Montgomery, 2000; Brennan, 1997; Davey, 2005; Foucault, 1980, 2001; Fowler, 1998; Grenfell, 2008; Stevenson, 2010). In this study, the concept of power was observed in its limited forms through which the respondents were strived for getting easy access to health and being affected in the process. The concept of (Weber, 2013) on authoritative power does hold the concept of legal/rational authority (Bhatt, 2011; Brennan, 1997), power-knowledge based on formal and informal knowledge (Bourdieu, 2010; Foucault, 1980, 2001) and symbolic or social power (Bourdieu, 1989; Foucault, 2001; Fowler, 1998; Grenfell, 2008; Swartz, 1997) of doctors' social status were studied that have been regulating doctor-patient relations and determining level of trust of poor patients upon public and private health facility centers. Besides this, the concept of language and symbolic power (Bourdieu, 1989; Foucault, 2001; Fowler, 1998; Swartz, 1997) was also applied to understand the existence and utilization of 'Power' on diverse levels. This concept was observed in its formal and informal circles.

1.5 Objectives

The major objectives of the study are:

- To understand the functioning of TB control program and health care system within which TB continues to thrive
- To find gains and effects of social capital and inequalities as resources and barriers to better healthcare
- To search for health preferential behavior among poor and social stigmas along with responses attached to TB
- To look at the existing strength of Doctor-Patient relation and its outcome in the concepts of power, trust, and risk

1.6 Research Questions

This ethnography answers following research questions in the light of theory of social capital and political economy.

- How TB control program is functioning under existing government healthcare system in Murree, Punajb Pakistan?
- What is the role of social capital and inequalities as barriers and resources to access government health care facilities in general and TB in particular in Murree?
- What is health preferential behavior among the poor in Murree and how this health preferential behavior of the poor along with TB related social stigma responds towards TB disease in the study area?
- How existing strength of Doctor-Patient relation and its outcomes determine the concepts of power, trust and risk in government health care system of Murree?

1.7 Significance of the Study

This research is very significant in two ways as far as its theoretical and practical dimensions about the issue of TB are concerned. It is a short step to develop an understanding of Pakistani healthcare system to global epidemiologists and local policymakers for developing future policies and new health strategies to control and minimize this contagious disease in Pakistan. Besides this, most importantly, being a respondent oriented study, it is significant to develop a connection between knowledge and information as capital for developing an ability to influence policies in the sphere of power both at the micro and macro level. This study is significant to understand the factors required for treating disease at the community level, which requires physical infrastructure and capital infrastructure to strengthen the connection between the patients and the government healthcare centers of Murree. Social capital goes both ways; the patient needs it and the providers need it. The flow of social capital is bilateral.

1.8 Rationale of Locale and Study

Murree, a hilly area, is more like a tropical region where average rainfall is more than other areas of Punjab and due to this ever occurring humidity, the ratio of chest and

lung disease is higher than other parts of Punjab, Pakistan. The geographical landscape of Murree and its environment had created infrastructural barriers to access the government healthcare facilities of Murree and in the study area the barriers and resources were best observed in extreme environmental conditions which are a common occurrence in Murree in winter and summer. The only operational TB sanitarium of Pakistan is located in Murree through which the researcher approached the targeted population of this study. The people of Murree have more trust on Samli Sanitarium and prefer to visit this hospital for their TB diagnosis.

TB is a disease that needs long time to cure and social support from the family members is very essential for the patients to recover fully from the psychological outcomes of the disease. This study has a multidimensional approach to address the long standing issue of TB prevalence and morbidity in Pakistan by analyzing healthcare structure of Tehsil Murree, Punjab Pakistan. The particular approaches are geography and political economy impact from global to local perspective and social capital of Murree. This study has made a unique approach to TB in Murree with a combination of theoretical framework of social capital and ethnographic technique in the field of Medical Anthropology.

Earlier to this, theory of social capital had widely been applied to the domain of Public Health but for the first time, it is being analyzed through an ethnographic study in the domain of Medical Anthropology in Pakistan. The existing literature demands more research for studying the issue of health through the lens of theory of social capital and it was gap in the field of Medical Anthropology in Pakistan to study health by the mixed approach of social capital and Medical Anthropology. This study also helps to support the interest of various anthropologists to question about the need of anthropologist contextualizing the issue of TB.

1.9 Theoretical Framework

The study was conducted through the lens of theory of social capital and political economy of health. In this part of chapter, I have presented a brief overview of these two theories by giving the background and historical development. A detailed discussion on application of major concepts of these two theories has been presented in chapter two “Literature Review” where the selected concepts of theory of social

capital and political economy of health have been explained and conceptualized in the framework of this research.

1.9.1 Social Capital

Social capital as a term was intermittently used from about 1890s, before being commonly used in the late 1990s (Google Ngram Viewer, 2017). Alexis de Tocqueville, a French diplomat, social scientists, and historian during the first half of the 19th century observed the American Life and outlined and defined social capital (Tocqueville, 2002). For the first time in 1916, the term "Social Capital" occurred in the article by (Hanifan, 1916) regarding local support for rural school with reference to social cohesion and personal investment in the community. Later on in Bowling Alone (Putnam, 2000) this article by Hanifan first recorded instance of the term. A book "The Community Center" by (Hanifan, 1920) for the first time contained a chapter titled "Social Capital". Earlier in the book "School and Society" by (Dewey, 1900) the term social capital was used in the monographs but did not offer any definition. The first occurrence of the term social capital was in an article regarding "local support for the rural schools" by (Hanifan, 1916) where it was defined as:

> *"I do not refer to real estate, or to personal property or to cold cash, but rather to that in life which tends to make these tangible substances count for most in the daily lives of people, namely, goodwill, fellowship, mutual sympathy and social intercourse among a group of individuals and families who make up a social unit . . . If he may come into contact with his neighbour, and they with other neighbours, there will be an accumulation of social capital, which may immediately satisfy his social needs and which may bear a social potentiality sufficient to the substantial improvement of living conditions in the whole community. The community as a whole will benefit by the cooperation of all its parts, while the individual will find in his associations the advantages of the help, the sympathy, and the fellowship of his neighbours (pp. 130-131)."*

Later on, in the early 1960s, the term of social capital was used in book "The Life and Death of Great American Cities" (Jacobs, 1961). She did not explicitly define this term, but she used it to refer to the vital value of networks as,

> *"If self-government in the place is to work, underlying any float of population must be a continuity of people who have forged neighborhood networks. These networks are a city's irreplaceable social capital. Whenever the capital is lost, from whatever cause, the income from it disappears, never to return until and unless new capital is slowly and chancily accumulated (pp. 138)."*

A political scientist (Salisbury, 1969) in his article "An Exchange Theory of Interest Groups" advanced the term social capital and considered it as a critical component for the formation of interest groups. Sociologist (Bourdieu, 1977) used the term social capital in his book "Outline of a Theory of Practice" and some years later he clarified social capital in contrast to cultural, economic and symbolic capital (Bourdieu, 1986). "A Dynamic Theory of Racial Income Differences" (Loury, 1978) further elaborated the concept of social capital and his definition was promoted, developed and popularized by (J. S. Coleman, 1988; Wellman & Wortley, 1990). The concept of Social capital gained a vast popularity in the late 1990s as it was being deeply considered by mainstream authors along with serving as the focus of a World Bank Research Program. The concept of social capital was adopted by various authors in their work such as Trust: The Social Virtue and the Creation of Prosperity (Fukuyama, 1995), Unhealthy Societies: The Afflictions of Inequality (R. G. Wilkinson, 1996), Black Social Capital: The Politics of School Reforms in Baltimore (Orr, 1999), Worlds Apart: Why Poverty Persists in Rural America (Duncan, 1999), The Society and Population Health Reader: Inequality and Health (Ichiro Kawachi et al., 1999), Achieving Success through Social capital (Baker, 2000), Bowling Alone: The Collapse and Revival of American Community (Putnam, 2000), Development as Freedom (Sen, 2000), Mind the Gap: Hierarchies, Health and Human Evolution (R. G. Wilkinson, 2001), Social Capital: Theory and Research (Cook, 2001), In Good Company: How Social Capital Makes Organizations Work (Cohen & Prusak, 2001), Social Capital: A Multifaceted Perspective (Serageldin & Dasgupta, 2001), Social Capital and Economic Development (François, 2002), Social Capital: A Theory of Social Structure and Action (Lin, 2002), Social capital (Halpern, 2004), Measuring Social Capital: An Integrated Questionnaire (Narayan et al., 2004), Diverse Communities: The Problem with Social Capital (Arneil, 2006), Social Capital and Health (Ichiro Kawachi et al., 2007), Sports and Social Capital (Nicholson & Hoye,

2008), Cultural Theory: An Anthropology (Szeman & Kaposy, 2010), The Power of Civility: Top Experts Reveal the Secrets to Social Capital (Bayer et al., 2011), Social Capital and Health Inequality in European Welfare States (Rostila, 2011), Handbook of Research Methods and Applications in Social Capital (Li, 2015), Our Kids: The American Dream in Crisis (Putnam, 2016), Social Capital (J. Field, 2016) and many others.

1.9.2 Political Economy of Health

Economic inequalities along with other types of inequalities affect the status of health, status of social capital, social status and social inequalities among the poor and marginalized people. The theory of 'Political Economy of Health' provides an important roadmap to study the economic and political determinants of public health. Theory of political economy of health and its practices in Britain and the Third World have been elaborated in political economy of health" (Doyal, 1979). It is more appropriate tool to know and understand the neo-liberal agenda of International Financial Institutions (IFIs) and International Medicaid Agencies (IMAs) (Farmer et al., 2013; Johnston, 1995; Keshavjee, 2014; Keshavjee & Farmer, 2012) through which they provide a conditional Medicaid and financial loans to the developing nations (Zaidi, 2005, 2015) that have a trickle-down effect on the health of poor segments of the society. Various sorts of inequalities can be observed within the concept of theory of political economy of health (Erin, 2007). The income inequalities determine the individual's status before the state (Morgan, 1987). The citizenship entitlements hold very close connections with the political economy of health (Altman, 2000).

Chapter two "Literature Review" is comprises secondary data to define and explain the selected concepts of theory of social capital and political economy of health and to relate with current study. The political economy is also a major concept of theory of social capital. So, the theory of political economy of health is applied to understand the effects of macro-level policies to determine the status of health on micro-level. The discussion of measuring social capital has helped to develop a quantitative tool to measure social capital. Besides this, some important aspects of health have also been defined and elaborated with the help of earlier relevant literature.

Chapter three “Research Methodology and Area Profile” is divided into two parts. First part presents the justification of applied data collection tools and techniques for this study. Second part presents the picture of Tehsil Murree through using qualitative and quantitative data comprising both primary and secondary sources, where primary data for this purpose was collected through the application of MPI tool. First part of the chapter presents details of utilization of MPI. Altogether, primary and secondary data has helped to understand the socio-economic and political structure of Murree along with its infrastructure and the living patterns of its residents. The chapter relates a connection of already discussed indicators of area profile of Murree with the status of health.

Chapter four “Healthcare Facilities: Local Practices to Deal with Global TB” is a part of the puzzle of health in Murree. This chapter is one chunk of a large story of health and helps to understand the healthcare structure of Murree along with its functioning and effectiveness. The disease of TB has been in the continuation and thriving for decades and methodical and effective interventions by NTP and PTP have been made during last few decades. The chapter is a macro level analysis of existing healthcare structure of Murree and investigates the reasons for lack of trust of masses in government healthcare centers of Murree.

Chapter five “Impact of Social capital on Health of TB Patients” answers the question of correlation between the inequalities and access to facilities through the utilization of existing forms of social capital in various conditions. The chapter discusses existing forms of inequalities in the culture of Murree and analyzes outcomes of inequalities and the effects of role of social capital for access to government healthcare facilities of Murree. In the end, it also discovers various factors leading to the development of the concept of power that has resulted in creating a barrier to trust of masses and has boosted health risk among poor and marginalized segments of Murree.

Chapter six “Doctor-Patient Relationship and Social Health Insurance Program” is a micro level analysis of trust in Government Healthcare Centers of Murree through ethnographic data. The chapter starts with the discussion on general practices of doctors in government healthcare centers of Murree and describes components of existing doctor-patient relation in the context of clinical ethics and barriers in the way

of providing quality service. This chapter also explores barriers to employment in remote areas and Primary and Secondary Healthcare Centers of Murree and talks about management issues, irregularities, and malpractices. Besides this, the chapter presents policy measures for bringing change in existing government healthcare structure of Murree for developing the trust of patients through quality service and the important elements of Prime Minister National Health Program in Punjab and its limitations in attracting patients to visit OPDs of government hospitals.

Chapter seven "Analyzing Social capital thought Public Participation" examines social capital through qualitative and quantitative methods. For the quantitative measurement of social capital, a Social Capital Measurement Tool was developed. This chapter explores existing types of community spaces in Murree and helps to find barriers to access these community spaces.

Chapter eight "Understanding Health-Preferences, Barriers and Resources" is the last chapter of ethnographic discussion about the issues of TB in Murree. This chapter discusses local understanding of health and way to grasp health behavior of respondents. The chapter talks about existing pathways for TB treatment. The chapter presents a case study of social stigma and discusses its 35 years of history. This case study also refers to discussion of chapter four and six of the dissertation and also presents a comparison of government healthcare structure of Murree and trust of respondents though this case study. The chapter discusses the concept of local understanding about the power of medicines as a barrier to TB treatment. In the end, it defines the importance of caregivers for successful TB treatment and evaluates direct observation.

And finally, chapter nine is based on conclusion. Every chapter has separately presented an analysis. The chapter of conclusion winds up the debate on TB by connecting all of the dots of this big challenge for Pakistan in general and Murree in particular.

Chapter 2

THEORY AND LITERATURE REVIEW

The current study explores various barriers and resources for treatment of TB among poor and marginalized groups in Murree, Pakistan. It focuses on studying epidemiological health issues of the poor and marginalized people that include socio-economic, cultural and environmental reasons for the spread and prevalence of TB, the socio-economic and environmental reasons for default rate of TB patients, the ineffective role of community spaces for sharing of awareness about the causes and symptoms of TB, low health prioritizing behavior, lack of satisfaction on public health facilities and service providing program etc. Existing barriers and resources are the reason for the increase in the number of TB patients because the earlier hindrances to pursue healthcare and the latter are neither functioning properly nor widely effective. In this research, the theories of social capital and political economy of health have helped to prove above-mentioned assumptions that are affecting the health.

This chapter is divided in two parts. Part one talks about theory of social capital, cultural capital and political economy of health. This part also elaborates operationalization of theoretical framework. The second part refers to review of literature relevant to this study. This part of dissertation discusses literature on various important topics including association and health; income inequality, psychological environment, and health; social status and health; politics and health; gender inequality and social capital; TB stigma and response of social capital; effects of stigma; health insurance; pathways of TB patients; and default of TB patients.

2.1 Social Capital

The term “Capital” is defined by (Stevenson, 2010) as wealth or other sorts of assets owned by people, whereas in the context of economics (Bourdieu, 1986; Chen et al., 2009; Glaeser et al., 2002) have described this term as assets that can be invested to gain profit. The term social capital is not new to the studies of social sciences; as it dates back to the Durkheim’s study on social influences of suicide (Durkheim, 1963) also emphasised on group life (Durkheim, 2014), where an individual’s involvement in group life yields positive outcomes. Moreover, Marx’s concept of class-based

society (Marx, 2012; Marx & Engels, 1978) also gives the notion of social solidarity. There are two sources of heuristic power of social capital; firstly, it pays attention to positive outcomes of sociability; secondly, its practical application – by setting aside the less attractive features – to place outcomes in a framework for wise utilization of important power and influence sources (Portes, 1998). Considering medicine as a social practice (Foucault, 2001) mentioned doctor-patient relation among one of its aspects.

In his work (R. G. Wilkinson, 1996) introduced Putnam's notion of 'Social Capital' (Putnam, 1993) to the field of public health. 'Social capital' defined by (Glaeser et al., 2002) is a social skill of a human being, or human capacity to negotiate and to solve the joint problems. Theory of 'social capital' by (Ichiro Kawachi et al., 2004; Putnam, 1993, 2000), within the context of public health literature, has explored three different viewpoints on the effectiveness of social capital; (a) 'Social Support' by (Vaux, 1988) is of the view that informal networks have chief importance to the objective and subjective welfare; which means there are some community spaces, formal or informal, where from the individuals get social support by getting knowledge and information about health; (b) 'Inequality' defined by (I Kawachi et al., 1997) lays an emphasis to claim that among citizens the sense of social injustice and exclusion emerges after widening economic disparities and this situation ultimately results in high anxiety and compromised life pattern which affects status of health among poor people; and (c) 'Political Economy ' according to (Ichiro Kawachi, 2001) observes socio-political exclusion of poor people from the material resources and its impacts on their health status. According to the concept of 'social circumstances' presented by (Burt, 2000) includes socio-economic, environmental conditions, surroundings, social positions, social network (e.g. information and social control) etc.

The debate over social capital is still in continuation and according to (Szreter & Woolcock, 2004) it is meant to become just like caste, gender and race, but it is important to understand how such concepts help people to seek connections to solve their health problems. Social capital is widely used by an individual with his/her connection, preferably within a same caste, class, race, religion, sect, gender etc. to seek out favor or help for solutions of his/her problems. It is confined not only to the general concept of solving a joint problem which further leads to the discussion of

social cohesion and network theories of social capital, but sometimes also where the problems are limited to an individual and sometimes belong to community. The research findings of (Chen et al., 2009) have supported the argument that personal social capital is a very valid and reliable scale.

Defining the social cohesion account of social capital (Ichiro Kawachi, 2006) says that it is available to the tight knit communities and it is a group attitude which supports the notion of equal resources for all. On the other hand (Ichiro Kawachi, 2006) says that network theory of social capital defines the concept by considering the resources that are individual property. Earlier to this (Ichiro Kawachi et al., 2004) said that as far as social capital as a group or individual property is concerned, sometimes it belongs to an individual and sometimes to a group. It turns our attention towards group level mechanism in particular situations such as informal social control, collective socialization etc. Instrumental support, social credentials, information channels and other resources are the individual property that can help for the betterment in health (Ichiro Kawachi et al., 2004). The strong caste system of subcontinent gives notion of group solidarity on some specific occasions, but generally it is not observed in the field of public health. Least financial and social support of TB patients was observed during this study. The findings of this research elaborate the turning of network towards social cohesion.

Within the major concept of social capital, social support is very important which further includes bonding, bridging and linking concepts. Defining bonding and bridging concepts of social capital (Szreter & Woolcock, 2004) said that trusting and cooperative relations between the similar beings e.g. members of a network and shared social identities are known as bonding social capital; whereas the relations of mutuality between those who are not alike on the basis of their ethno-lingual identities, religious background, social identity, class are considered as bridging social capital.

Social capital theorists (Perkins et al., 2002) have described its bonding concept as norms of reciprocity and trust within same networks, whereas bridging mostly refers to relationships among local institutions, but individuals' connection with local institutions and with each other must not be taken for granted or ignored. There is a need to study the most important concepts that are missing from the theory of social

capital. To have a deep understanding about the utilization of social support accounts of bonding, bridging and linking, it is important to study these concepts while keeping in mind the variables of social support such as trust, strength of relation, duration of relation, history of personal relations and social circumstances at individual and community level.

During this study, the above-mentioned variables were measured by developing a social capital measurement tool. This tool comprised seven sections including; (1) political participation; (2) civic participation; (3) religious participation; (4) connections in the workplace; (5) informal social connections; (6) altruism, volunteering and philanthropy; and (7) reciprocity, honesty, and trust. In his work (Putnam, 1993, 1995, 2000) has considered these variables very important for the development of social capital. The research findings of this tool are particularly discussed in chapter seven.

According to (Szreter & Woolcock, 2004) health objectives can be improved by enhancing the quantity and quality of bonding concept of social capital which is based on the good relation among friends, clan members and neighbors. The bridging concept of social capital can be helpful by enhancing a trustworthy relationship between different demographics. But on the other hand, such type of social links and ties can affect the status of health among the people having similar socio-economic characteristics, as it promotes social evils such as nepotism, corruption, and suppression.

Furthermore, this situation affects the trust of poor people in institutions. The bonding and bridging forms of social capital may have an effect on either or both social support and inequality version of the theory of social capital and its connection to public or population health (Ichiro Kawachi et al., 2004) because it favors a small number of people to gain easy access to health but becomes a barrier for large number of people by developing mistrust of government health facilities.

According to the findings of (Chen et al., 2009; Ichiro Kawachi, 2006) the bridging concept of social capital requires education of the communities and individuals for the better communication and development of trust. Generally, a low literacy rate is found among the poor and marginalized segments of the society. During this study, it was

observed that formal education or the cultural norms and ethics support the efforts of poor people within the given concepts of social capital.

According to (Chen et al., 2009; Westlund, 2006) there exists a nexus between loyalties and favors and through all sorts of loyalties, individuals seek favors and it has a deep link with the development of social capital. In his work (Keshavjee, 2014) has said that political loyalty of Communist Party favored its followers in various ways within which health was included. Similarly in micro level analysis, this concept is widely practiced, where generally health is not a priority among the list of favors. During this research, the concept of development of social capital through loyalty for solutions of individual health issues was observed. Different sorts of loyalties do show a balance of power in all dependency based relations (Swartz, 1997). This concept was found among the patients and hospital staffs, where from the first mentioned concealingly expect favors from the later ones.

One of the social determinants of health is a neighborhood. Furthermore, (Blakely et al., 2006) has divided neighborhood concept of social capital in three main determinants including; (1) physical features (environment e.g. air pollution etc.); (2) availability of resources (health care facilities) and (3) social features (social capital) that shape the status of health of an individual and the group.

The neighborhood is an important concept in the field of public health. The distance and resources have a great link with the mobility of individuals to seek healthcare. The concept of the neighborhood has added a dimension to the existing concepts of social capital and is being considered as an important concept in the current study. Health inequalities are always fundamentally rooted in differences of access to material resources that include housing and relevant neighborhood amenities which ultimately produce influential political and ideological decisions.

On the basis of above-mentioned argument, it can be inferred that the people's voice for their right of health is influenced by the access to material resources. According to contributors of theory of social capital (Cattell, 2001; J. S. Coleman, 1988; Forbes & Wainwright, 2001; Fukuyama, 1995; Putnam, 1993, 2000; Stone, 2001; Winter, 2000) it is difficult to define "Social Capital", but some of the scholars (L. F. Berkman et al., 2000; Stone, 2001) have agreed that active participation in the voluntary association is

the most important component of social capital and have linked it with spirit and empowerment of community.

In this study, the concept of neighborhood is observed in two dimensions. First, in the context of the theory of social capital, this dissertation talks about its role to provide an opportunity for developing social capital with people and institutions around. Second, there is a discussion on the concept of the neighborhood in relation to the environment.

According to (Forbes & Wainwright, 2001; Hawe & Shiell, 2000) in order to explain health inequalities, various theoretical and methodological limitations are being used and (Veenstra, 2000) has said that the effects of these health inequalities can be observed at an individual level. The study conducted by (Glass et al., 1999) has claimed that active social participation used to decrease death risk, and the participation in the voluntary organization holds dual benefits in the form of contribution and in return acquires potential health benefits (Seeman, 2000). During field work, very little voluntary social participation in the context of health was observed. The discussion on data about social participation is presented in chapter seven where an analysis has been made in relation to the existing literature.

The inequalities are observed both at micro and macro levels e.g. at household and society level. One of the major reasons for the great level of social inequality in the subcontinent is its strong caste system (Hussain & Mohyuddin, 2012). Quoting the example of household inequalities in Ganjool (Foley, 2008) said that it has a link with access to the traditional health care. It is very important to observe the concept of household inequalities at a micro level. The findings of this study have supported this pre-fieldwork assumption that one who contributes more to household economy is treated well during illness than non-contributory members. It is important to answer the question of the relationship between household inequalities and health at the household level.

Owing to greater economic disparities in the society, the medical personnel become financial managers for revenue generation by providing private health care, besides this (Foley, 2008) in his study observed structural violence, and stated that due to male seasonal migration, women empowerment and power of decision making was

being affected. In Pakistan, the family system is very strong and generally in rural areas kinship organizations are in form of extended and large family units. Within this type of family structure, woman has the least empowerment as far as her mobility, decision making, access to resources (especially health and education), income distribution and freedom of expression is concerned. This is very important to study the structural violence, its linkage with social capital and effects on health among the TB patients.

An indicated mechanism through which social distribution of income might get effect have been conceptualized by (Ichiro Kawachi et al., 1999) in three main categories; (1) influencing investment in human capital; (2) social process; and (3) psychosocial process. The first mechanism claims that the increase in income inequality results in a divergence of interests between rich and poor. The larger gap in income groups and greater disparity of interests puts pressure on lower taxes from the upper socio-economic class and this leads to diminishing opportunities for the poor.

The second mechanism to affect health is social process, within which there might exist less social cohesion and social capital among societies having income inequality. The shrinking of this social fabric is closely connected to poor health by a number of possible mechanisms which include health seeking behavior of a community through social cohesion, the increase in access to local amenities and services being facilitated through social capital and much more. The psychosocial process is the third mechanism that is least concerned with Pakistan's health care system. The assumption turns out to be somewhat true that broadening the gap between have and have-nots leads to frustration and it covers job insecurity, weak sense of control over life matters, hopelessness etc.

Social capital encompasses an important role in shaping the quality of life that an individual enjoys. As (Szreter & Woolcock, 2004) argue that the most important elements to get better public health are social network, socio-economic equality and access to the resources. According to (Fukuyama, 1995), the members of every society have high or low social capital that is connected with the current status of health. According to this theory, the 'social capital' enables the individuals of the society to gain access to resources, ideas, information, money, services, favors, the expectation of behavior of others, participation in public welfare activities and

strengthening the relationships and the network of association. The literature has proved that social participation does increase the number of benefits to individuals that result in well-being (Hyyppä & Mäki, 2003) for which participation in the voluntary organization is the key (Putnam, 1995, 2000).

Although social networks are very vital for the development of social capital, they also serve the dual purpose of the risk-potential network – defined as a tie between two or more people in presence of an infected person – and affect the status of health (Friedman & Aral, 2001). TB patients are not accepted socially for a long time and if they do become part of social networks during the process of their treatment, the social stigma attached to TB can put their position with their social network-mates at stake. Describing a connection in social network and health (George & Ferraro, 2015) claimed that the risk factor gets multiplied if the patients having an infectious diseases get close to non-infected individuals in their social networks.

2.2 Cultural Capital

Describing forms of capital (Bourdieu, 1986) has included economic, cultural, social and symbolic capitals that have a very complex relationship. Capital is a type of "energy of social physics" (Bourdieu, 1992), within which all of the above-mentioned forms exist and interconvert with each other under certain conditions, but economic capital is the root of other three types of capitals as it determines their shape and interrelationship. For (Swartz, 1997) cultural goods and services including educational credentials prove to be the asset of cultural capital that is more unstable than that of economic capital. For Bourdieu, Social capital is a network of relationship that helps people to utilize other forms of capital for gaining profit. According to him, cultural capital exists in institutionalized form, where its application is different among various societies. He considers it a network of social relations. In this study, the concept of "Cultural Capital" is going to be applied to understand the concept of power as a resource to health and its application among poor TB patients. A person belonging to similar social origins possesses different levels of cultural capital (Bourdieu & Wacquant, 1992), so it is important to understand how far people of the same culture hold a different level of cultural capital. This dissertation analyzes benefits and harms of "Cultural Capital" for the people of Murree.

2.3 Political Economy of Health

The theory of "Political Economy of Health" (Doyal, 1979) helps to understand the effects of economic inequality on health, social capital, social status and social inequalities – that are based on the economic consideration – among poor and marginalized people. In order to study economic and political determinants of public health, this theory provides an important roadmap.

Critical medical anthropology aims to understand how health and illness is shaped and produced in political and economic contexts (Singer & Baer, 2018). As (Farmer, 1992) ethnography of the early AIDS epidemic among the Haitian poor is a classic illustration of this line of thinking, that underlines how structural inequalities adversely affect health among the poor (see also, Baer et al., 2013; Morsy, S, 1979). Scholarship in this custom has also focused on the ground-level impacts of global health policy, and particularly, of structural adjustment policies, that had restricted access to health care and caused in poor health outcomes in many countries (Castro & Singer, 2004; Fort et al., 2004; Whiteford & Manderson, 2000). Many of these accounts center on critiques of neoliberalism, a political economic philosophy that aims to encourage economic growth through free markets, private sector competition, and minimal government involvement in the provision of basic social services such as health care (Harvey, 2007).

International Financial Institutions (IFIs) and International Medicaid Agencies (IMAs) under structural adjustment program – by focusing on neo-liberal agenda of privatization of public facilities including health and education; introducing user fee, cutting down budget subsidy for public welfare, reducing job market in government sector, increasing tax rate upon poor, introducing the concept of cost effective health programs for developing and underdeveloped countries, supporting the concept of private sector for service delivery, NGO based delivery model, restricting community participation, and determining pathways of development – do provide conditional Medicaid and financial loans to the developing and underdeveloped countries (Albritton et al., 2010; Doyal, 1979; Erin, 2007; Farmer et al., 2013; Keshavjee, 2014; McMillen, 2015; Morgan, 1987; Pfeiffer & Champman, 2010; Roberts, 2009). These factors push down economic capacity of masses and have a trickledown effect on the health of the poor and marginalized people of these countries. In response to this

provided conditional health aids and financial loans mentioned sanctions are imposed by the governments of developing countries and as a result of this, the poor segments of the societies have to compromise their health.

The effects of Structural Adjustment Programs can be observed in many of the world's poorest countries. It is in contradiction of this backdrop, and under the auspices of the developing field of "global health," that private international organizations lit the torch of nascent all-inclusive fight against TB. In order to appreciate this newly emerged filed, it is necessary to examine the institutional terrain of contemporary "global health." The leadership of international public health initiatives has changed drastically during last few centuries. As (Anderson, 2006; Nicholas, 2002) stated that in the 18th, 19th, and early 20th centuries, colonial governments carried out their missions to improve population health in the colonies to make sure a strong labor force.

In contrast, during the 20th century, intergovernmental health agencies expected a more noticeable role in dictating the agenda of what was then called "international health," mainly after the United Nations founded the WHO in 1948 (Brown et al., 2006). The occurrence of global economic recession in 1980's paved the way for bringing major changes in the composition of public health expertise. As WHO faced budget crises, the World Bank came to play a larger role in health financing.

Throughout the 1980s and 1990s, the World Bank provided loans for health systems reform and service privatization in a variety of impoverished countries as one component of neoliberal economic restructuring (Pfeiffer & Champman, 2010). A shift in terminology from "international" to "global health" was marked in 1990's (Brown et al., 2006), as a result of this, the trend of private financing of global health initiatives has increased (Biehl & Petryna, 2013).

Today, for example, private foundations such as the Global Fund, Milinda and Gates Foundation, Ford Foundation and many other multinational companies represent some of the most important agenda setters in global health activities. Such institutions, some of which have larger annual budgets than WHO, increasingly collaborate with non-governmental organizations, Ministries of Health, charities, health agencies,

universities, and each other in “public-private partnerships” to roll out new health initiatives worldwide (Brown et al., 2006).

Talking about the effects of Structural Adjustment Programs (SAPs) of IMF in Pakistan (Zaidi, 2015) said that owing to the structural adjustment programs in 1980s and 1990s, the socio-economic conditions of the poor had markedly deteriorated. These had a direct association between the implementation of the SAPs and deterioration in the standard of living of lower income classes because the subsidies were withdrawn under the conditions of SAP.

As (Erin, 2007) argues that theoretical framework of the political economy of health gives answers to the assumptions about marginalized groups. There is an assumption that unequal and political distribution of resources, power, wealth, environment and external structures has a connection with the health behavior of poor and marginalized groups. In his work (Erin, 2007) claimed that the provision of healthcare aims to improve the productivity and to keep the masses healthy. But, (Morgan, 1987) argues, those who have low economic worth to the state are being treated unequally in order to have access to health care services.

The concept of equality defined by (Hussain & Mohyuddin, 2012) is to treat equally the unequal. The individual response towards this state-level inequality needs attention by researchers. In such conditions, it is also important to understand citizenship behavior of the poor and marginalized segments of the society. The political economy is linked with the citizenship entitlements (Altman, 2000) due to that people get easy access to their right to health, education, award of wages, home ownership and voting. Here it is important to know that within the concept of citizenship entitlements, how the poor people respond to not having easy access to the above-mentioned indicators of citizenship entitlements?

The most radical form of neo-liberal system transformation emerged with an approach of “Tabula Rasa” following the collapse of Soviet Block (Albritton et al., 2010). This resulted in the destruction of inherited state-sponsored socialist institutions and supported the emergence of the universal liberal market (Albritton et al., 2010; Keshavjee, 2014). This shift of neo-liberal regime demanded institutionalized compromise and applied the concept to all developed and developing nations without

any discrimination. Its relationship with the statute of health can be seen on a micro level in the case of Kazakhstan (Keshavjee, 2014), where purposely the concept of private healthcare was introduced.

According to this agenda, at micro-economic level market is presented to be efficient and the state as in-efficient (Albritton et al., 2010; Farmer et al., 2013; Keshavjee, 2014). The high point of neo-liberalism occurred during the second half of the 1980s and the first half of 1990s when new policies were in process of being implemented under SAP and the response of developing states did not show up. During this time democracy in Pakistan was dangling (Niaz, 2010) and political will was nowhere to be seen to deal with the newly emergent challenge of neo-liberal agenda. Presenting data on growth performance of Pakistan (Zaidi, 2015) had argued that if not quite remarkable but this performance has been good and even economic indicators of Pakistan were very decent when the first major SAP was initiated in early 1980s. So, it seems to be the vested interests of IMF to create its hegemony by regulating world economy through introducing the charm of SAP and realizing developing countries to be on the verge of bad economic status.

Health Economy integrates and improves health, health services, and conception of health in the economic development of the privileged societies (Foucault, 2001). This discussion raises a question on government's standing for the welfare of masses within the circle of neo-liberal institutions and their preferences within the concept of the health economy. State power has been used systematically to impose the agenda of neo-liberalism. This dissertation depicts the effect of the macro-level policies on the health and social life of poor and marginalized people.

The findings of this study highlight the inequalities among the people based on their economic inconsistencies. There are some important questions about the role of formal or informal financial, legal, moral or ethical institutional corruption for the unequal distribution of anti-TB drugs and the effect of health policies on the health facilitation for poor segments of the society. The political economy of health has a deep link with the low level of satisfaction of masses about public health facility centers.

2.4 Operationalization of Theoretical Framework

This research studies the inter-relationship between poor health and determining factors such as: socio-economic inequalities, social support, social network, social circumstances, knowledge and information about better health, access to health facilities, available money, services, favors on the basis of social capital, expectations of other's behavior and participation in public welfare activities among TB patients of poor groups in the light of theory of social capital and political economy of health.

Use of social capital among individuals determines the status of health of the masses. In Pakistan, the concept of social capital is missing among poor people. It was assumed that individuals with better health influence the above mentioned determining factors. So, this study primarily focuses on how the socio-economic inequalities are giving birth to lack of social support, impact of social network and social circumstances of poor people, lack of access to knowledge, information, health resources, services and the poor response from the health providers.

Political economy is one of the determining factors for the vulnerable health status of poor people. At state level, political economy determines the state policy towards health and education. Illiteracy if allowed to grow like a wild bush leads to irretrievable backwardness in this age of enlightenment that affects the ideal status of social capital and results in social inequalities, unequal distribution of resources especially wealth and power, social injustice, state citizenship entitlements etc. Social capital is dependent on political economy for its development, survival and effects. In some of the cultural patterns in specific locales, some individuals through their own initiatives may make good use of social capital. But at the formal level where communication is the key, it loses its worth. For example, in a hospital, the doctor and patient have a formal interaction that is disturbed due to lack of formal education – educational credentials are a form of cultural capital that depends upon economic capital and exists unequally across social classes (Bourdieu, 1986; Swartz, 1997) – which helps in better verbal interaction.

On interaction with a health professional, the patient becomes confused because of concepts of power, trust, risk and due to lack of formal education, he/she loses parts of his/her linguistics. Hence it is easier for the patient to be manipulated (Grimen,

2009). It is being assumed that the poor people on formal interaction with health professional do not tell the actual story of illness because of two reasons; first due to lack of formal education and existing concepts of power, trust and risk; second health professionals have a very casual attitude towards such patients and their illness.

Social capital is not a magic stick or a comprehensive theory to improve the society's ills, but a very useful concept to focus one's attention on a significant set of resources such as networks, relationships, norms and associations in social sciences and public health literature (Szreter & Woolcock, 2004). Besides this, the theory of social capital is very useful for the study of public health both at the micro and macro levels.

2.5 Review of Literature

There can be a long list of social determinants of health but in this part of dissertation literature relevant to this study is quoted in discussion below.

2.5.1 Association and Health

As discussed by (Szreter & Woolcock, 2004), social circumstances are highly valued to shape the quality of life an individual enjoys, but for (Ichiro Kawachi et al., 1999) it is important to know the definition of social circumstances and their importance to form the value of life. During this research, it was found that poor and marginalized segments of the society were living in poor social conditions because of high-income disparities due to which they were having restricted social capital. A study conducted by (A. H. Khan, 2017) in Sindh, Pakistan on TB control describes socio-economic status of TB patients and describes that residents from low income neighborhood suffer from overcrowding. This was common finding in Murree where the poor segments of society were predisposed to developing TB (Akhtar et al., 2007). Such associated of living environment determines health status. This research study also indicates its findings of the above socio-economic conditions of patients in Murree.

The failures of policy within the field of public health has always increasingly focused its attention on the limitations of a narrowly 'individualist' approach to population health that is associated with the rise of clinical epidemiology during the postwar era (Kindig & Stoddart, 2003). Such failures have resulted in a massive shift of collective approach to individualist one which has boosted capital or private health

system. Since the emergence of a neo-liberal school of thought, health services are now being decentralized from public to private sphere. This failure of public policy particularly in the field of public health has brought a state of distrust among the masses upon public health centers. So, the reasons for the failure of policy in public health, the causes of distrust upon public health centers and the expansion of private health system are to be investigated. Due to this health policy, a large chunk of population of Murree was not connected with available public health facility in their vicinity and was not in association with public health providers.

There are always health-related inequalities in affluent societies that affect the psychological experiences of the individuals along with their relationship to others in their society and community. According to (Szreter & Woolcock, 2004), this can happen due to the material deprivations of overall economic structure and national political choices. For many years, (R. Wilkinson, 1986) worked within the field of comparative epidemiology to further develop an understanding of the relationship between mortality patterns and income inequalities among relatively affluent societies which have been one of the chief boosters in most recent debates. In the context of this debate on existing health-related inequalities in Murree marginalized segments of society facing psychological barriers to get in close association with nearby health facility.

Talking particularly in the context of Pakistan, health inequalities can be seen in every sphere of life from neonates to infants to adolescents and to old age. The public health delivery structure not being able to cater to largely poor segments of population is one of the major reasons for the unsatisfactory condition of public health centers. This has become a partial barrier to develop association with public health centers in Murree. As a matter of fact, Pakistan top-level political leadership and an affluent portion of its population prefer to go abroad for their medical examination or even for a minor illness. A good number of people and families who have sufficient funds and can manage to pay prefer private health care providers within the country. So, a serious question in such a state of affairs is how would the policy implementors understand the capacity of public health care system to deliver? Undoubtedly they are least interested in comprehending harsh ground realities and they continue to commit gross negligence by intentionally ignoring their interaction with the current system.

On the other hand, the national political choices of the leadership are a deep concern for the failure of policies and the distrust of population in the management of political policy making planning. To resolve the long overdue problem of urban transportation, a Metro Bus Project has been launched in each of three most populous cities of Punjab Province of Pakistan namely Lahore, Rawalpindi and Multan at a colossal cost running into billions of rupees. But the same management has axed the budget for improvement of healthcare system or diverted to other sectors with the result that the health facilities everywhere are in shambles, equipment broken down and out of order and manpower hardly to be traced. With this state of affairs, one can imagine how one of the most important social sectors has been totally ignored and overlooked completely. The choices of development are also deeply linked with the overall preferences of masses either to opt for or not to consider the public healthcare centers.

It is likely to be strongly context-dependent in the case of implication for health and welfare of issues such as trust and reciprocity (Portes, 1998). It is highly usual to accept that social capital can equally function in both a socially inclusive and exclusive way which might have positive welfare effects for some and negative for others (Kunitz, 2001; Leon & Walt, 2001). So, it is important to know that how implications for health and resolving of issues are strongly context-dependent and how social capital can be both a part of the problem and a solution to local health problems. The findings presented in later chapters of this dissertation are both of given perspectives about social capital as problem and solution to local health problems.

Higher inequality in income distribution has an association with greater mortality (Rodgers, 1979). Life expectancy increases with increase in income across the countries, but at a certain rate, this becomes progressively lower as income increases (Preston, 1975). Moreover, the countries with higher life expectancy have equal income distribution. A rich body of evidence of diverse theories and data has supported the argument presented by (Porta et al., 2002) that income distribution has an impact upon the shaping of health indicator. The findings of this study show that the health of the poor segments of Murree is affected because of unequal distribution of money and social good and services.

The evidence given by (Porta et al., 2002) has widely supported the idea that well-being of population depends not only on the absolute income of any society, but also on the distribution of income across the society. Thus the idea of the existence of a frequent relationship between the increase in Gross National Product (GNP) per capita and health improvement is confined to less developed nations.

It is important to know why income distribution is important in the field of health in Pakistani context as by ignoring it we cannot understand the growing health interest in social capital. Income distribution does matter in a two-way relationship for a number of reasons: (1) it is hard to buy healthcare without money; (2) poor people are not respected in the society and in government healthcare centers; and (3) TB disease itself carries the stigma of poverty. In Murree TB is the embodiment of a social condition, so having TB is an indication of social disadvantage in a way that other diseases are not.

The failure of the reduction of income inequalities will more likely result in discrimination and victimization of vulnerable groups (R. G. Wilkinson, 2000); this might have distinct salience to determine the level of physiological arousal and anxiety in a population. As populations are divided into groups and further into sub-groups, so it is important to know what holds them together.

To answer this question, it might be stated that common needs and interests are the potentials for continuous strength and conflict between them. So, in this study, it is important to understand to what extent the target population knows the reasons of their unity; does this idea of common-hood and unity exist in the community in physical or abstract form? As, (R. G. Wilkinson, 1996) argues that among the affluent societies, either a hierarchy or community of equals determines the overall extent to which its citizens find themselves at the bottom of the pecking order of socio-economic status will, as a response, experiment state of arousal and anxiety which will damage their health in the long-term if this becomes a chronic situation for them.

The earlier literature, particularly Wilkinson's work, enhanced the repute of Rodger by developing a concept that the income inequality is simply not a summary of balance income among the rich and the poor, but an individual health hazard in its own right (Rodgers, 1979; R. G. Wilkinson, 1992, 1996). The aim of this research is

not to apply the concept of income inequality and health at country level. This concept is being applied at a micro level that is primarily missing in the current debate.

The theoretical framework was developed by linking the concept of income inequality with the theory of social capital to observe its relation with the status of health among the poor and marginalized. As an assumption, income inequality generates low literacy rate, low social capital and social and environmental disparities among poor and marginalized communities, which are ultimately harmful to their health individually and collectively. The application of this framework will be helpful to fill the missing concepts in these two theories and to answer the primary research question. Wilkinson, just like Rodgers, established a relationship between income inequality and life expectancy among rich countries, both in levels as well as in differences over time (R. G. Wilkinson, 2001). He assigned a direct role to income inequality for harming individual health and creating stress. According to him, such inequality is an essential indicator through which the institutional and social environment becomes harmful to health that is observable phenomenon among respondents of Murree.

The physical effects occurring in a society are generally perceived unequal as they are not considered as an important factor for direct health-damaging consequences. The physical effects are termed as 'neo-material' realities of poverty even in an affluent society. They have a vast range that includes a tendency to be restricted to lower quality of food and clothing, poor quality and even dangerous housing, greater exposure to environmental pollutants (along with low air quality) and hazards, and less likelihood of access to effective medical care when required. All such conditions are needed to be observed while conducting a research in the light of the theory of social capital and political economy of health. Such observation develops a better understanding of the presence of these concepts in Murree and its aligned effects on public health. Apart from this, it helps to know the choices of people of Murree to pursue health.

It is a very common assumption that the masses of rural communities and urban neighborhood (particularly sub-populations) are irrefutably having a low level of social capital because of various inequalities, as the member of such communities

prefers isolation (Duncan, 1999) and a higher level of stress (Steptoe & Feldman, 2001). Most common environmental health care is taken for granted here, as a reduced capacity can be observed to retort to environmental health threats and to receive effectual public health service interventions (Campbell & Aggleton, 1999). Health behavior and environmental factor become a barrier to improve the level of community health (Munir & Suhartono, 2016) that is one of the findings of this study.

2.5.2 Income Inequality, Psychological Environment, and Health

Wilkinson's model of inequality and social cohesion had also been criticized. It has been claimed by (Carles Muntaner et al., 1999; Carles Muntaner & Lynch, 1999) that the practice of Wilkinson's model is limited to the developed countries, and thus it neglects the effect of international economic relations on the level of income inequalities. The critique demands the theory to address those social mechanisms that create income inequalities; it demands the theories of social stratification and class analysis to try to explain those class positions of a society which generates income inequalities.

At international level, world inequality affects not only between-countries income but also within-country income inequalities (Wright, 1996). This is the macro level analysis, but in this study, the effect of income distribution to income inequalities has been observed at the micro level and answers the reason of occurrence of income inequality through Neo-Marxian model. Some critics including (J. Lynch et al., 2000; C. Muntaner et al., 2001; Carles Muntaner & Lynch, 1999; Whitehead & Diderichsen, 2001) have claimed that "Social Cohesion" might have both good and bad consequences on health. So, there is need to better define the concept of Social Cohesion within the concept of theory of social capital, because historically it has been used as a means of social control among the fascist societies as it may have both good and bad after-effects on health.

The critiques (C. Muntaner et al., 2001; Carles Muntaner & Lynch, 1999) have considered it necessary to analyze the relationship between class and social cohesion along with the political aspects that are related to social cohesion and income inequality. The most historical example is that of former Soviet Union where breakdown of social cohesion, the crux of socialist state ultimately transformed into a

capitalist state (Keshavjee, 2014). In Murree social cohesion generally prevailed among similar classes but caste system (Eglar, 1964; Eglar & Chowdhry, 2010) in Murree has partly set aside the concept of class based society and holds reasons for social cohesion for limited reasons. Most of the times, for finding solutions to existing communal health related issues social cohesion component is hard to find in Murree.

The inequalities divide people into different classes and the social cohesion account of social capital brings the like-minded people closer to each other on the basis of common interests. In Murree, this can be found more often in political social cohesion, but among the poor and the marginalized group this concept is always lacking because collective consciousness is not developed among them.

In general, the links can be observed between income inequality and health at two levels. Some of the studies examine this with reference to country health differences, whereas other analyzes this association of income inequality and health within countries (J. W. Lynch et al., 2000; Carles Muntaner & Lynch, 1999; Smith, 1996; Wagstaff & Eddy van Doorslaer, 2000). Keeping in mind the scope and area of research, this study primarily is concerned with the second sort of analysis that is to know the existence of these links within the locale of this research.

Moreover, the extension of this proposed assumption is that the quality of individual's psychosocial environment is most commonly characterized by things that include social capital and sense of control over life, which is the chief explanatory mechanism for such types of associations (M. Marmot & Bobak, 2000; R. G. Wilkinson, 1996). The theory of psychosocial environment claims two main pathways, through which income inequality is associated with health; behavior and stress (R. G. Wilkinson, 1996). The poor and marginalized segments of Murree are under stress due to poverty and this has developed low health seeking behavior among them. Health is mostly taken for granted.

Income inequalities are the basic cause of low level of health preferential behavior among poor and marginalized segments of the society that always keeps them under stress. At the individual level, there is evidence that psychosocial factors, such as control (M. G. Marmot et al., 1997), distrust (Everson et al., 1997) and the quality of interpersonal relationships (Kaplan et al., 1994) affect health. Suppose at a population

level there exists an association between income inequality and health, the question raised by (Gravelle, 1998) is to know at what level this association is the mathematical result of the underlying connection between income and health at the individual level. This study aimed to explore the connection of income inequality and health at individual and household level, where the concepts of psychosocial environment, social capital, and sense of control over life, distrust, and quality of interpersonal relationships were analyzed in the light of the primary concept of inter-connection between income inequality and health. The assumption that households, within groups or clans, with higher income inequality and poorer psychosocial environment have worse health status which was observed during this research by analyzing the above-mentioned concepts.

The aim is to assess a relationship resulting from income inequality and poor health conditions, worsening sanitation, low level of social capital, congested living environment, and low health preferences etc., in order to understand the status of TB disease among the targeted population. Analyzing the relationship between income inequality and child health outcomes (John Lynch et al., 2001) claims that higher income inequality had an association with higher infant mortality and low birth weight in people of both sexes aged 1–14. The earlier cited studies depict a close association between income inequality and health that promotes the researcher's interest to examine this relation affiliated with other mentioned concepts in current research.

2.5.3 Social Status and Health

There is a wide relationship between health and social status (Sapolsky et al., 1997; Shively & Clarkson, 1994). As (R. G. Wilkinson, 2002) has claimed that among humans, better material conditions ensure higher social status. Similarly, (Shively & Clarkson, 1994) have pointed out that just like animals, among humans, the element of social stratification is to gain privileged admittance to resources. This attitude results in social stratification and there emerges class system where one holds the resources and the others are dependent.

In the field of public health, the resource holders manipulate the resources to their own advantage and regulate the lower class in order to show their power and this

assumption was found to be true in this study. It is commonly observed that the affluent groups, who hold easy access to resources, do not visit the public health facility center for treatment as they have financial capacity to avail the facilities in private sectors. But the members of this group work as a franchise for poor and marginalized people to have an easy access to resources particularly in government hospitals.

In the past, the income distribution, rather than average income, was more closely associated to population health (R. G. Wilkinson, 2002). It means a higher level of material consumption was least inclined towards social gradient in health as compared to social status. The higher social status works as a tool to provide a rapid approach to those indicators whose non-possession takes to social anxiety.

During some earlier years, the association has been traced with low social status towards sources of anxiety, such as job and housing insecurity, debt and number of more difficulties of life being faced by the low-income groups (R. G. Wilkinson, 2002). The least level of social cohesion is the outcome of income difference that further leads to anxiety as it creates a widening gap between members of different socio-economic classes among affluent societies. This difference is easily observed among residents of Murree where resource holding class is mostly least concerned about health related problems of people with low social status.

'Social trust' element of the theory of 'social capital' is an indicator that is the quality of social relations and is most commonly found among the egalitarian societies (I Kawachi et al., 1997). Whereas, the element of 'social trust' is lacking among various classes and caste-based societies, the uniting force is not often present. The socio-economic anxieties also play a vital role in nurturing a negative side of social trust. As a result of these anxieties, the individual begins to consider himself socially isolated and starts monitoring how others react to the transformation in his personality, and whether the reaction is that of shock or scare or filled with arrogance, shame or embarrassment. Such level of self-confidence decides the way of negotiating at social space, as a fact they guide individuals' behavior who can never avoid monitoring others' response towards them (R. G. Wilkinson, 2002). The statuses of such social anxieties were observed during this research.

It is an assumption that the social anxieties have a close relation with individuals' social trust and negotiation process in the field of public health. It is an assumption that the individuals may feel that the others take their presence for granted. So, the element of distrust starts emerging in his/her personality. Moreover, as an assumption, the poor and marginalized people consider themselves inferior to the affluent that is why, they find themselves in a discouraging state of affairs and helpless to negotiate their rights. This was in particular found to be correct with reference to current research, the poor and marginalized TB patients of Murree could not negotiate for their successful treatment at public health service as they had low level of trust upon the public health centers and public health providers and their communication skill could not support them because their interaction was weak due to prevailing social anxieties.

2.5.4 Politics and Health

The politics of health, more considerably, is a politics of human relations and being part of a social structure it is related to the human psychological needs (R. G. Wilkinson, 2002). Concerning women, all this has serious implications for them. According to (Blau & Kahn, 1992) more classes, racial discrimination along with excessive discrimination against women can be observed among the more male-dominated famiies, more violence and primarily among the more unequal societies.

Such sort of women's status can be enhanced only by bringing improvement in social relations in the public space along with decreasing the income differences among men (Ichiro Kawachi et al., 1999). As discussed earlier, the human relations within the context of social capital is linked to the status of health which leads to psychological satisfaction among patients. As an example, people of Murree having direct or indirect established contacts with the concerned authorities feel more psychologically satisfied to visit a public health facility than to those having no links at all.

Discrimination against women in Pakistan is a very commonly observed phenomenon in a male dominated unequal society where women have to struggle for their rights. The women of Murree are economically dependent upon men and most of the time struggle especially when married under the shadow of multiple restrictions. Their mobility is curbed by men and causes hurdles for establishing human relations outside

home with people in both domestic and public spheres. During this research, these concepts were closely observed by following the proposed research methodology to know the connection between human relations and health seeking behavior among women, extent of liberty given to the women along with its impact upon socially marginalized members of the community.

Rodgers' work captured the interest of public health researchers to answer the question whether income inequality affects health in population (John Lynch & Smith, 2002; Rodgers, 1979). Rodgers recognized specific factors such as sanitation, clean water, healthcare and food supply along with aspects of social infrastructure investment that are important but empirically difficult to disentangle because they tend to be highly co-linear with each other as well as with income. Social inequality is a multi-dimensional concept – not confined to income inequality only and is expressed through occupation, education, access to services, housing and gender discrimination, ethnicity and age which are required to be fully explored.

The reviewed literature on income inequality and health has discovered crucial roles played by individual's income and has become a meaningful lesson. On winding up this discussion, a question arises whether income distribution really affects health (Farmer et al., 2013; John Lynch & Smith, 2002)? The answer to this question is very simple. Yes, of course, it does, as it affects the incomes of individuals, but it will be an enormous challenge to prove the given answer without conducting an in-depth study.

2.5.5 Gender Inequality and Social Capital

All sorts of inequalities are exerting adverse effects on health in developing countries (Deaton, 2002). Gender discrimination is among one of the inequalities that we observe around us. Denial of girls' education relative to boys leads women to compromise their as well as their children's health (Sen, 2000). The sociologists have described sex as a relatively fixed biology of either being female or male, whereas gender refers to the socially attributed roles and expectations of women and men in any of the given society, which might get the changeover life stage, time and place (Phillips, 2005). In his study (Haslanger, 2000) has made it evident that gender is a

social construct, rather than being a biological one, which varies with norms, values, and roles of any given society or area.

Gender has impacts on the health of women in a number of ways such as their powerlessness and lack of access to resources – negligible education, restricted medical care, and insufficient food. There are causes of disadvantages to women throughout the developing world. Besides this – socially defined traits more often stereotypes – including active (for male) passive (for female), rational (for male) emotional (for female) and many more, associated with men and women having fixed characteristics for both separately impact the status of health of women. All over the globe, in most of the countries, women have less control over themselves, limited access to resources and over their lives, than men. The women have to face negative consequences of health seeking practices because of inequalities between sexes.

There exists an interrelationship among social gender differences, utilization and development of social capital. The debate over the theory of social capital begins with its very simplest definition e.g. the human capacity. This leads to a question how far people of different gender possess the equal human capacity and how gender is supposed to be equal in a patriarchal society. Religious places, playgrounds, cultural events etc., are claimed to be the social anchors (Clopton & Finch, 2011) that help individuals to develop their social network for enhancing their social capital. The gender-based discrimination of mobility has a deep connection with the existing level of education, job status, language skills etc. of women in any society (Hightower et al., 2013) that is observed in Murree. As (Clopton & Finch, 2011) has argued that at certain time, a cultural institution such as music, food, or local festivals (Wood & Thomas, 2006) may be considered as social anchors for the community because they provide space for social gathering.

Likewise, (Portes & Landolt, 1996) consider the valued account of the communitarian view of social capital that assumes community members as homogeneous and provides everyone equal benefits from its resources. This becomes true as far as the bonding concept of social capital is concerned, whereas in bridging concept of social capital somehow or the other it becomes controversial. In his work (Portes, 1998) identified four negative consequences of social capital: (1) the exclusion of outsiders; (2) excess claims on group members; (3) restriction on individual freedom; and (4)

downward leveling of norms. In speaking of social capital as an exclusionary resource, he notes that "*the strong ties that bring benefits to members of a group commonly enable it to bar others from access*".

The first point of exclusion of outsiders is very obvious among both homogeneous and heterogeneous community members. When we talk about more than one sex we support the idea of (Fausto-Sterling, 1993) about five sexes. It is observed that due to gender-based differences the third gender is excluded from the social gatherings of both or separate gender. So, not to mention the third gender here the second gender (woman) is marginalized on two levels; society and household. This affects their value and level of social capital for the TB patients that is observable in social settings of Murree.

Similarly, it is quite obvious that due to socio-cultural, economic and religious reasons, women are excluded from the community spaces or social anchors of the men. A second point that has been observed in Murree is that both the genders do not have equal excess to social capital that is the result of exclusion and individual freedom for mobility and participation at community spaces.

The root cause of social inequality is an unequal distribution of social capital (Bourdieu, 1986, 2010). The whole discussion of gender and social capital leads towards some basic questions. In the concept of gender and social capital, Pakistan being a patriarchal/male dominant society, women are neglected at household and societal level and over a period of time undergo a mentally willful distress which leads them to become marginalized part of the society. The socially defined roles for women have assigned them to look after their households. If women are provided with equal opportunities to attain education and seek jobs, there is a bright possibility that they could be as capable and competent as men.

But owing to gender based discrimination in Pakistan, the responsibility for women has been largely restricted to the four walls of the house where as housewives; they have to carry out multiple tasks from cleaning to cooking, washing and entertaining guests. During this research, it was found that women diagnosed with TB tend to stay at home during the course of their treatment, did not follow health directives with the results that they kept spiting here and there. Unfortunately it's the women household

folk who directly encounter this situation and add to the existing number of TB patients. In these circumstances, poor and marginalized groups especially women are at great risk of accepting TB virus from those carrying it at home.

Men and women have different biological structure and functions and so are some of the ailments too on the basis of gender. The biological functions induce them to produce children, due to which for certain time period their mobility and interaction with their homogenous group gets limited. Women are more biologically, religiously, culturally, morally, economically, ethically bound and have very limited mobility than men. Although the poor segments of Murree are vulnerable because of afore-mentioned limitations, the women of these groups are doubly vulnerable.

In reality, the women are marginalized at two levels. First, within the framework of this research, women are marginalized at social and domestic levels. At the social level, they are relegated to lowest position due to their unequal status compared to men, and additionally they are marginalized at domestic level too. First, at the structural level, there is unequal income distribution that affects the social status of the poor; besides this, the state also does not treat them as equal citizens. As far as the domestic marginalization in Murree is concerned, the women of targeted group do not financially contribute to their families. So, their status is not equal to men. The male chauvinistic approach conveniently forgets that household duties of women are unpaid for and without any compliments. Such sort of gender inequality can be observed right from the birth of a girl child and does not end even till her death, while a man continues to enjoy highly valued status compared to the woman.

Keeping in mind the central argument of “Unhealthy Societies” (R. G. Wilkinson, 1996), it can be assumed that in Murree being housewives women are more safe from external threats to life e.g. road accidents etc., whereas women are more close to internal life threats e.g. germs., that do not have sudden results as compared to external life threats. Constantly encountering the germs, while cleaning the home, may harm her health worse than any external health risk. This segmentation of internal and external threats should be considered for conducting studies in the domain of public health. Talking about the case of TB and social capital (Atre et al., 2004, 2011) said that the women – because of gender identity – are restricted to home

through which they cannot develop equal social capital as men, but they remain protected from TB if there is no TB patient at home.

Quoting the significance of religious social capital (Jang & Kim, 2013) said that it was found to be one of the most substantial sources of capital which used to help the Koreans in the process of settlement in the United States and at community level as the local Churches were providing help to community members for purchasing a car or a house. It is a common observation that religious values knit the communities into harmonious relations and religious teachings preach the people to take care of humanity as a whole and their neighbors also. Religious congregations facilitate people to enhance their social skill through the tool of social capital. During this research, the quoted case study of young Korean community (Jang & Kim, 2013) was a guiding principle to explore how religious social capital is helping Pakistani community by providing health-related knowledge, financial help during the course of illness and whether it is effective for treating the unequal as equal.

2.5.6 TB Stigma and Social Capital's Response

Stigma, being a social determent of health, is found to be a major barrier to accessing healthcare (Craig et al., 2017; Green, 2009). For the first time, (Goffman, 1963) defined stigma as, *"an attribute that is deeply discrediting"* and considered it an outcome of power differentials, existing in an interpersonal relationship, which is deeply discrediting to social identity of an individual. Oxford Dictionary defines Stigma as "*a mark of disgrace associated with a particular circumstance, quality, or person*" (Stevenson, 2010). Disgrace associated with any of the circumstances puts a visible question mark on social acceptance of stigmatized conditions or individuals attached to it.

Talking about the history of stigma in early Tuberculosis Movements (Roberts, 2009) discussed some established boundaries and stated that theories of racial predisposition laid a foundation to introduce clinical and social stigmas of TB by presenting various notions such as association of TB with Black Population; marking TB infected houses for social identification, and describing dust and dried sputum as causes. Stigmas hold a close connection with health-seeking behavior, because of which there is a delay to initiate treatment (Ahmed Suleiman et al., 2013; Mak et al., 2006). There are many

other factors for initial default rate which cannot be underrated and a part of it is shared by social stigma that is partial reality of the issue in Murree.

Stigma – negative experience of labeling, stereotyping, discrimination and exclusion due to any of personal attribute reported by an individual of a society, who uses government facility centers (Allen et al., 2014; Martinez-Hume et al., 2017; Stuber & Kronebusch, 2004). Social scientists have been concerned to know the experiences of stigma and its influences in diverse ways (Green, 2009). Talking about stigma and blame game (Martinez-Hume et al., 2017) said that Stigma is evident through a process of rejection, blame, or exclusion that is faced by some of the TB households of Murree.

TB stigma does discredit social interaction and association in Ladakh (Sonal & Sharma, 2011), where the cultural perception of TB virus defines well-being of patients and families. Besides two common medical symptoms – nose bleeding and breathlessness – this study of Ladakh presented a backache, nausea, and headache most reported socially defined symptoms of TB. It further describes that a very small number of respondents knew TB as a contagious disease and considered it harmful. Accessibility, cost, privacy, and effectiveness are the basic indicators for choosing a health facility center to get TB treatment. Similarly in the context of Pakistan (A. Khan et al., 2000) have presented their research finding and stated that majority of the families did not have knowledge of causes and symptoms of TB and they had a very low level of health seeking behavior. The existing research literature on TB in Pakistan by (A. Khan et al., 2000; Liefooghe et al., 1995) supports the idea that hospital staff spreads various social stigmas among patients.

In history of TB disease, myths and misconceptions were developed and experienced (Roberts, 2009) , which travelled over generation and exist among the people of Ladakh (Sonal & Sharma, 2011), where use of asbestos plate for cooking bread, eating cow's meat, taking Ladakhi butter tea and having residence in a particular area are existing myths for becoming a TB patients. In Ladakh, TB stigma snatches moral support from patients and also pushes them into exclusion. The discrimination and deprivation of a group is the result of various manifestations of social exclusion (Sen, 2000) which are usually based on stigmas.

Social support is required to overcome the effects of stigma upon TB patients (Arcêncio et al., 2014; Juniarti & Evans, 2011; Long et al., 2001) for which social capital can be the best possible tool. Scientifically stigmas have no standing, but in the culture of Murree, social stigmas are closely attached to the life of TB patients. Chapter eight of this dissertation comprises field data and observation that discusses existing social stigmas and their effects in developing health disparities and breaking down social capital among poor and marginalized segments of the society.

Stigmas exist because of false beliefs, and persist due to a number of reasons and resist change as they have become part of cognitive orientation that has an overwhelming effect on marking relationships (Jones, 1984). The developed cognitive orientation is based on information-processing that plays a part to mark the distance to stay away from TB patients as well as influences their behavior and hinders to accept the core reality based on true knowledge about the disease for changing social behavior towards TB patients.

2.5.7 Health Insurance

The success of any health insurance reform entirely rests on the understanding of behavioral components of coverage and the take-up, which is likely controlled by psychology just like economics and public resources that can likely be of much more use through a behaviorally informed policy design (Baicker et al., 2012). The failure of taking any health insurance, either social or private, poses serious health risks (Institute of Medicine, 2009). According to (Baicker & Finkelstein, 2011; Finkelstein et al., 2011) both types of health insurances develop the concept of self-reported health as compared to uninsured.

In a traditional economic model, there are reasons for low take-up of the public insurance program, free or subsidized from the government, are hard to explain in this context (Baicker et al., 2012) where people compare the expected cost in comparison to expected benefits. The public health insurance program is not accepted because of its lengthy application process and complex eligibility criteria along with various social stigmas that also play their role for depressed enrollment in public health insurance programs (Moffitt, 1983; Stuber et al., 2000; Stuber & Kronebusch, 2004),

which can be improved through assistance and providing true information to people (Aizer, 2007).

Some social stigmas, such as transfer of cash or supply of kind, boost the enrollment of welfare health insurance programs (Baicker et al., 2012). The outcomes of various stigmas associated with Welfare Health Insurance Program may have important implications for its beneficiaries and can become a barrier to access quality healthcare (Martinez-Hume et al., 2017). The channels of spreading information (Community Spaces) impact on establishing social stigmas and the same social channels can be of an optimal use for the success of a welfare health insurance program by communicating right knowledge about the program. In Punjab, a newly established Prime Minister's National Health Program is also facing such socio-cultural, political and religious stigmas that have become a barrier to boost the enrollment of this pilot project. The best possible way to winning this situation is to provide knowledge of this health insurance program (Institute of Medicine, 2002).

2.5.8 Factors for Health Determinant

A significant report published by (IOM, 2006) highlighted that health is determined by several factors including personal behavior, genetic inheritance, access to quality health care, and general external environment (such as the quality of air, water, and housing). The report has promoted an ecological model with a focus on three major domains include genes, behavior and social environment. This study also observes behavior of respondents towards their disease and effect of social environment as barrier for many and resource for few in Murree. In addition to this, a growing body of scholarship has documented association between social and cultural factors and health (Lisa F. Berkman & Kawachi, 2000; M. Marmot & Richard G, 2005). A study conducted to understand why it might be that people who arrived in New Zealand without active TB disease developed disease up to many years after arrival (Park & Littleton, 2008) claims that in addition to infection with the bacillus, another likely contributor was stress and it relationship to immune functioning, part of the conceptual apparatus of biological anthropology and physiology. In support of this argument, earlier studies have shown that stress can alter immune function and hence may be detrimental to health (IOM, 2006). Anything that suppresses a person's immune response may therefore assist the conversion from infections to disease

(McDade, 2005). Potential stressors might be difficulties of earning that were common among respondents of this study.

2.5.9 Pathways of TB Patients

All of the TB patients go through some of the pathways for reaching for a hospital which provides TB treatment. A formal and informal healthcare structure exists in form of barrier between patients and TB facility centers of Murree. A study conducted in Delhi by (Kapoor et al., 2012) has presented a finding that the most common pathways of TB patients are private chemists, informal health providers or quacks and qualified practitioners. This study had not found any patient who had directly visited DOTS center in Delhi rather remained a rolling stone amongst these pathways. This shows the care-seeking behavior of TB patients. There is a policy concern to engage these pathways to overcome the situation.

As per the policy guidelines of WHO, PTP was working on Public-Private Mix (PPM) strategy under which qualified practitioners were being engaged to overcome the dilemma of TB. The PPM should be recognized by the TB control programmes as a public health intervention within its policy mandate and engage both public and private healthcare providers to ensure the equitable availability of services (Dewan et al., 2006; Lönnroth et al., 2004). A vast proportion of the TB patients – being poor and marginalized – avail the services of informal health providers and private chemists (Kapoor et al., 2012), whereas no regulatory policy has been developed on private health providers. It is very important to know the reasons for the preference of informal healthcare providers for seeking better health by the unprivileged. A multi-sited study conducted in Pakistan (A. Khan et al., 2000) also reaffirms this debate in the context of Pakistani healthcare system that every TB patient reaches TB center through different pathways.

The researchers hypothesize four mechanisms or paths by which health and behavior may be affected by social capital, ‘Informal support’, ‘instrumental support’, ‘emotional support’ (Lisa F. Berkman & Kawachi, 2000); and ‘collective efficacy’ (Sampson et al., 1997; Skrabski et al., 2004). This study finds the existence and utilization of these pathways among the poor and marginalized TB patients of Murree.

In Indian perspective (Rajeswari et al., 2005) it has been said that knowledge of TB was very poor among the patients, a deep psychological pressure was found, TB illness did affect “non-job” activities of the patients and TB became a barrier to visit friends. Discussing the perception and consequences of TB in Sialkot (Liefooghe et al., 1995) has stated that social perception of TB among people has very serious repercussions because of which individuals and families get alienated. This is partly true in the context of current research conducted in Murree that owing to perception about TB the individual patients and households are alienated even after more than two decades of earlier study conducted in Sialkot.

In a qualitative study talking about the barriers in the management of TB in Rawalpindi (Soomro et al., 2013) it is said that limited knowledge of patients, loss of employment, financial burden, social stigma and long distance from health care facility were main barriers for TB adherence. This study has proposed that more patient-centered interventions and attention to mentioned above barriers are needed to improve the treatment adherence. Besides this it recommends direct observation of patients and regular home visits by health workers can reduce the risk on non-adherence. These findings are similar to this ethnography where barriers for treatment of TB are similar.

A study on prevention of TB says that it involves early identification of the infected people to stop damaging effects (Bhopal, 2016). Although a survey conducted in 1996 showed that approximately 80% of TB patients first seek care from private sector including general practitioners in Sindh (Marsh et al., 1996) but such studies and surveys have not been conducted in Punjab. The study says that GPs were fair in refereeing and recognizing TB, but their case management and diagnostic procedures were quite weak. In addition, the health has become a provincial chapter after 18th constitutiona amendment and the health ministry should evaluate the knowledge, attitude and practice of general practitioners as well as providing counting medical training for treating TB (Ahmed et al., 2009; Marsh et al., 1996). The study suggested improvement for the detection of TB patients.

2.5.10 Default of TB Patients

Primarily, controlling TB is possible by ensuring right and timely treatment for TB patients; ensuring patient support through providing guidelines and improving delivery mechanisms of TB treatment. Second, controlling the default rate of TB patients is one of the most important ways to overcome the spread of this disease. In the first reported study in Pakistan conducted by (Rao et al., 2009a) on initial default rate supports an idea of default that was earlier presented by (Buu et al., 2003) for highlighting the important issue of default in the treatment process of tuberculosis.

A study conducted on prevalence of treatment failure among pulmonary TB patients in a tertiary care teaching hospital of Dera Ismail Khan, Pakistan (Yasin et al., 2016) found a significant treatment failure and suggested vigilance on part of health care personnel. This study claims that treatment failure further increases the risk among TB patients. The above mentioned study does not talk about the reasons behind treatment failure and its outcomes in details. This study has explored the reasons behind treatment failure and its outcomes in Murree.

A similar study conducted on treatment outcomes among new smear positive and retreatment cases of TB in Mangalore, South India by (Joseph et al., 2011) gives a descriptive analyses of findings by saying that male patients were more likely to default, relapse or end up as failure of treatment compare to females; most of the TB patients were resident of urban areas and this could be due to poor living conditions with respect to housing and high population density which influence the disease transmission; poor treatment outcomes pose a significant challenge to the DOTS initiative and TB control; early diagnosis of TB is highly valued for which Community Health Workers can play a vital role by enquiring patients with a longstanding cough of more than two weeks and refereeing them to primary health center; and finally the elimination of default rate can can be made possible by motivating TB patients and also by effective implementation of DOTS to improve the success of TB control program. This ethnography of Murree talks about causes and consciences of treatment failure among TB patients of Murree where the earlier discussed reasons for failure to treatment were observed and part of the responsibility falls on patients and part of it on DOTS workers.

The term initial default is used to describe those patients who are diagnosed with TB, but they do not follow-up with the anti-TB treatment. Before the start of treatment, this sort of default is a very serious problem not only for the smear-positive patients but also for the others in the community because according to (Rao et al., 2009b) such patients are a potential source for the spread of infectious disease. A patient having active pulmonary TB expels infectious droplets of 0.5 to 5 microns during coughing; sneezing or speaking, where around 40,000 droplets can be produced through a single sneeze (Cole & Cook, 1998) and each of these droplets does hold an equal chance to infect the inhalers. A new infection can easily be caused even by a single Bacterium because the infectious dose of TB is very low (Nicas et al., 2005).

On the basis of these facts, it has been proved, that in a single year one TB patient with positive smear can infect 10-15 persons and in due course, 10% of the total infected persons will develop the disease. This failure belongs to DOTS rather than the negligence of TB patients because patients were expected to become defaulters and there was a policy guideline to be followed by TB facilitators to overcome default rate. In order to control the issue of initial default rate and to prevent its further transmission, presented are important recommendations to trace such cases and register them for the purpose of treatment on priority (Rao et al., 2009a). Although there exists high or low initial default rate (Gopi et al., 2005), there is need to understand the reasons for this issue from different angles. The issue of initial default is taken for granted in Murree and this argument is detailed discussed in later chapters of this dissertation.

Reporting 8.3% of an initial default rate, with a total of 79.5% defaulting patients (Buu et al., 2003) considered health facility as a principal reason for this initial default. Furthermore, elaborating the reasons for this initial default rate (Buu et al., 2003) stated that 15% of total initial default patients in the study were not aware of the diagnosis. As a solution to this situation (Rao et al., 2009b) said that it is required to improve knowledge and awareness about TB and the clinic protocols among the patients being presented to chest clinics.

Apart from this general and initial default rate, there exists another most serious and challenging issue of untraceable defaulters (Rao et al., 2009a; Sai Babu et al., 2008), which is not only a barrier to overcome TB disease, but also one of the fundamental

reasons for the spread of TB. A field report from India (Rajeswari et al., 2005) and a research conducted in Pakistan (A. Khan et al., 2000) found the issue of migration and intimation of incorrect residence address is rampant among TB patients leading to difficulties in locating their whereabouts.

It is recommended that NTP of every country suffering from fatal chronic infection of TB should take most urgent and foolproof measures including the mandatory documentation of a most accurate and complete address along with the active mobile number of the patient and contact person. Besides this, according to (Rao et al., 2009b) funds allocation for this purpose has also suggested a helping role of the laboratory technicians at the time of sputum sample collection to the diagnosis and treatment of TB.

The selected concepts of theory of social capital and political economy of health along with literature review related to the topic of study have helped to study the prevalence of TB in Pakistan from multiple directions. The prevalence of TB in Pakistan cannot be attributed to single reason but the challenges to fight the menace of TB should now be integrated into a policy at all tiers of government machinery. There are a number of small realities to boost the spread of TB in Murree in general and Pakistan in particular where the logical relationships develop and shape into a complete picture.

Chapter 3

RESEARCH METHODOLOGY AND AREA PROFILE

This chapter is divided into two parts; the first gives detail of applied research methods including data collection tools and techniques and the second portrays the area profile of Tehsil Murree. The first part of this chapter presents a justification of applied data collection tools and techniques. Area profile portion comprises qualitative and quantitative data that helps the reader to understand the socio-economic and political structure of Murree along with its infrastructure and the living patterns of its residents. The determinants discussed in the section of area profile have a close link with the status of health.

3.1 Research Methods

During this study, research ethics were given prior value before the application of every data collection tool and technique. The respondents were verbally communicated with objectives of the study and utilization of their provided information. Verbal consent of respondents was ensured at every step of the research. Data collection methods, tools and techniques used during this study to collect data from pulmonary TB patients are given below.

3.1.1 Rapport Establishment

Rapport establishment is one of the important anthropological research methods that helped the research to get more close to the target population of this study to develop trust with the community and its inhabitants. The researcher collected more reliable and valid research data through this method. During this study, the researcher established rapport with the staff of existing government hospitals in Murree and TB patients with positive pulmonary cases. The researcher gained permission from the Medical Superintendents (MS) of Syed Muhammad Hussain Government TB Sanatorium Samli (Samli Hospital) and Tehsil Headquarters Hospital (THQ) Murree before formal start of the study.

During the course of seeking authorization, the researcher had to face a lot of hurdles as one of the doctors of Samli Hospital refused to support this research by raising apprehension with regards to the role of Shakeel Afridi who was suspected of

providing information on Osama Bin Ladin to the United States of America (USA) and played a key role in Abbottabad Operation. It took two weeks to gain the confidence of MS and get his permission.

During this time, the researcher developed good terms with the Deputy Medical Superintendent (DMS), who also turned out to be researcher's co-sect and had presented a soft image of researcher before MS. Finally, the DMS was able to arrange a one-on-one meeting with MS, who finally understood the situation and put his signatures on permission letter. This permission helped the researcher to communicate and establish rapport with staffs of TB dispensary of Samli Hospital. In reality, staff working in TB dispensary of Samli Hospital was in close contact with TB patients due to their nature of job.

At the start of the research, the researcher developed rapport by taking part in extended sittings with paramedic staff of Samli Hospital, exchanged pleasantries with them and had lunch and tea. During this interaction, informal discussions were held with the employees of Samli Hospital including doctors, dispensers, nurses, ward boys, gardeners, and sweepers. Fortunately a doctor, who belonged to researcher's native district, was employed in MDR-TB Section of Samli Hospital. He helped to further enhance rapport with doctors and other staff.

During Out Patient Department (OPD) hours, the researcher spent time in the dispensary where all types of TB patients were registered, and also interacted with every registered patient with positive pulmonary TB. This continued for a month without fail. Besides this, the lab technician and TB facilitator of THQ Murree belonged to the neighboring area of researcher's native district and spoke Saraiki[2]. This lingual intimacy helped in developing a close understanding with other staff of THQ and also established link with a staff member of Rural Health Center (RHC) Phugwari (Murree).

3.1.2 Participant and Non-participant Observation

Participant observation is an attribute that makes anthropology a specialized field distinct from other social sciences. Both participant and non-participant observation

[2] Saraiki is one of the local languages of Pakistan that is spoken in South Punjab and in some areas of Khyber Pakhtunkhwa Province

research methods had helped to get more close association with government healthcare providers and TB patients for the development of 'We' feeling that had mostly led towards a higher degree of trust. The researcher did participant observation in non-technical matters of the hospital and daily activities of patients.

Participant observation was done by sharing the dispensary burden with the staff of TB dispensary of Samli Hospital by measuring the weight of the patients, placing the medicine in the polythene bag, collecting and queuing up the prescription of patients in absence of dispensary staff and writing the dosage on the packing of medicine with board marker. Non-participant observation in government hospitals of Murree was held in technical affairs of the staff. The researcher had observed the behavior of doctors and all other staff of government facility centers at different levels during the visit of patients in OPD as well as participant observation through participating in various socio-cultural activities. The use of this anthropological research method at the hospital had helped to develop rapport not only with service providers of government healthcare centers of Murree but also with patients, who later on warmly welcomed the researcher to spend time with them in their residential areas.

3.1.3 Key Informants Interviews

Key informants (KIs) are considered to be the backbone of an anthropological research. The key informants had helped to establish an affiliation in the initial stage of the research and also supported in exploring the topical domain and the local vocabulary related to the targeted domain. During this study, the researcher had selected five key informants by assuring their willingness and availability.

The dispenser of Samli Hospital, Lab Technician of THQ Hospital, Medical Officer (MO) of Basic Health Unit (BHU) Kali Mitte, a Lady Health Worker (LHW) – deployed at BHU Tret – of National Program for Family Planning and Primary Health Care (NPFP & PHC) and a Field Operator of Military Intelligence (MI) were selected as key informants. Doctor Salam MO of BHU Kali Mitte and dispenser of Samli Hospital Ihsan helped to gain access with MOs of other two selected BHUs. The MOs of every selected BHU assisted in establishing rapport and contact with one LHW of their BHUs respectively. Field Operator of MI had helped in accessing to higher officials of Health Department in Lahore.

The selected key informants had supported researcher to interact with other staff of these selected government healthcare centers and also helped in establishing direct contacts with all types of patients. They also facilitated the researcher to visit various departments of selected government healthcare centers to observe the process of treatment and to get diverse information. In addition, they aided the researcher in exploring and interpreting local words for the purpose of research in spite the fact that the researcher was living in Islamabad for last ten years and boasted of having command of the dialects in the peripheries.

3.1.4 Informal Discussion

A number of informal discussions were held during this research with all sorts of respondents. The audio recorder was used to record these discussions. During informal discussions, the respondents gave very valuable information. These informal discussions were initially helpful to establish rapport and during that phase of research casual topics were part of discussions. Later on, most important issues related to objectives of this research were considered for informal discussions. By that time, close link was established with the respondents including patients and staff of public healthcare structure and an indicating sense of confidence emerged that was expected to produce practicable results. They provided all of the confidential information and even talked about internal politics, flaws, malpractices, and corruption in the government healthcare centers of Murree.

3.1.5 Judgmental and Convenient Sampling

The sample is defined as the smallest representative of the larger whole. The sampling techniques had supported in the generalization of field data. Judgmental and Convenient Sampling techniques were selected to conduct this study. It was conducted in two phases. The first phase was conducted in Samli Hospital, where a sample of 93 positive pulmonary TB patients was selected through convenient sampling for conducting poverty survey through Multidimensional Poverty Index (MPI) tool. At this stage, verbal consent of selected sample was ensured and these 93 respondents agreed to participate in second phase of study only if they were contacted beforehand.

The second phase of the study comprised in-depth qualitative field research and a total of 51 respondents were selected through judgmental and convenient sampling. For this purpose, quantitative data of the first phase was processed and a sample of 20 most deprived (poor) positive pulmonary TB patients was selected through judgmental sampling. Besides this, convenient sampling was applied to conduct interviews with 10 members of general public, 5 caretakers and 16 Public Healthcare Providers and policymakers. The age of respondents for this study was between 18 – 60 years. By using these sampling techniques, various research techniques and tools were used for data collection, which are discussed in detail below.

3.1.6 Multi-dimensional Poverty Index (MPI)

Multi-dimensional Poverty Index[3] (MPI) was used to identify multiple forms of deprivations at household and individual level. MPI was used to collect data at micro level through conducting the household survey. For this purpose, a MPI Tool was developed within which health, education, and living standards were the focused indicators. This research tool was applied during first phase of the study through convenient sampling to know the status of poverty and deprivation among positive pulmonary TB patients of Tehsil Murree.

Utilization of MPI Tool proved to be very helpful not only to acquire data for quantifying poverty and deprivation but also to have an initial and first-hand contact with either TB patients or their caretakers. This first phase of research was conducted after the development of rapport with dispensary staff of Samli Hospital where data of 93 households were collected from either patients or their caretakers (members of household). At the completion of this phase, the data was processed to get results. For this purpose, Microsoft Excel was used.

3.1.7 In-depth Interviews

The technique of in-depth interviews was a very useful research method to conduct a qualitative study. During this study, apart from twenty life histories, thirty-one in-

[3] MPI was developed in 2010 by the Oxford Poverty & Human Development Initiative (OPHI) and the United Nations Development Programme. MPI uses different factors to determine poverty beyond income-based lists and replaces previous Human Poverty Index (HPI) and Inequality-adjusted Human Development Index (HDI). MPI identifies multiple deprivations at the household and individual level in health, education and standard of living. It uses micro data from household surveys, and – unlike HPI and HDI – all the indicators needed to construct the measure must come from the same survey.

depth interviews from care-takers of the respondents, public health providers, program personnel, policymakers, and general public were also conducted. These in-depth interviews were conducted in a contented environment. This qualitative method of data collection gave an opportunity to respondents to speak freely for sharing their understanding and perspective over the questions.

3.1.7.1 Semi-structured Interview Guides

Data collection tool of semi-structured interview guide was used to conduct this study through in-depth interviews. Four different types of Semi-structured Interview Guides were developed to conduct in-depth interviews with key informants, care-takers of the patients, public health providers/policy makers and general public. Open-ended question technique was used to develop these interview guides.

3.1.8 Life-histories

Life-history is a method of qualitative research – frequently but not exclusively – used in anthropology and in health-related studies these days. It provided an alternative to empirical methods for identifying and documenting health patterns of individuals and groups. During second phase of this study, the life-history method was used to collect more in-depth information from the patients. For this purpose, life-histories of 20 positive pulmonary TB patients of selected age group were conducted through multiple sessions. This age bracket fell in the earning age group in Pakistan and the reason to select sample from this age group was to observe the household inequalities towards earning members during the process of sickness and TB treatment. The researcher had multiple long sittings with the patients, who narrated stories of their lives before getting sick; pre-diagnosis and post-diagnosis sickness, and during treatment; and after the completion of treatment. Verbal consent of respondents was ensured to use voice recorder during life-history sessions.

3.1.9 Focused Group Discussions (FGDs)

Focused Group Discussion (FGD) was a very helpful technique to validate and cross check data collected by applying data collection tools and techniques from different perspectives. During this research, three FGDs were conducted at Samli Hospital with different types of participants. First FGD was conducted by formulating a group of TB patients. The second group for FGD comprised patients, their caretakers and

dispensary personnel of Samli Sanatorium and the third FGD was conducted from the group of patients and general public. Each FGD comprised 8 members including researcher and a notes taker. The audio recorder was also used to record these discussions for avoiding the chance to miss any important information. The earlier collected information was validated through the application of this technique.

3.2 Area Profile

This part of the chapter deals with area profile, with a particular focus on, the locale of research. This information helps the reader to understand various physical features, environmental conditions, geography, modern amenities and other information relevant to the topic of the research, which determines the status of health among the poor and marginalized segments of Murree. There is a close relationship between man and environment i.e. ecology which has been defined as the science of interrelations between the living organisms and their environment including physical and biotic environments. This part puts emphasis upon interspecies and intraspecies relationship. It can be said that this is the most useful way to look at ecology and at the range of society.

3.2.1 Rawalpindi

District Rawalpindi – with a total area of 5,286 square kilometers (sq km) – is located in the northernmost part of Punjab Province of Pakistan on the Pothohar Plateau. It is the fourth largest metropolitan area of Pakistan with a total population of 5,405,633 (Pakistan Bureau of Statistics, 2017). Before the establishment of Islamabad (Federal Capital of Pakistan) in 1960, it had a total area of 6,192 sq km. It has been a well-known historical existence of a Buddhist civilization. It was named "Rawalpindi[4]" in 1493 AD by Gakhars, who were defeated by Sikhs and it went under the control of Sikh Empire. Later on, in 1849 AD, it became part of British Raj who turned it into the largest garrison town in 1851 AD. After the partition of Subcontinent in 1947 AD, Rawalpindi became the General Headquarters (GHQ) of Pakistan Army, for which the city is most famous worldwide (F. A. Khan, 2013). Rawalpindi has a warm and temperate climate. Being a district administration head, it has seven sub-units named Tehsils which include Tehsil Rawalpindi, Murree, Gujar Khan, Kahuta, Kallar Syedan, Kotli Sattian and Taxila (Population Census Organization, 2000).

[4] Rawal is the local caste and word "Rawalpindi" literally means the Village of Rawals

Figure 1. Map of Punjab Province

Source: Rawalpindi District Office

Rawalpindi district is divided into three distinct zones according to a general configuration. The first consists of Murree and Kotli Sattian Tehsils and the northern zone of Kahuta Tehsil. The second is Rawalpindi Tehsil which extends through Kahuta up to the west bank of Jhelum and down into Gujar Khan Tehsil unless it reaches the northern border of Jhelum district. The third zone consists of Potohar Plateau which includes whole of Gujar Khan Tehsil except a small corner on the east traversed by the hills on the bank of Jhelum and south-east zone of Kahuta Tehsil.

3.2.2 Murree

Murree (*marī*) meaning 'Apex' has historically been a beautiful tourist spot – located on the Pir Panjal Range – part of District Rawalpindi. Because of its natural scenic beauty, it is widely known as "ملکہ کوہسار (Queen of Mountains)." Murree comprises total area of 434 sq km and lies in north latitude 33° 54′ 30″ and east longitude 73° 26′ 30″, at an elevation of 7,517 feet (2,291 meters) above sea level at a distance of approximately 31 kilometers in northeast of twin cities of Rawalpindi and Islamabad (Population Census Organization, 2000).

Talking about historical establishment of Murree (F. A. Khan, 2013) said that in 1847 – hundred years before the partition of Subcontinent – Major James Abbott[5] (Indian Army Officer) was first to identify Murree as a potential hill station and in 1850 an official municipality was created to establish a sanatorium for the British troops stationed at Afghan Frontier. Later on, in 1851 President of the Punjab Administrative Board Sir Henry Lawrence[6] made the earlier development of the Town. A permanent town of Murree was constructed in 1853 at Sunny Bank. Furthermore, Khan stated that in 1857 a church was sanctified and a road – originally known as Mall Road that is still commonly referred as "The Mall" – was also built the same year and until August 14, 1947, access to Mall Road was strictly restricted to "Natives" of the area e.g. Non-Europeans.

3.2.3 Population Size and Growth

According to the data of Pakistan Bureau of Statistics, the total population of Murree was documented at 176,426 in National Population and Housing Census Survey of 1998 and 87.88 percent of this figure was rural (Pakistan Bureau of Statistics, 2017). This population has jumped to 233,471 in National Population and Housing Census Survey of 2017 with an annual growth rate of 1.70 percent.

3.2.4 Physical Feature and Topography

The topography of Murree exhibits a rich variety of high mountains, forests, plateaus, valleys, river, streams and few plains. Nature has endowed Murree with beautiful

[5] One of the City of Khyber Pakhtunkhwa Province of Pakistan "Abbott Abad" is named on the name of Major James Abbott

[6] On his name a famous most college of Pakistan "Lawrence College" is situated in Tehsil Murree, where the children of Notables, Economic and Political Elite do study.

scenery. Murree hills form an offshoot of the Himalayan system. They rise to heights between 2133 to 2438 meters. The highest ranges of Murree were covered with a varied growth and lined with silver, fur, oak, blue pine etc., while the lower hills produced wood rich in wild olive, acacia, and myrtle.

South-west of the Murree and Kahuta hills stretch a rough high lying plateau about 548 meters (1,800 feet) above the sea level. The northern part of Murree includes Tehsil of Rawalpindi and the portion of Tehsil of Kahuta. It is drained by Soan River and its tributaries. The southern part of plain forming Gujar Khan Tehsil is drained by Kanhi, which flows south-ward from Kahuta hills (Population Census Organization, 2000).

3.2.5 Flora

In view of its varied geographical feature, Tehsil Murree is rich in the variety of its flora, differing in character at different elevations. In the upper reaches of Murree hills, the main trees are Deodar (Cedrus deodar), Biar (Pinus Excelsa), Paludar (Abies smithiana), Barangi (Quercus passiflora) etc. The Chil (Pinus longi flora) covers the lower hills up to 1830 meters. The Cheel timber of Punjab has a high reputation and is preferred for furniture. In the lower hills, the common trees are Kao (wild olive), Phulai (Acacia Modesta), Drek (Melia Sempervirens), Sinetta (Dodona Burmanniawa) and etc.

This flora of Murree has been providing bread and butter for the daily living of poor people of Murree and as well as substantial yet noticeable profit to mafia involved in the timber trade. At present, countable people are involved in timber business and due to strict policies of Government of Punjab for the conservation of forests and introduction of advanced cutting machines, the opportunities for poor daily wagers have diminished and likewise interests of timber mafia shifted to other businesses. The tourism of Murree flourished because of this flora as this vegetation was the primary cause of low temperatures and heavy rains as compared to other areas of Punjab Province. Secondly, poor people used to cut down trees for firewood at home and also sold it illegally in the market for their earning. This illicit trade on government property was the result of prevalent corruption, but it was a common practice and a source of earning for a small portion of population that met their primary fuel source for cooking.

During the months of May, June and July, a wide range of white and yellow wildflowers blossomed in Murree and local people used to make attractive bouquets to sell to tourists on the roadside. Besides this, in the north-west part of Murree along the border of Khyber Pakhtunkhwa, a trend of growing pomegranates has emerged during last three decades. This was small-scale cultivation and people used to sell their product to local dealers.

3.2.6 Fauna

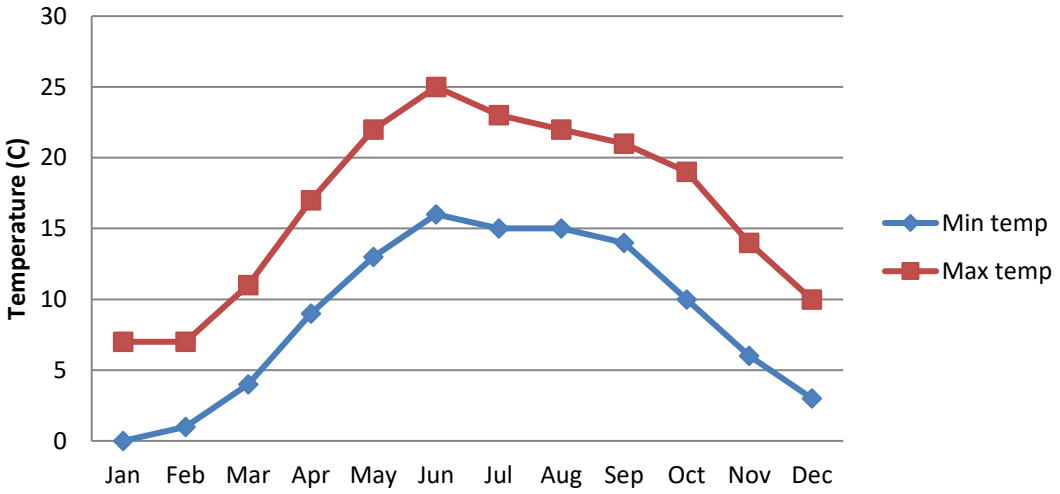
There was a time when tigers and leopards used to be very common in the forests of Murree, but these animals have now become more or less extinct. Jackals were quite common. There were wolves, and occasionally these could be found here and there. Fox was usually heard in the hills. Wild boars were quite common and had become a security risk for tourists at night because of their overpopulation. Barking deer and wild goats were common in the past but could not be seen anymore. Chikors and gray partridges are still common in Murree.

Monkeys are still found commonly on the roadside and attract the tourists. The tourists used to stop to take pictures of monkeys. It was common practice for the tourists to buy corn and bananas from the local people for whom this was a reasonably good source of earning. The tourists would play around with monkeys and fed corn and bananas to them. The increase in population and expansion of tourism industry in Murree has affected the presence of these animals in the forests of Murree. The hotels for the tourists had not been limited to Murree city only, as the investors had constructed villas in quieter villages in the vicinity of Murree by clearing the forest and hilly land, because of which the wild life has badly been affected.

3.2.7 Climate

There was a wide variation of climate between Murree and its surrounding areas, being the basic reason for its center of attraction among local tourists. Its temperature is always very pleasant as compared to adjacent areas and cities of Islamabad and Rawalpindi. Murree and Kotli Sattian have severe winter and mild summer, whereas other Tehsils of District Rawalpindi and Islamabad have hot summer and moderate winter. The table below shows the average minimum and maximum temperature of Murree during 2017.

Figure 2. Average Temperature of Murree in 2017

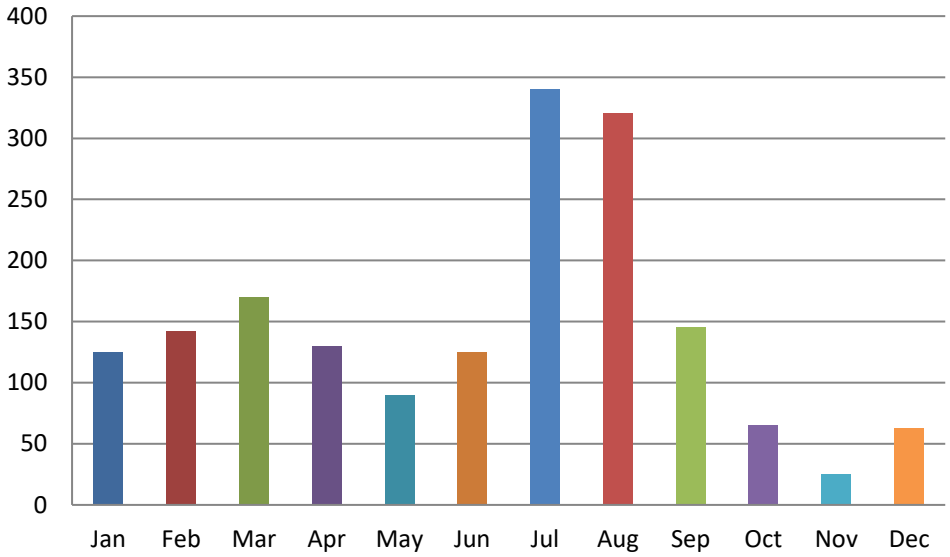


Source: (World Forecast Directory, 2017)

Trend lines show month wise average highest and lowest minimum temperature of Murree in 2017. The upper trend line shows average highest and lower trend line shows average lowest temperature. According to this graph, in 2017 the hottest month in Murree was June with average highest temperature of 25°C and lowest of 16°C. Generally, the summer season stretches between May to September, whereas October and November are autumn months. According to the table, coldest month of the year was January when average temperature dropped between 0°C to 7°C. Roughly, the winter ranges from November to February. Sometimes March is also cold and spring is delayed and stretches till mid-April. During these months generally, the temperature used to go below the freezing point and Murree was covered with snow. Commonly, snow season begins from mid-December and continues till first week of March.

Murree has the characteristics of tropical region. It was more humid because of excessive rains and extreme winters. There were two distinct rainy seasons in Murree. There were about 160 rainy days during a year in Murree. The table below presents month wise average rainfall in Murree during 2017.

Figure 3. Month-wise Average Rainfall in Murree in 2017



Source: (World Forecast Directory, 2017)

This table presents average rainfall during 2017 in millimeters. According to this graph, July and August were the rainiest months in Murree. According to this data, there was no dry month in Murree in 2017. The respondents had also confirmed that it rained every month and the bulk of monsoon precipitation occurs in July and August.

Vegetation, excessive rains and snowy winters were very attractive for tourists and they kept visiting Murree round the year. This environment was the reason of tropical characteristics of Murree and was not very favorable for health of poor and marginalized segments as people used to suffer from chest and respiratory diseases. Some of the respondents linked their pulmonary TB with cold weather. The ethnographic part of this dissertation comprises detailed discussion in this regard.

The humidity and cold weather creates enviromental stress for which people of Murree use different primary sources of fuel for the heating purpose during the cold winter. The table below shows primary sources of fuel to heat.

Table 1. Primary Sources of Fuel to Heat

Fuel Sources to Heat	Number of Responses	Percentage of Responses
Electricity from a grid [legal or illegal connection]	2	2%
Gas Fuel [methane from tank, biogas, etc.]	4	4%
Wood, sawdust, grass, or other natural material,	79	85%
Coal or charcoal	3	3%
Other	5	5%
Total	93	100%

Source: Field Data (MPI Survey)

This table shows use of primary sources of fuel for heating during winters. According to the data of MPI presented through this table, 2 % of the households were using electricity, 4 % were using natural gas as source of energy to heat their rooms in winters. A vast majority of the households 85 % used wood or any other natural material as a source of fuel to heat whereas Pakistan Social and Living Standards Measurement (PSLM) Survey conducted in 2014-15 (Pakistan Bureau of Statistics, 2016) showed that 63 % population was relying on wood and loose broken dry sticks to cook their food. The use of coal or charcoal among the households was 3 % only. There were 5 % of the households who were using other sources of fuel in this regard. The high rate of use of wood and other sources as fuel was because of its free of cost and abundant availability.

According to above table only 6 % of the households were using partly risk free source of fuel for heating during winters. A vast majority of households were consuming wood, coal and other sources of fuel and were not in a position to financially afford the high priced electricity or natural gas. This continuous high consumption of wood and similar sources of fuel for heating had badly affected the health status of people of Murree. On one hand, it had polluted overall environment of Murree and on the other hand, the use of wood had produced smoke and carbon which was directly affecting lungs and respiratory system of people at household level. This situation had adversely affected the residents of area and it was found to be worst for residents of houses with low oxygen pressure. Besides this, the high consumption of

wood was an overwhelming threat to vegetation of Murree and could also affect its tourism economy in future.

3.2.8 Ethnic Groups

In order to study its ethnography, Murree can be divided into two parts i.e. urban and rural. Murree city and its neighboring population belonged to four provinces of Pakistan, Azad Jammu & Kashmir, Federally Administrated Tribal Areas (FATA) and Gilgit Baltistan. These people were not large in number, but they owned a major portion of business in Murree. Pakhtoons were holding a major stake in business.

The major castes of Murree were Raja and Abbasi. Second to them were Satti, Syed, Mughal, Awan and Qureshi who were less in number but least effective in local politics of Muree. The original people of Murree were not dark but of a lighter complexion.

3.2.9 Administration

Administratively Murree was divided into cantonment areas – spread over most of the hilltops – and fifteen Union Councils (UCs) and one representing the non-cantonment urban area of Murree city. Civil administration of Murree was under the executive charge of District Coordination Officer (DCO) with overall supervision of the Commissioner Rawalpindi.

3.2.10 Political Organization

At the macro level, people of Murree had an affiliation with three major political parties of Pakistan. Respondents of this study said that they had voted for Pakistan Muslim League Nawaz (PML-N), Pakistan Tehreek-e-Insaf (PTI) and Pakistan People's Party Parliamentarian (PPPP) in general elections of 2013 and local body elections of 2016. This showed active political participation of the respondents through vote and electing representatives of their own choice. Enhancing social capital among the respondents through political participation has been discussed in chapter five and seven.

Both Federal and Provincial (Punjab) governments were being ruled by PML-N. All elected representatives of Tehsil Murree were also part of ruling political party. The political elite of Murree had always been enjoying government representation

throughout the history of Pakistan. Two major castes of Murree were Abbasi and Raja, who had a major influence in the Tehsil and local politics of Murree. Currently, Prime Minister of Pakistan Shahid Khaqan Abbasi[7] and Punjab Minister for Labor and Manpower Raja Ishfaq Sarwer belonged to Tehsil Murree. This national level political involvement shows that Murree holds a significant political standing at National and Provincial levels. A respondent commented on the role of political elite to uplift living standard of the people of Murree through social development programs and said:

> *"The political leaders do not have any role for bringing change in our lives. The politicians just win the election and visit the area for next election campaign. There isn't any road for connecting villages to [Murree] city. Water supply is damaged and we do not have clean water to drink. Hospitals do not have medicines. Shahid Khaqan Abbasi has been the Federal Minister [for Petroleum and Natural Resources] since 2013 but the supply of gas pipeline has not been extended to surrounding areas of [Murree] city."*

Apart from these identified areas by the respondents, the researcher could not see any massive change in healthcare structure of Murree. During last twenty years, government healthcare infrastructure of Murree had not grown in accordance with the growth of its population.

3.2.11 Local Government and Infrastructural Development

A so-called local government system was functioning in Murree. The elected local body government of 2002 had completed its five years turn till 2007. After that, next election was held in December 2015 with a gap of 7 years, but its fruits were not enjoyed by local people. Talking about the barriers for elected Chairmen of Murree for local development Hassan Mehmood, Chairman of Union Council Tret, said:

> *"Being an elected Chairman of UC Tret, I do not have any powers because Government of Punjab is not giving me funds for local development. I am not the exception because all of the Chairmen of Tehsil*

[7] During field work of this study, Shahid Khaqan Abasi was Federal Minister but after the disqualification of Nawaz Sharif in 2017 Mr. Abbasi became the Prime Minister of Pakistan

Murree are being treated likewise. As a reality this Local Government System is just a fraud. As a reality, the funds for residents of Murree are being spent for the development of Lahore [Provincial Capital of Punjab]. My voters expect me to help them to fix their issue but I have nothing to offer."

This statement shows that local governments did not have any role to play for bringing a change in the existing infrastructure of Murree. The role of national to local political economy was observable only where importance was given to a big city that was the provincial capital (Lahore), which was a pure discriminatory policy. Such state level inequalities were developing the culture of mistrust and frustration at micro level. Besides this, local political leaders were not exercising their legal power to sue any of the department including health, education, police, judiciary etc., at local and national level to get their rights.

3.2.12 Road Infrastructure

Road infrastructure connecting Murree with Islamabad, Rawalpindi, and Abbottabad is highly developed. There are two roads to connect Murree with Islamabad and Rawalpindi, one is Islamabad Muzaffarabad Dual Carriageway (IMDC) that is linked with old Murree road at Satra Meel bus stop from Bhara Kahu[8] and ends at Lower Topa Murree. This is a one-way road, where officers of National Highways and Motorways Police patrol round the clock for ensuring that motorists strictly observe traffic rules. This road was constructed to share the burden of traffic with old Murree road. This road was designed to give very easy, comfortable and swift access to tourists to Murree and Muzaffarabad (The Capital of Azad Jammu and Kashmir).

The other road was N–75 (National Highway–75) that is also known as old Murree Road. This road starts from Rawalpindi; passing through Islamabad Capital Territory (ICT) and Bhara Kahu; and is connected to Murree where at Kuldana Cantonment it splits into two; one for Muzaffarabad and other leads to Abbottabad. The road from Murree to Muzaffarabad was not of good quality and it was damaged at places causing traffic to slow down. A number of villages of Murree were located along with this road. The road from Murree to Abbottabad is newly renovated and is a real

[8] It is a small town of Islamabad located in northeast direction toward Murree. This town does share the administrative boundaries with Tehsil Murree.

attraction for the tourists due to a number of recreational points and abundance of vegetation and wild life.

A large network of small roads linked with two above mentioned roads, which connected villages of Murree and Khyber Pakhtunkhwa (KP) province with all major cities. The condition of these linked roads was very poor as most of these had broken down. It was very difficult to travel on these dilapidated roads in a mountainous area where there was hardly any road sign to guide the motorists. Besides this, N–75 was perceived as a road for the poor, whereas IMDC as a luxury of rich people. Apart from main city, some villages of Murree were deprived of road facility. The people of these villages had to walk through unpaved paths either to get to a link road to get to main city or to get to N–75/IMDC.

The government was very efficient during snow and land sliding to clear N–75 and IMDC because the blocked roads affected the business and became a barrier for tourists to reach Murree. On the other hand, linked roads were generally blocked for two to three days during snow. The roads other than IMDC were not safe for travel due to absence of road protection rail guards. There were instances where vehicles slipped and rolled down the mountains causing extensive damage to human lives.

3.2.13 Transportation

The government has not provided any transportation facility to the people of Murree. Private transporters had offered transport facility. The fares and quality of private transport was not regulated by government as road transportation was the only facility available to people of Murree who had to travel to Rawalpindi to have further access to Railway station and Airport. A large number of settlements were located on the sidelines of IMDC, but they did not have any easy access to public transport because of low passenger burden and due to restriction upon sitting capacity the Highways and Motorway Police did not allow the local transporters to use this route. This restriction caused considerable difficulty to the people living along the IMDC who had almost no easy access to any of the Government Health Centers of Murree.

Most of the population is located on the sidelines of N–75 (National Highway), because it was the oldest route that connected Murree with neighboring cities. The people living close to this road used to get very easy access to transport facility for

visiting Murree and other neighboring cities. It was not safe to travel because during summer the drivers indulged in rash driving to get maximum trips between Rawalpindi and Murree and earn more in the process. The careless and negligent driving caused many serious accidents every year and dozens of people lost their lives. There was hardly any public transport facility for the people of villages. In Murree transportation was easier to avail in summer than winters. During snow season, the villagers were restricted to their homes and seldom went out. The respondents, residing in villages of Murree had considered poor transportation as barrier for accessing Murree city and Primary & Secondary Care health facilities. Chapter eight discusses availability and issues of local transport posing a barrier in accessing Government Healthcare Centers in Murree.

3.2.14 Education

Overall the education level of Tehsil Murree was low with high dropout rate. The trend of education was not so common among the poor population of Murree. Owing to poverty, the families had allowed their children under 18 to engage in various income generation activities, such as tourism industry where these children had a good chance of earning for the family. During this study, the researcher saw the children, under 14 years of age, selling bouquet crowns made of local wild white and yellow flowers and coconut, doing petty jobs in hotels and restaurants, washing cars of tourists etc., in the surroundings of Murree city. Besides this, a number of children of the same age bracket were commonly found engaged in labor on Mall Road.

Literature has supported argument that poor and marginalized segments of society have a low level of education. Data collected through MPI reveals that a vast majority of TB patients were deprived of education. The table below presents the quantitative result of the level of education among selected 93 households.

Table 2. Education Level of Household Roster

Level of Education	Number of Responses	Percentage of Responses
Illiterate	121	19%
Primary	113	18%
Middle	89	14%
Matriculation	112	18%
Intermediate	34	5%
Graduation	16	3%
Master	14	2%
Religious Education	14	2%
School Going	56	9%
Non Schooling	66	10%
Total	635	100%

Source: Field Data (MPI Survey)

This shows education level of selected household population. According to this table, 19 % population of the selected household were illiterate[9], 18 % had primary level education[10], 14 % had passed Middle School[11], 18 % were matriculates[12], 5 % were intermediate[13], 3 % were graduates[14], only 2 % had completed masters[15], 2 % had received religious education, 9 % fell in the school going age and 10 % were in the bracket of non-school going age. According to the results of PSLM 2014-15 (Pakistan Bureau of Statistics, 2016) 50 % of population of district Rawalpindi was illiterate. The results of above table shows that the percentage of illiterate, primary, middle level education, school going and non-school going was 56 % due to multiple reasons including less attractive government policies to promote basic education, poor access of households to schools, poverty, fewer job opportunities and varying attraction of tourism for local economy.

[9] Illiterate means that they had never been to school or were dropped off before Primary Level
[10] In Pakistan Primary Level Education is 5 years of Education
[11] Middle School is 8 years of Education
[12] Matriculation is Secondary School Certificate that is 10 years of Education
[13] Intermediate is Higher Secondary School Certificate that is 12 years of Education
[14] Graduation is 14 years of Education
[15] Masters Level is 16 years of Education

The education emergency policy announced by Government of Punjab was not being strictly observed in Murree as the school dropout rate was high and on the other hand the schools had failed to achieve their target of fresh enrollment. This could be termed as failure of political economy for not being able to attract poor and marginalized segments of Murree to education system coupled with persistent culture of poverty where youth preferred to work at young age rather than getting education. As a result cultural capital of people diminished leading to compromise their health at government healthcare centers. The effect of education on developing social capital and formal communication for health is discussed in later chapters of this dissertation.

3.2.15 Economy

While comparing the household economy of rural population of District Rawalpindi, with last year, there were 47 % people in PSLM (Pakistan Bureau of Statistics, 2016) who had perceived worse economy. This data of PSLM shows poor economic conditions of masses in locale of the study. Major part of economy of the area was dependent upon Tourism Industry. The temperature of Murree used to get very pleasant in summer while the plain areas of the country burned with blazing heat. For local tourists of Pakistan, approach to Murree was very convenient. Murree is the most developed city in Galyat region[16]. The economy of Tehsil Murree was directly linked with Tourism Industry. During an informal discussion, a respondent, who was a taxi driver and suffering from TB, said that tourists were his only hope of decent earning. The major economy of tourism was based on hotel industry, transport, trade, and business. Majority of investors in hotel industry belonged to various areas of Pakistan. In transport business, a major share belonged to local investors. On the other side, high percentage of the total trade and business was being operated by Pakhtoons of KP.

3.2.16 Occupations

The occupations among selected households relate to government employment including serving and retired government servants, private employment/business,

[16] Galyat (گلیات) derived from a word Gali (گلی) of Urdu language which literally means street or alley between two mountains. Galyat is (plural of Gali) a narrow strip between the mountains roughly 50 – 80 km in north-east direction of Islamabad that is extended on both sides of Khyber Pakhtunkhwa-Punjab border, between Abbottabad and Murree. Many towns of this region have word Gali in their names.

daily wage labor, and house wives. According to the data of MPI, the total population among 93 selected households was 635 out of which 317 individuals belonged to above mentioned occupation categories. The table below presents the analysis of occupation categories.

Table 3. Occupation of Household Roster

Occupation Categories	Number of Responses	Percentage of Responses
Government Employment	29	09%
Private Employment/Business	33	10%
Daily Wage Labor	129	41%
House Wife	126	40%
Total	317	100%

Source: Filed Data (MPI Survey)

This table shows that 9 % of the population was either serving or comprised retired government employees. The private employment/business represents 10 % individuals who were either working on monthly wage or were running their small scale private business. The daily wage labor characterized 41 % individual out of 93 selected households through MPI survey. A vast majority of selected women with 40 % were not engaged in any formal employment.

A large number of earning members of selected 20 households for second part of this study earned their living through daily wage labor. This shows that the selected sample for in-depth part of this study did not have enough economic capital to develop their living standard.

3.2.17 Agriculture

Agriculture was a very limited activity in Murree as it was a hilly terrain and small terraces of land were found occasionally. So, it was out of question to talk about large scale agricultural activity. Whatever land was available was cultivated for corn and vegetables during the summer season. The agriculture output was almost for domestic use. Affluent people in some villages either owned cows and buffaloes or had animals on sharing to get milk for their domestic use. The surplus milk was sold in the market. This livestock activity and the emerging economy through domesticated animals, their

care and milking belonged to women. Talking about the utilization of this income, a woman respondent said,

> *"In this village, the women spend major part of their earning through dairy products to purchase the dowry for their daughters. Although it is not a source of higher income yet I do not give this money to my husband. I expect my husband to spend money on health out of his pocket. I spend my savings [of dairy products] on health in very extreme conditions. I delivered a baby boy and at that time my husband was not having enough money and I had to spend Rs. 15,000 [Pakistani Rupees] but during my sickness and TB treatment, I did not spend my savings for my health. But, the doctor asked me to take milk and in that case I have increased the limit of milk for household use."*

Such women had control over the domestic income because of their involvement to take care for their animals. The men used to cultivate corn in the field and the women took over responsibility to cater to their animals. In the month of September and October, the women used to cut the wild grass from the jungle to feed their cattle during winters. The men were also contributing to this activity only if they did not find work and were at home. The narrative of the respondent showed that before sickness and till the time of TB diagnosis, the consumption of dairy products was low and the maximum production was being sold to earn more money. It was due to the advice of doctor that the respondent had increased the amount of consumption of dairy products at household level.

3.2.18 Migration

Very high migration rate was observed during summer. At the end of March, local residents of Murree returned to their places because winter vacation in schools and colleges had ended. Following this, a vast majority of traders, transporters, investors, hotel employees and all others linked with tourism industry of Murree started returning to Murree to enjoy the earning season. These migrants used to migrate from mid-September to slightly warmer places because of scarcity of work. This seasonal migration, however, was not affordable to the poor segments of Murree and they had to stay in Murree during extreme winters. This was one of the reasons for high ratio of

chest diseases among poor communities of Murree as they could not cope with environmental stress and easily caught cold.

3.2.19 Media and Communication

Mobile

Mobile phone technology was the most popular form of communication system because of which the life in Murree had become very fast. The table below shows the availability of mobile phone among the selected households.

Table 4. Availability of Mobile Phone

Categories	Number of Responses	Percentage of Responses
No	1	1%
Yes	92	99%
Total	93	100%

Source: Field Data (MPI Survey)

This table exhibits results of availability of mobile phone among selected households. Only one out of 92, households did not have the capacity to purchase a mobile phone. The technology has made the communication very easy for the poor TB patients. Talking about the daily use of mobile phone and its expected charges, a woman respondent said,

> *"My mobile phone is worth Rs. 1000 [PKR]. Its battery is not working well. So, most of the time, it is connected with power plug and placed on the table. I am not educated. So, I can neither read text messages nor I do. This mobile is just for receiving calls. My husband is a daily wage laborer and I can hardly afford credit for using cell phone as I spend Rs. 50 – 100 per month."*

This case study along with field observation comes to a conclusion that very few among the selected households of Murree were using internet on their mobiles. The mobile was not being used as a source to gain health related knowledge and information by the respondents and the government was not using it as a source to

spread health related knowledge. Talking about the culture of letter reading and writing a man respondent remarked:

> *"It is not so old. It has been just 20 years when we used to receive letters from our family members and at that time, we used to find a literate person in the village. This person was helpful in reading the letters and writing reply to that letter as well."*

In past, this culture was very supportive for the promotion of social cohesion. According to respondents, there were more educated people in their villages than past. Now, it was very easy for the respondents to find a person for reading mobile text messages. This will not only result in revival of social cohesion but will also help people to use the technology of mobile phone for communication of health related knowledge and information.

Radio

Radio has always been a very effective source of communication. Radio was very easy to carry, so it could have been used for communication of health-related knowledge and information. Over the period of time, radio technology has developed and become cheap and is now within the financial reach of the people. The table below shows the response of households for having radio as an asset.

Table 5. Availability of Radio

Categories	Number of Responses	Percentage of Responses
No	74	80%
Yes	19	20%
Total	93	100%

Source: Field Data (MPI Survey)

According to the data presented in this table, 80 % of the households had denied having a radio in their homes, but they forgot to remember that every mobile user of their household had FM radio in his/her pocket. During last two decades, Amplitude Modulation (AM) radio technology has been shifted to Frequency Modulation (FM) radio technology. During field work, it was found that cell phones had built-in radios

and FM radio could be played on it. This was a very positive sign for having a facility, but this was not being used for spreading health-related knowledge and information because of two reasons. First, FM radio stations of Islamabad, Rawalpindi, and Abbottabad did not have strong signal strength in Galayat Region. This was a cause of interruption in listening to radio. Second, the mobile phone consumes more battery while playing radio and this was inconvenient for mobile users to play radio on their mobile phones as it added to their costs.

During this study, the researcher monitored radio programs and advertisements. It was found that there was no such program on providing health related information to people through radio. Only on International TB day there were broadcast messages about TB disease and this was not enough to raise awareness about the disease.

Television

According to the method of MPI, the household assets determine the level of poverty. A household not having modern assets to gain health-related knowledge and information is not only poor income wise but is also deprived of health related knowledge and information. The table below shows the availability of asset of television among the selected households.

Table 6. Households Possession of Television

Categories	Number of Responses	Percentage of Responses
No	38	41%
Yes	55	59%
Total	93	100%

Source: Field Data (MPI Survey)

This table shows the households possessing television set. According to presented data, 41 % of the households did not have a television, whereas remaining 59 % possessed television. Talking about the relation of television and health a respondent said:

> *"I have a TV set but due to unannounced power shortfall extended load shedding is quite common. Therefore, TV is not being used as*

entertainment provider. Even if we have uninterrupted power supply, then health related programs are not being broadcast on TV. I can see that the advertisements on TV are to provide information for well-to-do segments of society. The Dawlance products are of no concern to me."

This narration supports field observation and results of monitoring of top-rated TV channels of Pakistan. In villages, long hours of load shedding were very common. The TV channels were broadcasting advertisements of Government of Punjab to educate people about the health issue of dengue and polio. The information about the causes, symptoms, precautions and treatment of TB were only broadcast on its international day.

Ideally, issues regarding health and hygiene were not being addressed through radio and TV broadcasts as Murree was doubly affected because of unavailability of cable TV network to villages, and long hours of load shedding that majority of population was forced to face. In nutshell, village communities of Murree were deprived of this valuable channel of information since they did not have TV set as an asset at their homes nor any access to cable TV network. Long hours of electricity absence lost the interest of people in television.

3.2.20 House Structure

Construction of a house in Murree was very costly as most of the terrain was hilly and the cost of foundation of new construction was very high. The foundation of the house had to be made solid and of a high standard in order to protect it from the damages from excessive rain and small-scale land sliding. Foundations of a house were always built with stones. There were three types of house constructions in Murree. One was brick walled and the other where stones were used for construction of a house. The third was a combination of these two.

For the construction of the first type of brick house, cement, iron, crush and other required material were used. The roof of such house was mostly constructed with reinforced iron and cement and very few made from wood. The other type of construction was done by stone and mortar. The roof in this type of construction was made of wood and on the top, either lattened sheet or mortar was pasted. The third type of house construction was a mixture of these two methods. Either the roof was

made of wood with lattened sheets with a combination of bricked walls or stone construction with a wooden roof and mortar on the top.

These three types of constructions did not have capacity to protect their residents from cold because uses of modern methods of construction to protect a house from cold during winter were missing. Owing to extreme cold and snow during winters and prolonged rainfall in summer, the rooms got humid. Long humid months had affected the health of residents of these houses. Heating methods to keep the rooms warm have been discussed earlier and concluded that these were more harmful than its benefits.

3.2.21 Household Conditions

The first indicator of MPI was household condition. Household conditions were not only helpful in determining the level of poverty and deprivation but had also helped to understand the status of health in a household. It comprised sub-indicators as included house flooring, sanitation facility and its sharing, the primary source of light, type of fuel for cooking and heat, the primary source of drinking and non-drinking water and distance from house to water source. Household conditions had a direct link with the status of health. The table below shows a number of households with various types of flooring.

Table 7. Household Flooring Types

Categories	Number of Responses	Percentage of Responses
Earth/Sand	29	31%
Chips	4	4%
Cement, sand, crush	56	60%
Marble	4	4%
Total	93	100%

Source: Field Data (MPI Survey)

This table shows that 31 % houses had natural flooring. Other than this 4 % houses had used chips for flooring, houses having flooring made of mixture of cement, sand and crush were 60 % and 4 % had marble flooring. This shows the picture of the financial status and living standards of TB households. In this type of living, residents were not protected from germs. The term “unprotected flooring” is being used for

natural flooring and one with mixture of cement, sand and crush, whereas the term "protected flooring" is being used for flooring made of chips and marble.

Protected flooring was very easy as far as cleaning was concerned because germicide could easily be used. Whereas unprotected flooring – made of mixture of cement, sand and crush – was comparatively rough and germs protection was not easily manageable. Natural flooring (unprotected) was comparatively more dangerous among poor households for protection from germs. The flooring was not clean both among households having protected and unprotected flooring because germicide was costly for them and residents were at moderate and greater health risk respectively.

Household sanitation also determines the health of masses. One of the indicators of health was sanitation. Poor sanitation had introduced sickness through unhygienic conditions. In the past, there was a time when household sanitation was taken for granted, but it had a valuable role to determine health. The table below shows the household sanitation conditions among selected households.

Table 8. Household Sanitation Types

Categories	Number of Responses	Percentage of Responses
Flush to pipe sewer system	88	95%
Flush to pit (Laterine)	1	1%
Hanging Toilets /Laterine	1	1%
Pit laterine with slab	1	1%
No Facilities/ Go to bush or fields	2	2%
Total	93	100%

Source: Field Data (MPI Survey)

This table presents a satisfaction over household sanitation conditions, where 95 % of the households had standard sanitation system. According to PSLM conducted in 2014-15 (Pakistan Bureau of Statistics, 2016) there were 89 % households in rural parts of District Rawalpindi with access to toilet facility in their homes. This satisfaction turned into disappointment during the second phase of this study, when the researcher visited individual households and spent time with families. It was observed that the respondents from 20 selected households had no safe sanitation

conditions because the waste water was being drained through a pipe from the household into an open dug hole but it was situated in a fifteen-yard circle of every household.

Household sanitation was also linked with the sharing of the latrine because a number of diseases were the result of shared household facilities. The table below shows the results of sharing of sanitation facility.

Table 9. Sanitation: Sharing Facility

Categories	Number of Responses	Percentage of Responses
Yes	16	17%
No	74	80%
Not Applicable	3	3%
Total	93	100%

Source: Field Data (MPI Survey)

This table presents the data of sanitation shared facility where 17 % of the households – had or did not have sanitation facility at home – were sharing it with other households. On the other hand, 80 % of the households had this facility at their home and they were not sharing the facility of latrine with other households. This situation has another picture as well. Average household population size among the selected 93 households was 6.82 persons per household, where all of the members were sharing the same sanitation facility which was a burdensome situation.

3.2.22 Basic and Modern Amenities

It is not only access to resources that determines the living standard of people who possess basic and modern amenities of life, but the quality of such resources also defines the standard of living and health hazards to the people of Murree. A detailed description of available basic and modern amenities and their standard is discussed below. Chapter eight discusses the effects of quality of accessed basic and modern amenities on the health of users.

Water

The people of Murree had access to five major sources of drinking and non-drinking water that included government piped water supply at home, private water supply through tankers, rain as a source of non-drinking water, natural springs, and boreholes. The government facility of water supply was limited only to main city and major towns adjoining Murree. Most of the surrounding villages of Murree were not being provided water from government water scheme. There was a serious level of corruption in this facility because the hotel industry of Murree was a barrier for the delivery of this right to domestic consumers. The poor could neither afford to purchase expensive water through private venders nor to construct a big water reserve tank. The table below shows access of selected households to the primary source of drinking water.

Table 10. Primary Sources of Drinking Water

Categories	**Number of Responses**	**Percentage of Responses**
Piped water into home	8	9%
piped water facility near home	6	7%
Spring water facility at home through a pipe	23	25%
Borehole at home	10	11%
Protected spring	27	29%
Unprotected spring	15	16%
Other	4	4%
Total	93	100%

Source: Field Data (MPI Survey)

According to this table, only 9 % of selected households had facility of piped water at home through government supply, whereas, 7 % had the facility of piped water near their home, 25 % depended upon spring water facility at home through a pipe, 11 % of the households had done boring for underground water at their homes, 29 % depended upon protected springs, 16 % used to fetch water from unprotected spring near their homes and 4 % used other sources of water for drinking purpose. The

statistical data of PSLM 2014-15 (Pakistan Bureau of Statistics, 2016) reveals that 33 % population in rural areas of District Rawalpindi relied on dug wells and other sources of drinking water including spring water. Murree is the sub-admin of the respective district where this percentage was higher because of its geographical conditions and limited facilities of drinking water. The following picture depicts quality and condition of protected and unprotected springs for drinking and non-drinking water.

Figure 4. Picture of Protected and Unprotected Water Spring

Source: Field Data

The quality of government water supply was not in accordance with international standards. Talking about the quality of government water supply a staff of TB dispensary from Samli Hospital said,

> *"This hospital is being supplied water through government supply line, but we do not fetch water from this water from here. The quality of government water supply is very poor. We send our peon to fetch water from spring that is situated on the back of women ward. I can say that government water supply is more hazardous for health than spring water."*

The picture presents the status of deprivation of vast majority of selected households from safe and clean drinking water. On the other hand, the water supply of government did not satisfy residents of Murree. It was observed that households not

having easy access to protected or unprotected springs were using government water supply for drinking purpose. The use of water either presented in picture or government supply for drinking and cooking cannot guarantee a healthy and disease-free life. The access to resources can also be an indicator to measure poverty. One of the yard sticks to measure poverty and the availability of resources includes access to safe drinking water. The informal discussions with respondents revealed that all of the selected households were deprived of safe drinking water. The table below does show the results for sources of non-drinking waters:

Table 11. Primary Source of Non-Drinking Water

Category	Number of Responses	Percentage of Responses
Piped water into home	20	22%
piped water facility near home	8	9%
spring water facility at home through a pipe	31	33%
Borehole at home	12	13%
Protected spring	9	10%
Unprotected spring	4	4%
rain water	5	5%
Tanker Trunk	1	1%
Other	3	3%
Total	93	100%

Source: Field Data (MPI Survey)

This table presents the status of access to primary source of non-drinking water among the selected households. According to the results of quantitative data presented in this table, there were 20 % households where piped water through government schemes was available for non-drinking purpose, 9 % households had access to piped water through government schemes near households, 33 % had access to spring water facility at home through a pipe line, 13 % had borehole at home, 10 % were dependent on protected springs, 4 % relied upon unprotected springs, 5 % collected rain water for non-drinking purpose, only 1 % could afford to purchase water from tanker trunks and 3 % of the households were using other sources.

Regular supply and quality of drinking and non-drinking water determined the status of hygienic living among selected households. A large percentage of selected households were suffering from water insecurity for access to drinking and non-drinking water. It was observed that the residents of 20 selected households for in-depth study were living unhygienic life because of scarcity of non-drinking water. Regular bathing habits were not common among the respondents and their family members, because of interrupted water supply and labor to fetch water for non-drinking purposes.

There is very minute difference in the results of tables for drinking and non-drinking water. Only one of the households could afford water supply through tanker for the non-drinking purpose. This whole situation illustrates the status of health among poor and the marginalized groups. For healthy and hygienic living, safe drinking water is a basic requirement and it could have been protected from waterborne diseases, for which Government of Punjab had established “Punjab Saaf Pani Company” (Punjab Clean Water Company) in 2014 which had neglected Murree till the timeframe of this study; where poor people were forced to drink unhygienic and sub-standard water. The company started its projects for providing safe drinking water in areas where people had easy access to underground water. One of the respondents said that Lahore (Provincial Capital of Punjab) was the focus of development and welfare of people. He said that higher authorities from all walks of life visit Murree and pollute its nature, but they do not think about its development.

Electricity

In the age of development, electricity is considered as an important modern amenity. The infrastructure for providing this facility to the far-flung areas of Murree was highly developed. It was revealed that 100 % of the selected households had legal electricity connections in their homes. According to the results of PSLM 2014-15 (Pakistan Bureau of Statistics, 2016), there were 97 % households within District Rawalpindi having electricity connection, but Pakistan has been facing an historical power crisis since 2008 and it was going through its worst phase in 2016-17, for which the households had to face power load shedding. This source of energy was very costly for selected respondents of this study for the purpose of heating and cooking. The tables about sources of energy for heating and cooking also present least

use of electricity. But, the use of electricity for heating and cooking might have had protected the health of respondents and their families from the effects of smoke and carbon emission through existing sources of energy being used for cooking and heating.

Natural Gas

All of the governments had been focusing on the development of Murree through its infrastructure schemes, but the prime reason for this development was to facilitate the tourists. Although the living of the Murree residents was dependent upon tourism yet basic and modern amenities had been confined to main city of Murree. The villages were deprived of such facilities. Although Liquefied Petroleum Gas (LPG) was easily available in the market yet the poor did not have the financial capacity to afford it. The table below presents the results for primary fuel sources for cooking.

Table 12. Primary Fuel Source for Cooking

Category	Number of Responses	Percentage of Responses
Gas Fuel [methane from tank, biogas, etc.	17	18%
Wood, sawdust, grass, other natural material	76	82%
Total	93	100%

Source: Field Data (MPI Survey)

The data in this table shows that 18 % of the selected households were using gas for cooking. For 82 % households primary fuel sources for cooking were wood and other natural materials. The consumption of high percentage of natural materials for cooking was because of its free and abundant availability in Murree. The other side of this use of natural material was quiet horrible for health. According to table No. 1, wood and other natural material was being consumed as primary fuel source for heating among 79 % of selected households. This is quite visible through the analysis of tables for use of primary fuel source to cook and heat. It was revealed that a vast majority of selected households were living a risky life as they were vulnerable to respiratory diseases. The natural fuel sources were protecting the residents of selected household from harsh weather but were also gifting them life in smoke and carbon.

3.2.23 Healthcare Facilities

Chapter four discusses a detailed description of healthcare structure of Murree and chapter five and eight talk about access of people to existing healthcare facilities.

3.2.24 Kinship and Social Organization

Social organization has a deep connection with kinship patterns. It is kinship that identifies the patterns of socialization, social relations and social connections.

3.2.25 Family Structure

In Murree, the individuals were connected with strong family ties and were part of three basic family types including nuclear, joint and extended family. Every family was connected with a network of caste. It was ascribed status of individuals and had given them equal membership in their caste. Individual social capital was shared among all other family members. Next to this, the caste based membership was also an important social capital that had given the concept of social cohesion. The table below is to present family types among the selected households;

Table 13. Family Types

Category	Number of Responses	Percentage of Responses
Nuclear Family	59	63%
Joint Family	23	25%
Extended Family	11	12%
Total	93	100%

Source: Field Data

This table shows types of families among the selected households. According to quantitative data presented in this table, 63 % families were nuclear in nature of family structure, 25 % were joint and 12 % were extended families. Social capital does not mean to have social relations outside the boundary wall of a household; rather its origin is from home. Social capital is shared among members of a family and it gives positive results for finding solution to an individual or family problem. Social support of patients is very important that begins from home and family members are the primary source in this regard.

The nuclear family is very small unit where a married couple stays along with children. In this type of family, generally social capital is very low and social support for patients is very limited. Joint family is extension of nuclear family and typically grows when children of one sex do not leave their parents' home at marriage but bring their spouses to live with them. In this type of family, the strength of social capital and social support of patients is stronger than nuclear family, whereas the extended family is further extension of other two types of families. In this type of family, social capital and social support is generally higher than the other two. As social capital is fluid in its nature. Sometimes it cuts across all other types of statuses and capitals and helps poor segments of society to find solution to their individual and joint problems. The later part of this dissertation and particularly chapter five, seven and eight presents a detailed discussion in relation to family support and social capital of TB patients and TB households.

Chapter 4

HEALTHCARE FACILITIES: LOCAL PRACTICES TO DEAL WITH GLOBAL TB

The existing healthcare delivery structure in Murree is one of the most visible pieces of the jigsaw puzzle. This chapter begins with one chunk of a large story that helps the reader to understand healthcare structure of Murree where TB, one of the most common infectious diseases, has continued to thrive since decades. The overall healthcare structure of Murree comprises 14 Basic Health Units (BHUs), Rural Health Center (RHC), Tehsil Headquarters Hospital (THQ), Combined Military Hospital (CMH), and Syed Mohammad Hussain Government TB Sanatorium Samli (Samli Hospital). CMH Murree is offering free healthcare to its entitled retired and serving armed personnel and has closed its doors for all other segments of society, but it is offering private medical consultation against a heavy fee. Owing to this policy of CMH, this chapter has not discussed the role of CMH in Healthcare Structure of Murree. BHUs are first level care facilities and foundations of this healthcare structure which are ideally supposed to work as scanners on micro level to screen out TB suspects. This chapter discusses existing healthcare structure of Murree along with the functioning and effectiveness of Provincial TB Control Program (PTP). It also attempts to answer the central part of the research question and elaborates the reasons for lack of trust of masses in government healthcare facilities in general and TB in Particular.

4.1 Accessing Policy Makers for Knowing Health

It was December 2016. Murree was covered in snow and I did not see much movement of people and general activity was too slow. It was high time that I planned to visit Lahore to conduct interviews with policymakers, legislatures, and bureaucrats to know their perspective on health sector, Government of Punjab and the role of TB control program and government healthcare structure facilities that were designed to provide treatment to TB patients. I knew that it was not an easy task to get appointment from these high officials. Before my departure to Lahore, I contacted a friend, an officer in Military Intelligence (MI), to arrange a meeting with Advisor to Chief Minister on Primary & Secondary Care Health Khawaja Salman Rafique. He

assigned this responsibility to one of his Field Operator (FO) Sarfraz, who was in his late twenties. I was told to reach Health Secretariat Punjab at 8:00 A.M., where Sarfraz would be waiting for me. The contacts were exchanged and Sarfraz was in communication. I reached the public parking area of Health Secretariat Lahore at the said time and waited for 15 minutes. I met Sarfraz who took me towards main gate of Secretariat building, where a security guard stopped us and asked about our identity and purpose of visit. Sarfraz whispered something in guard's ear and said to me, *"Let's go."* I said, *"Sarfraz, what did you say?"* He replied, *"Sir, I said "MI" and you don't know he won't let you inn if I were not with you."* After this, during rest of the tour of Lahore, I remained silent on entrance of every public office.

When we reached the office of Secretary Primary Care Health Punjab Najam Shah, Salman Rafique was getting ready to chair a meeting. It was Tuesday and Sarfraz had already communicated a day before with Personal Secretary (PS) to Advisor. Sarfraz talked to PS to Advisor, who asked to provide a letter from my university which I did. He glanced at the letter, returned to me and said, *"Advisor Sahib*[17] *is busy at the meeting and I don't know how long it will go on. You sit in the waiting area. I will call you as soon as Sahib gets free. I have told him about you and you are on the meeting list."* PS showed me the list of meetings, where my name was next to ongoing meeting.

We walked to a door on our left and entered the waiting area, where numbers of visitors were also waiting to meet different officers. It was a short gallery opening to its two ends; the cold December wind cut across the room and I felt chilly as if sitting in Murree. After 30 minutes of wait, Sarfraz said, *"Sir, you don't know! I know these politicians and officers. It is my daily job. He [Advisor] will move on and in the end, PS will just say "sorry". You sit here and do not move around. I will call you. I am going to stand next to PS."* Sarfraz left me with a ray of hope to cut short this waiting time.

I waited for two hours in total. I was exhausted both mentally and physically sitting idle. Sarfraz opened the door – connecting to waiting area and the office of PS to

[17] *Sahib* is word of Urdu Language which is a courtesy title at the end of the name or designation of an individual for respect or honor. The word *Sahib* is also used for a lord, gentleman, officer or a master or someone holding power. The utterance of word *'Sahib'* brings the concepts of power in the mind of speaker and listener.

Secretary – showed his face, waved his hand and said, *"Come."* I rushed to the door to reach the office of PS to Secretary. Sarfraz took me to the meeting hall. The meeting was over and Advisor was sitting alone next to a table containing leftovers of meeting refreshment. I explained purpose of visit for a few minutes but the advisor hardly listened to me, pushed the button of a wireless office bell to call his PS, and advised him to connect me to Secretary Primary Care Health. Advisor said, *"I have another meeting. You may sit here, have tea and refreshment."* I thanked him for his generosity.

Advisor left the room and I was waiting in another line to meet Secretary Health. PS to Secretary Health Basharat said, *"Bhai [Brother], Sahib [Secretary] is busy in conducting interviews and he is already late because of a recent meeting with Advisor Sahib."* I said, *"What if I come in the morning."* PS looked at the calendar and responded, *"Tomorrow Sahib [Secretary] is busy with the Turkish delegation and you are not on the meeting list. I can arrange your meeting on Thursday. How is that?"* After my acceptance, he entered my name and objective of meeting on his computer and I was set for meeting at 11 A.M. on Thursday.

After a daylong rest, I took an early start because I was not familiar with roads of Lahore. I preferred to leave the room a bit earlier to reach on time. I took local transport and reached Liberty Market where Sarfraz was waiting for me. We had a ride on Sarfraz's motorbike. Going through the process of entry at the main gate, we reached at 10:45 A.M. at the office of Secretary Health. Basharat informed about an ongoing meeting. So, we were asked to wait and it was expected. It was around 11:10 A.M. when I was called for the meeting.

The head welcomed me to the office of Secretary. *Sahib* was sitting on his chair with a bureaucratic look. I started with my introduction and I had not finished when Secretary interrupted, *"I got the purpose of your visit. I would suggest you to meet Dr. Wahid and Dr. Sarah. You just go to Basharat and tell him to direct you to their offices."* This meeting was over in a flash. I thanked Secretary *Sahib* and left the office to get to PS. Basharat was busy for next 20 minutes in responding to phone calls, connecting to his *Sahib* and managing office files on his table. Finally, he paid attention to me. Basharat made a call to PS to Dr. Wahid and said that a researcher was being referred to Dr. Wahid for meeting on directive of Secretary *Sahib*. He hung

the phone, wrote the address of Dr. Sarah's office and made a call to her as well. He gave me a piece of paper with Dr. Sarah's office address and instructed me to go there.

I was also directed to meet Dr. Wahid, whose office was in the same building. Luckily I did not have to wait for too long and Dr. Wahid called me because his PS had already communicated the message of Secretary *Sahib*. Sarfraz waited in the office of PS. Dr. Wahid was in his late fifties. He joined health department in 1984 as Medical Officer (MO) and was promoted to this current post. Dr. Wahid was very helpful; offered me a chair and after listening to my efforts to approach to Advisor and Secretary, he took an early tea break. He asked his peon to bring tea for me. He gave me thirty minutes interview. His interview has been shared in every chapter of this dissertation in parts and pieces. Talking about the problems of Healthcare System Dr. Wahid said:

> *"Basic Health Units are the backbone [Foundation] of the healthcare system of Pakistan. Weak foundations result in shaky system. Young doctors of this generation do not want to serve at this basic level because BHUs are situated in villages where no proper housing and social life exists and they are unable to carry out any private practice. You may go to the posting section and ask the question of posting preferences. They will tell you that nobody [doctors] wants to serve at remote health centers."*

BHUs were the most primary foundation of government health structure of Murree, but some elements had made this foundation weak. Talking about the structural violence (Farmer, 2004) emphasized on missing facilities at basic level health clinics. In this context, the latter part of this chapter presents a discussion on reasons for weak foundations of government healthcare structure of Murree and its impact on the status of health among poor segments in general and TB patients in particular. Describing healthcare structure of Tajikistan (Keshavjee, 2014) pointed out importance of basic healthcare structure to provide health facilities to far-flung areas. This discussion gives wide importance to existence of BHUs and easy access to the people.

4.2 Healthcare and Trust in Basic Health Units (BHUs)

Generally a BHU had been established at union council level for providing Primary Healthcare Services including provision of static and outreach services like Mother & Child Health (MCH); Family Planning (FP); Expanded Programme on Immunization (EPI); advice on food and nutrition; logistic and management support for Lady Health Workers (LHWs) and Traditional Birth Attendants (TBAs); and provision of first level referral services for patients referred by LHWs. Ideally, a BHU had to refer patients to Secondary and Tertiary Care hospitals of Tehsil Murree and District Rawalpindi.

BHU Tret was one of 14 BHUs of Murree. It was 4 km short of Samli Hospital and 16 km from Tehsil Headquarter Hospital (THQ) Murree. Islamabad and Rawalpindi were at a distance of 29 km and 36 km respectively. This BHU was distanced around 1 km from the main bus stop of Tret, but the buses used to stop to drop and pick passengers from BHU Tret. It was situated on one side of the mountain where the patients had to go downstairs around hundred plus stairs to have access to healthcare facility. There was no pavement between main road and start of stairs. Personal vehicles, if any, used to be parked on the road. BHU Tret was surrounded by the houses of local residents. One gets out of breath to reach the entrance of BHU Tret by walking through the unpaved path and stepping down through stairs. The entrance gate was missing on the boundary wall of BHU Tret. There was no sign of entrance gate, but the boundary wall was broken at a point and created enough room for entry and exit to reach the BHU facility.

From this point, I had seen an arrow mark on the side wall of the building of BHU directing to the entrance door of the building. Having entered through the broken boundary wall, the first thing I saw was a big banner saying, *" ٹی بی کی مفت تشخیص اور ع.ج کی سہولت موجود ہے Free TB Diagnosis and Treatment is Available"* and picture of Chief Minister (CM) of Punjab Shahbaz Sharif on it. The main door of the building was marked *"Welcome"* on the white chart in bold letters. A number of banners and charts – printed and handwritten – having health-related knowledge and information were pasted on the walls. BHU Tret comprised a labor room, ward, Lady Health Visitor's Room, waiting area, EPI room, Medical Officer's (MO) Room, Health Technician's (HT) Room, medicine store and a dispensary.

It was noon and there were very a few numbers of patients in BHU. An old man in late fifties came out of dispensary and was shocked to see a clean shaved man, bag on the shoulder and seamless ironed *Shalwar Kameez*[18]. He went back into the dispensary and returned shortly with another man in late twenties. Meanwhile, I kept on reading one of the handwritten charts signed by "WMO Dr. Sehrish Wafa Bukhari." Zawar was a 29 year young man who belonged to District Hafizabad and was working as a dispenser in BHU Tret. I was asked to introduce myself. My introduction assured them that I was not a member of health department monitoring team. They took a sigh of relief and offered me a seat in the dispensary.

I spent around 30 minutes with Zawar and had an informal discussion. Zawar said,

> *"I am a dispenser and have been working here for last three years. It has been just a year since Dr. Sehrish has been appointed here. Before that there was no doctor for six months. I have been giving medicines to patients. Three months before the OPD had gone much down. At that time, mostly patients were visiting for deliveries. Today Dr. Sehrish is in Lahore to call off her transfer. She was transferred to BHU Masyari. During her absence, I am giving medicines to patients. Since the doctor has been appointed, the patients have changed their behavior. Now they come in bigger numbers and ask for the doctor. On finding her absent, they hesitatingly ask for medicine. After the appointment of Dr. Sehrish, the numbers of patients have increased."*

On my way to home, I was thinking whether Dr. Sehrish would allow me to sit in the health unit or not and what would be her response to my request for interview. I was planning to get permission from District Health Department when all of a sudden; I thought to discuss it with my key informant Ihsan who said that Tahir could give her contact number because Dr. Sehrish had been working part-time at the private health clinic of Tahir since last few months. I called Tahir and requested mobile number of Dr. Sehrish. Tahir shared her mobile number with me and said that she was a young professional and would not pose any problem. After reaching home and taking some rest, I called Dr. Sehrish, introduced myself and shared the purpose of my visit to

[18] It is a part of National Dress of Pakistan and most of the people prefer to put on Shalwar Kameez in Murree.

BHU Tret. Dr. Sehrish said that she would be on duty in the morning and would be pleased to provide every possible support.

Next morning, I reached BHU at 9 A.M. and found Dr. Sehrish busy in examining the patients. I was listening to her loud voice. She was very caring and welcomed the patients as she listened to them very intently. Thirty minutes after my arrival, Zawar informed Dr. Sehrish about my presence. Dr. Sehrish called me into her room. Dr. Sehrish seemed to be in her late twenties. She was originally from District Jhang but was born and raised in Rawalpindi city. She had completed her medical degree from China. She had passed her PMDC[19] examination in December 2014 and was appointed Woman Medical Officer (WMO) on the payroll of Government of Punjab. BHU Tret was Dr. Sehrish's first posting station.

Dr. Sehrish was very expressive during informal discussion and shared her experience of one year. On this day, I spent around two hours in her office. A formal interview turned into an informal discussion, during which I asked all the questions I had listed. I managed to connect various dots of that discussion to present the issues to BHU through her one year experience as WMO on BHU Tret. Her views are summarized below:

> *"Before my appointment as WMO, I was very determined and passionate to serve in a remote area. I commuted on local transport because I did not have enough money to buy a car. There is a long list of issues of BHU. We do not have any facility for the diagnosis and treatment of TB. The advertisement on the wall of the hospital is a pack of lies. We don't have even a single tablet for TB patients. The only thing I can do is to screen a patient and refer to Samli or THQ. I don't know about the number of TB patients in my area [UC Tret]. BHU has no link with THQ and Samli Hospital as far as the sharing of information about TB patients is concerned.*
>
> *Did you hear someone saying to meet a doctor in the hospital? Most probably you will never hear because they [Patients] say that they are*

[19] Pakistan Medical and Dental Council (PMDC) had not been accepting degree of Foreign Qualified Doctors and it used not to register such degree holders for giving permission of Medical Practice in Pakistan. PMDC had established its National Examination Board for conducting an examination.

going to get medicine from the hospital. For the Patients, the doctor has a secondary importance. We do not have enough supply of basic medicines to cater to the needs of people. The health department gives verbal directions to keep a minimum stock of medicines to satisfy the monitoring teams. I have observed that very poor people come here who cannot afford the fee of a private doctor/quack or the cost of medicine from the private medical store. I feel very painful to write a private prescription for them.

We do not have a basic laboratory, ECG facility, first aid for cardiac patients, noting to be honest. We cannot do more than physical examination and give free medicine if available with us. We have an acute shortage of staff. I was not here last day and during my absence, there was no replacement. This dispenser was working as a doctor last day. During the absence of this dispenser, the peon of the hospital holds his responsibilities and even the Aya [Maid] gives injections.

There is no facility to bring a patient from road to hospital. The patients ask neighbors [the neighboring houses of BHU] to help in bringing down the patient on a stretcher. I purchased sphygmomanometer and stethoscope out of my pocket. I made all of these handwritten charts and pasted on the walls. All this is for the interest of patients. I must talk about indoor facilities. There is no water supply to this BHU. The restrooms are locked. I spent my personal income to pay for the cleaning of BHU. My theory and practical experience are opposite to each other."

Dr. Sehrish had started a private clinic around three months before this interview, which was owned by a dispenser of Samli Hospital, Tahir. The same doctor was providing services in a private clinic at a distance of 1 km. This distance had determined her status as a doctor of poor and doctor of rich. The poor were visiting BHU Tret and the rich were going to Ali Hospital Tret for seeking advice and treatment. In the context of "Social Space and Symbolic Power" (Bourdieu, 1989), this differentiation had made it clear that the government hospitals were for the poor and the private sector medical outlets for the rich. Talking about the role of neoliberalism for promotion of trust in private healthcare delivery (Foley, 2008; Keshavjee, 2014) said that over period of time, people developed more trust in private

healthcare delivery. Dr. Sehrish was easily accessible to every resident of Tret at BHU, but her affiliation with two different systems e.g. public and private health facilities had provided an opportunity for local people to make personal choices. In neo-liberal context, these public and private sectors were a binary opposition with a local understanding, where the public was being perceived as good and private as bad, dirty and clean, trustworthy and untrustworthy, and poor and rich respectively. On the miseries of BHUs, Dr. Sehrish was very emotional. She also claimed that nobody would have given this information because for others, this was normal state of affairs.

Although the availability of medicines at BHU was sharing a major portion of the element of trust, there were numbers of other elements that could not have been underrated. Discussing lessons from Haiti (Walton et al., 2004) said that providing free medicines to patients on public healthcare centers means increase in number of patients and this means increase in number of doctors and health budget. In this context, this could have been a reason for not providing medicines at BHU level so that the government might not have to increase its health budget. The increase of patient burden since the appointment of a doctor in BHU was also one of the elements of trust. With the appointment of Dr. Sehrish, the number of poor patients increased, whereas the rich still preferred visiting private clinics.

4.2.1 Exploration of Trust Components

Kashmiri Bazar is located on Murree – Muzaffarabad road. There was a paved road made of cement and crush from Kashmiri Bazar towards Beesawali Kasi. This road started with a short ascending steep slope. One had to walk for 30 minutes on the top of the mountain, where an alien was fascinated looking at all of the neighboring tops and listening to the voice of wind cutting through the branches of pine trees. I stopped a local passenger van and reached Beesawali Kasi, where Mohsin was waiting for me to take me to his house through the jungle trails. On this side of the mountain, there were scattered houses. There were no pathways, but pedestrian's walk had marked routes.

Mohsin was 22 years old. I met him for the first time in Samli Hospital, asked for his consent for becoming respondent, and filled the MPI Survey form. Mohsin was living with his father and mother in the house of his uncle as caretakers because their house

was hit by land sliding and damaged beyond living. Mohsin's family could not afford to construct a new house for themselves in spite of the fact they were trying during last ten years. Mohsin's uncle had been shifted to Rawalpindi since long ago for the education of his children. It was a nice clean house. Sardar Khan, father of Mohsin, placed chairs in the courtyard to make us comfortable and I could see a patch of Islamabad Muzaffarabad Dual Carriageway (IMDC) far down. Mohsin's father preferably used to travel through IMDC, but for me, it was out of the question to walk down the mountain and get back.

Mohsin was in the last month of his TB treatment. Razia Bibi, his mother was 55 years old woman, had already completed her TB treatment six months before Mohsin was diagnosis with TB. Sardar Khan was very religious and had political sympathies for Jamat-e-Islami that is a right-wing religious political party of Pakistan. Sardar Khan was very offended with government healthcare structure of Murree. Responding to a question regarding trust in government health centers he said:

> *"The government hospital in Phugwari is not providing free medicines. The residents of UC Phugwari cannot claim receiving free medicine from hospital [RHC]. The doctors are doing their job to get their pay. The free medicines are ineffective. Water is being injected in the name of injections. The patients are given two prescriptions and are asked that this one is for inside [Hospital Dispensary] and this one is for outside [private pharmacy]. They simply say that they do not have this medicine in the hospital and patient will have to purchase from outside [private pharmacy]. I have been paying pharmacy bills up to Rs. 1000. Whose hospital is this? This is not a government hospital. This is not a hospital for the poor. I have been visiting hospitals of Phugwari, Rawat, Aliyot, and Murree to find free medicine, but all the times failed to get any. The rich people can afford to visit private hospitals. Not to mention the rich, even the poor do not have trust in government health centers. Why should I trust a government hospital? Do I get free medicine? Why do they not give free tablets? Why they want me to purchase an injection from outside [private pharmacy]? There is nothing in government hospitals. Al-*

Khidmat Foundation[20] *is giving free healthcare to the poor and I have more trust in them than any government hospital of district Rawalpindi. There is a doctor at Al-Khidmat Foundation, who pays proper attention. I must tell you that the whole government health system is a betrayal."*

This was the story of every Sardar Khan of Murree. TB medicine was free and available on every TB center of Murree. TB patients of Murree were using different pathways for the purpose of their treatment prior to diagnosis. The pathways and preferences of TB patients for their treatment are discussed in chapter eight of this dissertation.

The story of Sardar Khan has helped to understand elements of trust in government healthcare centers of Murree. Low level of trust in government healthcare centers of Murree was because of its overburdening, unavailability of routine medicines, the non-professional behavior of doctors, ineffective available medicines and culture of private prescription. Owing to these barriers, a higher proportion of poor segment of Murree was not visiting government healthcare centers for treatment.

Discussing diagnostic and treatment delay in TB in 7 Countries of the Eastern Mediterranean Region (Bassili et al., 2008) reported that more than 50% of patients received self-medication, 42.2% consulted drug stores and only few went to health care providers in Pakistan. The findings of this study showed that those patients who directly contacted TB program were not only diagnosed but also put on treatment within 3 days. This indicates that patients approaching health facilities equipped for providing free TB care may enhance diagnosis and treatment. However overcrowding at public health centers, the attitude of staff and lack of trust on treatment, discourage patients from visiting these facilities. In general, TB is diagnosed from sputum examination, chest Xray and skin test but unfortunately these are not being used in general practice to exclude TB by health care providers. This shows lack of awareness

[20] Al-Khidmat (الخدمت) Foundation was network to provide humanitarian services across Pakistan. Al-Khidmat Foundation was an offshoot of Jamat-e-Islami. It was registered with Government of Pakistan as non-governmental organization (NGO) under the Societies Act XXI of 1860. Its service included Disaster Management, Health, Education, Orphan Care, Clean Water, Mawakhat Program (Micro Finance) and Community Services.

or interest to follow national guidelines for TB diagnosis in Pakistan (Saqib et al., 2011).

Above study further says that previous exposure of TB is an important source of infection which is most common in Pakistan. Majority of patients had strong contact history still most of them were not suspected for TB. Health care providers either did not enquire about TB contact history or respond appropriately indicating casual attitude. Furthermore, contact based investigation for TB is needed to enhance diagnosis. A significant association of total delay with coughing and fever were observed providing an opportunity to investigate patients for TB having these symptoms for more than three weeks.

4.3 Healthcare and TB Center in Rural Health Center (RHC)

During the second phase of research, I was conducting life histories of selected TB patients and also visiting TB facility centers of Tehsil Murree to observe healthcare practices and to conduct interviews with healthcare providers. RHC Phugwari – with a total population of around 15,000 – was the only RHC in Tehsil Murree. There were 8 BHUs linked with RHC. It was located on the far north side of Murree. Phugwari was lying on both sides of IMDC that had two-way traffic. Other than this, there were link roads that were connecting the population of Dewal to Murree and Phugwari. The people of far-off villages of UC Phugwari were dependent on this RHC.

I traveled to RHC Phugwari through IMDC. From Lower Topa to onward, the road condition was very rough. There was a downward steep slope from Lower Topa to Kuhala Bridge[21]. The local transport was not so frequently available. There were buses and Toyota wagons running from Rawalpindi, Islamabad, and Murree to Muzaffarabad and its other surrounding areas and also served the residents of Phugwari. There were very few Toyota wagons and coasters specifically for Phugwari. One had to wait at Phugwari bus stop for almost half an hour to begin a journey to any destination. It used to take 40 minutes from Phugwari in a private taxi/car or personal transport to travel 18 km to reach Murree, but on a local transport either coaster or wagon the journey time stretched to an hour and thirty minutes.

[21] Kuhala Bridge was constructed on river Jhelum. It was river Jhelum that had marked a natural boundary line between Punjab and Khyber Kakhtunkhwa (KP) of Pakistan and Azad Jammu & Kashmir (AJ&K). This bridge was connecting Pakistan to AJ&K. This bridge was having attraction for tourists.

The population of Phugwari was scattered on a large area on the mountains. Phugwari bazar was a connecting place, where people from all surrounding villages of UC Phugwari used to reach for connecting buses. Phugwari Bazar was just like all traditional bazaars of rural towns of Pakistan. It had a bank, a police station, a post office and number of shops that used to cater to the needs of local residents of this small town and its surrounding villages. There were three medical stores, two private clinics and a private laboratory in Phugwari Bazar. This place was not a tourist attraction like Murree because of two reasons; first, it was on low altitude as compared to Murree city and other Gilliyat region; and second it did not have much greenery around. Because of negligible tourist attraction, this area was poorer than any other areas of Murree.

There was a small street on the downside of the Bazar leading to RHC. It had stairs for the pedestrians because RHC was far down from the level of the road. There were small stalls along both sides of this path. At a distance of 400 meters from bus stop towards Muzaffarabad, there was a road leading to RHC. Through this road, the distance to RHC was around 2 km. The link road further led to many small villages and finally touched far down Jhelum River. The road started with a sharp slope downward and the building of RHC was on a sharp upward slope on the right side of the road. RHC was divided into two portions. One was the residential area of staff and the other was the main building of health facility. There was a small parking area too. The visitors could enter through the back of the building by their private vehicles and the pedestrians through the main entrance of the hospital building.

Generally a RHC had 20–30 bedded ward and it was supposed to provide primary level curative care; static and out-reaching services such as Mother and Child Health (MCH), Family Planning (FP), Expanded Programme on Immunization (EPI), and advice on food and nutrition; Communicable Disease Control (CDC), Acute Respiratory Infection (ARI) and acted as a referral link for patients referred by Lady Health Workers (LHWs), Traditional Birth Attendant (TBAs) and Basic Health Units (BHUs). RHC was a first-level care facility where medico-legal duties were also performed.

It was 11:00 A.M. when I reached RHC. I saw dozens of patients present in OPD. The beds were vacant in the ward. I was sitting on a bench at the start of the gallery, where

from I could see a gathering of patients outside the rooms of doctors straight ahead and on my left queue of patients outside the dispensary for getting their medicines could be seen. The kids, accompanying their mothers, were shouting loudly. The floors were very dirty. It seemed to me as if no cleaning took place for last couple of days. The total manpower of hospital comprised a Senior Medical Officer (SMO), an MO and a dental surgeon. SMO and MO were on duty and sitting in separate rooms attending to the patients. The patients could be seen pushing each other from all sides to get their turn to reach the doctor. The doors of those rooms were closed; one patient entered at one time. The reception desk for issuing the registration slip – with a window opening to the entrance of hospital building – was on my back.

I walked around, but could not find a section for TB diagnosis and treatment. I went to the dispensary, where Sohail – a forty-year-old bearded man working as dispenser – was busy in giving medicines to patients. There was a table and two chairs in the dispensary. A protocol patient was sitting in the next chair. Three cartons were lying beneath the table. Sohail was picking leafs of tablets from those cartons and bottle of syrup from the closet. A woman in her mid-forties handed over two slips of prescription. Sohail glanced through; placed one on his table and handed over the other one to women and said, *"This is for outside [private pharmacy]."* The woman remained silent. I inquired about the location of TB section but before responding, Sohail asked me about the reason for the visit. I introduced myself and presented the letter of Quaid-i-Azam University. Sohail glanced at the letter and returned it to me. Sohail called the janitor staff and asked him to bring a chair. The other man stood up and insisted on me to take the chair. Janitor returned with a chair and he was asked by Sohail to call Ashraf who was responsible for giving TB drugs to patients but was on leave that day. Sohail asked for tea but I excused. I asked for Ashraf's mobile number for setting up a meeting before my visit.

Next I went to the laboratory where Younas – a man in his mid-thirties – was relaxing on the chair. It was a small room; having a table and chair, and a wooden bench to serve the patients with sitting capacity of four. Younas was putting on *Shalwar Qameez* and waistcoat, was freshly shaved and supported a mustache. Younas seemed to be an employee with a good grade. Actually, Younas was a peon in the hospital and had replaced Zahid, the lab technician of RHC. Zahid was originally appointed a lab

technician at RHC, but was on rotation duty for a month to screen TB among prisoners of Adiala Jail Rawalpindi. Younas had always been taking care of the laboratory affairs during the absence of Zahid. In reality, Zahid had informally trained Younas to do basic laboratory tests, as Younas said,

> *"I am a Naib Kasid [peon] here. Zahid is the laboratory man. I have learned this work and manage laboratory during Zahid's absence. Zahid is not here for a month. He is on government duty to Adiala Jail. There is no pathologist. There is only one lab technician here. In my absence, laboratory remains closed and in that case, the tests are conducted from a private laboratory. To diagnose TB, we have this microscope. We take the sputum for test and get blood for ESR to know whether the infection is getting high or low. The other is chest X-ray, for which X-ray machine is out of order. We do not have a machine to know MDR-TB, for that we send the patient to Pindi [Rawalpindi]. We do not follow such referrals. I do not know whether the patients go to DHQ hospital or not."*

After leaving the hospital, I contacted Ashraf on his mobile and assured his availability in the morning. After three days of my first visit, I reached the dispensary of RHC at at 9 A.M. Sohail welcomed me and asked janitor to call for Ashraf. Ashraf entered the dispensary and asked me to follow him. Ashraf was in his late thirties. He took me to the X-ray room. As I entered X-ray room, he said,

> *"Today there is no TB patient for follow up and medicine, So, I was enjoying the sun. This room is completely free because X-ray machine is out of order. We can sit here as long as we wish."*

I presented him the letter of my university and reintroduced my research objectives before the start of the interview. I told him that information shared by him would be used for the purpose of research only and will not be shared with anyone else. Ashraf belonged to a well-educated family. He became very friendly in a few minutes. I spent an hour and thirty minutes with Ashraf and had tea during the interview. At the start of the interview, he regretted for not being present on the day of my first visit.

Ashraf: *"I saw the list of patients and there was no TB patient expected to visit hospital for another day, so I took leave."*

Majid: *"What if there comes a newly TB diagnosed case?"*

Ashraf: *"In that case, Sohail gives medicine for a week and asks them to visit after one week for their card and monthly medicine, and if they create problem, he issues card there and then"*

The average patients' burden in OPD of RHC was around 180 per day. But, number of TB patients was not so high. RHC had registered only 7 TB patients during first quarter of 2016. RHC could not win over the trust of the general patients because it did not have all required medicines. The patients were carrying prescription of government doctors to be purchased from private pharmacy. There were two MOs and a dental surgeon to deal with the average OPD of 180 patients per day. There was no chest expert doctor in RHC to examine the TB patients. District Officer Health (DOH) Rawalpindi had been informed in writing about non-functional X-ray machine, but there had been no response for a year. Ashraf was appointed an X-ray technician in RHC but was given extra charge of TB program. Ashraf has been working as TB coordinator in RHC for last ten months. Parts of his interview are connected as he said:

> *"We have not been providing an up-to-mark healthcare service to TB patients at RHC. We do not have a proper mechanism for TB diagnosis. For example, the X-ray machine is not working, lab technician is on rotation to jail for screening TB patients and in this situation, how we can make correct diagnosis. There have been some cases of TB who did not continue their treatment. We do not have any mechanism for contacting and bringing the suspected cases to the facility, but NTP wants us to do this task and enroll a maximum number of TB patients. This is the work of LHW. Generally, patients visit this hospital [RHC] for general check-up and get medicine for cough and fever. When the doctor suspect indications of TB, he writes TB test and if they are diagnosed with TB after positive sputum test, they are given TB medicine. Mostly diagnosed patients are found to be in last or second last stage of TB. This delay in diagnosis and treatment is because of lack of knowledge and information about the causes and symptoms of TB. The dropout cases are placed in lost and to be very honest we leave such cases."*

It was interesting to know that PTP was not supplying TB drugs to RHC. The staff of hospital had to collect TB drugs from Rawalpindi on their own. It is clear that one of the components of DOTS is to ensure appropriate and regular anti-TB drug supply (National Tuberculosis Control Program, 2013) which was not being practiced. TB facility center was not providing any mask to TB patients to prevent them from spreading the TB bacteria Mycobacterium. TB patients were verbally advised to cover their mouth during coughing and sneezing. RHC was not having diagnosis and treatment of MDR-TB, XDR-TB, extrapulmonary TB and childhood TB. This research finding validates the criticism made by (Farmer et al., 2013; Johnston, 1995; Keshavjee & Farmer, 2012; McMillen, 2015; Roberts, 2009) on DOTS and WHO for not facilitating all other types of TB as government hospitals of Murree were only dealing with pulmonary TB patients. RHC referred patients to Rawalpindi and Islamabad for genexpert test. The TB staff of RHC was not sure of the availability of genexpert machine at Samli Hospital.

Dr. Nabeel, MO in RHC, said,

> *"Patients come to us and do not tell us the symptoms of TB. It is not like we don't ask. Patients say that they have a little cough and fever for two or three days. So, how can I screen with this history provided by the patient? Patients deliberately conceal their symptoms. I cannot write for TB test to every patient as we do not have enough capacity."*

At the end of this interview, I asked Ashraf if he could support me to conduct an interview with one LHW. Ashraf left the room and instead brought one Lady Health Supervisor (LHS), a skinny woman in her early fifties, Shamshad. Before entering the room, Ashraf had already introduced me and my work to Shamshad. It made my task easier. She was leading a team of 16 LHWs. I asked her to connect me to a LHW. I was lucky enough because their monthly meeting was in progress. I had to wait for LHW, but I conducted her interview, which has been shared in the later chapters of this dissertation. Talking about the barriers for attraction of patients to RHC, Shamshad said,

> *"For better health and hygiene, water is necessary and there isn't any drop of water available at RHC. We have to request the people for safe*

delivery at RHC and when we bring them here, we have to carry water in the vehicle."

Apart from equipment and human resource, such issues were part of every government healthcare center of Murree. The government had failed to provide uninterrupted supply of clean drinking water not only to villages but also to hospitals of Murree. Besides this, the administration of Hospitals remained abortive to settle the issue of water supply from local resources.

4.4 TB Facilitation at Tehsil Headquarters Hospital (THQ)

The city of Murree was situated on the top most hill in the area. The height of the hill gradually increased from north to south and reached its highest level at Kashmir Point. General Post Office (GPO) crossing was a point where the traffic from five directions intersected. THQ was situated on Kuldana Road. THQ was not in an easy access to all types of patients because of its geographic location. Murree city was a highly populated area. There were hotels all around the top of the mountain and in the surroundings of THQ hospital. Because of tourism, overall traffic and population burden of Murree increased many folds during summer. Every road of Murree city was for one way traffic. In such a situation, the only approach to THQ was through private taxi or personal car via Jheeka Gali Road.

One day, I was returning to Islamabad and I had a chance to meet Saeed. He was a Traffic Warden in Murree, belonged to Rawalpindi, and was posted at Jheeka Gali Chowk. I had an informal discussion with him about the effect of road blockade on visitors to THQ hospital. Saeed shared his observation and general practice as:

"Bhai, [brother] every year from May to August, an average 30 thousand small and large vehicles enter Murree on daily basis, and how much space this small mountain holds? In this rush, we cannot carry an ambulance over our shoulders. At our best, we allow the ambulance to go through Kuldana Chowk and break the law of one way [traffic]. And, if some ambulance driver himself goes though Jheeka Gali, in that case, I cannot leave my duty to drop him to THQ . . . if patients are being carried in the car [private] or taxi, then I don't have the magical power to have that knowledge."

The roads of Murree city are almost blocked in every season. The trend to give way to the ambulance was not common in Murree in general and the traffic plan of Murree did not give priority to support the visitors of THQ hospital.

THQ Murree was serving as first level referral hospital by receiving referrals from RHC and BHUs. THQ hospital was providing specialist medical care. This hospital was providing both in-patient and out-patient services along with TB diagnosis and treatment to the people of Murree and its adjacent areas including Khyber Pakhtoonkhwa, Azad Jammu & Kashmir and Kotli Sattian. Although all of the adjacent areas had health facilities, some villages and town were in more easy approach to THQ Murree but people still preferred to travel to THQ hospital for treatment.

I had first visited THQ at the start of this study. It was 11 A.M. when I entered the building of THQ hospital. Reaching the reception, I asked about the direction to MS office. A middle-aged man, in white *Shalwar Qameez*, directed me to walk straight to my right and to take first left and third door to the right. On moving to the right, there was a laboratory on the right side and a nursing room straight ahead of me. I followed the direction and reached the office of PS to MS Dr. Khalid Masood. I asked PS for my interest to meet MS. The PS gave me a page to write my particulars on it. I wrote my name and academic status. He gave that pager to a peon and said, *"Give it to Sahib"*. I was offered a chair to wait. The peon came out and asked me to come inside the MS office.

MS was 59 years old and was going to retire after one month. MS stopped me at the start of my introduction and asked if I was Saraiki speaking to which I said yes and from that point to onward we communicated in Saraiki. Dr. Khalid Massod was from District Rajanpur that was a Saraiki speaking area. He was pleased to have me in his office. He offered me tea and asked his peon to call Tariq from the laboratory. Tariq was a lab technician and was holding the sole responsibility of TB program at THQ hospital. MS, pointing to me, said to Tariq, "*He is my son and doing some research on TB. So, you have to help him whenever he visits. Do care for him after my retirement. Don't forget me after my retirement."* It was a fifteen minute healthy talk with MS. Meanwhile, I asked for his mobile number. I was happy to have a first top-level reference and sad as well because he was soon going to retire.

After departing from the office of the MS, I went to the laboratory to meet Tariq and share the objectives of my study. On that day, I did not have much detail about the functioning of PTP in THQ hospital with Tariq. I moved on after getting information about TB patient burden. I saved Tariq's mobile number in my contact list, thanked him by reminding that I would contact him after a few weeks.

It was May 10, 2016. The first phase of the study was over and I was exploring Murree to reach the selected TB patients. I was staying in hostel of Government Degree College for Boys Jheeka Gali, Murree. On that evening, I made a mobile call to Tariq and asked for his time for an interview. We planned to meet at 8 P.M. at GPO crossing. It was night and the roads were full of tourists. We went to the café of THQ hospital. Tariq belonged to Kabirwala. It was a neighboring area of my native District. This intimacy was very helpful to gain his trust.

The general features of THQ hospital were similar to those of BHUs and RHC because of its location, where health mattered, the patients and especially the old ones found access quite difficult. Some of the issues were that the hospital remained overburdened with all types of treatment seekers. The hospital was visibly short of staff which included doctors and others. Medicines remained short and were not being provided. Private prescription for poor patients was common. The TB program was being copied to that of TB program at RHC Phugwari with a slight change. Here it was a one man show. Tariq was having extra charge of TB DOTS program and was doing Microscopic tests of TB suspects, registering the TB patients, taking care of patient treatment record, distribution of TB medicine, self-collection of TB medicine from Islamabad, and attending a meeting of NTP. THQ hospital had 31 TB cases during first quarter of 2016. This TB center was not providing diagnosis and treatment for MDR-TB, XDR-TB, extrapulmonary TB, and childhood TB to children less than 14 years of age. It was providing treatment and diagnosis to only pulmonary TB patients. On managing TB program, Tariq said:

> *"I have already pressure for my own work. My performance as a lab technician is being affected because of this extra responsibility. I have not been provided laboratory stuff from government or NTP. I am doing all of the tests on the same plates where there are greater chances of error. These days MDR-TB is on the increase. The reason for this is that the*

patients do not take medicine for a full duration of time. To be honest in government record, the patients get medicine and treated but in reality, they don't."

Tariq also had informally trained Rehman, a ward boy, to do basic laboratory tests during his absence. The genexpert machine was not available in THQ and they had been sending patients for genexpert test either to Rawalpindi or to Samli Hospital. The laboratory of THQ had a vacant post for the pathologist and a lab technician. There was no pulmonologist in THQ hospital. Tariq said:

"You would have observed the overburdening of OPD and it is the responsibility of doctors to screen out TB suspects. Doctors skip TB suspects by prescribing them medicines. I have nothing to do with this TB. My job is to do lab test for TB suspects whether the patient has it or not. I am overburdened. There is no substitute to run the laboratory in my absence. So, I have trained a boy. Here we are just managing. In reality, it is of no worth the way we are working."

According to Tariq, 8 BHUs were linked with THQ Murree for referring patients. After conducting life histories and interviews from selected three BHUs, it was revealed that TB suspects were not being referred to THQ hospital, RHC and Samli Hospital for TB diagnosis. I have discussed pathways of TB patients for reaching TB centers in the last part of this chapter and ethnographic case studies in chapter five. The later part of this chapter and other chapters of field data describe the overburdening of healthcare structure of Murree and talks about ways and means to access a doctor.

4.5 Syed Mohammad Hussain Government TB Sanatorium Samli

Syed Mohammad Hussain Government TB Sanatorium Samli was the only sanitarium in Pakistan. It was commonly known as Samli Hospital or Samli Sanatorium among the patients. It was being run by Provincial Government of Punjab. Its budget was not part of overall health budget of the District Rawalpindi. The Provincial Government used to release a separate budget for Samli Hospital. Before giving detailed description of the functioning of Samli Hospital to deal with global TB issue, it is required to mention its history.

4.5.1 History of Samli Hospital

The history of this sanatorium dates back to the days of partition of Subcontinent. Dr. Syed Muhammad Hussain belonged to Central Punjab and moved to Murree in 1928 with a vision to construct a hospital for the treatment of TB patients of Subcontinent. The core motivation for this philanthropic urge was the death of his one and only son, who suffered from the deadly disease of TB. During his visit for selection of land to construct the hospital, he chose a piece of land covered with pine trees, fresh underground water, and fresh air that had always been ideal for the rehabilitation of TB patients. He was informed by the local population to contact Raja Khan Zaman, the owner of the land, to share the idea of a hospital. Dr. Muhammad Hussain shared the idea and future plan for constructing the hospital with Raja Khan Zaman during the first meeting. Raja Khan Zaman donated 350 Kanals of land for this noble cause.

The hospital construction was initiated in 1929 at a small scale and after six years, the epidemic growth of TB multiplied manifolds in Rawalpindi for which Red Cross Society took notice. Mrs. Kethbert King, the wife of Commissioner Rawalpindi Mr. Kethbert King, was chairing the society and chalked out a plan to set up a sanatorium in Murree. She approached Dr. Muhammad Hussain and Raja Khan Zaman for holding talks to share the idea of developing this small hospital to a large Sanatorium. They willingly gave possession of the Hospital to the District Government Rawalpindi and finally on May 8, 1935, the charge of this hospital was transferred to British Government.

On August 14, 1947, the management of the sanatorium was overtaken by the Provincial Government of Punjab, Pakistan. The sanatorium had one triple story building initially and later on the provincial government extended the hospital and constructed a separate ward for women TB patients, an OPD and an operating theater.

In Pakistan, every District Headquarters Hospital (DHQ) had separate TB ward, but Murree was the only Tehsil in Pakistan where a separate TB hospital was working in form of Samli Sanatorium. This was the reason for which TB center of THQ and RHC were not having a large number of TB patients. The patients had a great trust in Samli Hospital because of its historical standing. A patient said:

"Samli is a most famous and well reputed TB hospital all over Pakistan. I came here from Okara.[22] *One of my relatives told me about Samli. I was getting weak every day. I am much better now, and it is because of Samli."*

Rawalpindi was a very developed city of Pakistan with availability of advanced medical facilities both at public and private levels. A woman belonging to Rawalpindi city was distributing sweets among the staff of Samli Hospital on the recovery of her daughter from pulmonary TB. She said, *"Samli's medicine is of good quality. So my daughter is secured from TB."*

4.5.2 Infrastructure

Samli Hospital has a total capacity of 360 beds. Samli is divided into four parts on the basis of its healthcare facility; (1) Men's TB Ward; (2) Women's TB ward; (3) MDR-TB Center; (4) and OPD. Men's TB ward was a three-story building with the total capacity of 240 beds, whereas the women's TB ward was separate from the main building of the hospital and had the total capacity of 90 beds. OPD and MRD-TB centers shared a triple story building, where the 1st floor was for MDR-TB Center, the second floor comprised the MDR-TB ward and private rooms for TB patients with the total capacity of 30 beds, and OPD was on the third floor. Samli Hospital had a residential colony for married staff and a hostel for women paramedic staff. Besides this, there was a guest house in the hospital.

4.5.3 Accessing Samli Hospital

In December 2015, I discussed the findings of visits to various TB hospitals with my research supervisor. Samli Hospital was selected as a site for research. In order to get to Samli Hospital, a road travel was the only option. The roads of Murree were winding and many passengers vomited on the way. Company Bagh was a bus stop, from where a single broken road led to Samli Hospital. Company Bagh was situated on National Highway at a distance of 40 km from Rawalpindi and 33 km from Islamabad. This stop had its history from British Empire. The Britishers used to stop at this point to water their animals and to cool the engines of their vehicles which got heated due to ascending curving roads. Later on, a company of British Army was deployed at this point for the security of British visitors to Murree. The local people

[22] A District of East Punjab, Pakistan

named it Company Bagh[23]. This stop was in a curve where there were two small reservoirs containing water. Every local bus used to stop at the upper side of the curve to cool its engine to remind us of the British legacy.

There were some small grocery, fruit & vegetables, sweets, cigarette shops and small hotels to serve tourists and the local population. Round the year, there used to be some hustle and bustle on the stop, either because of tourists travelling to Murree or because of patients visiting Samli Hospital. Cars of outdated models were used as Taxi to drop the patients from Company Bagh to Samli Hospital. There is a very small market at the main gate of Samli Hospital. There are two medical stores, three small hotels, fruit and vegetables shops, chicken shop, and some general stores close to Samli Hospital. There was no canteen in the hospital and this market was catering the need of indoor patients, visitors to OPD, and the local population.

Carrying a field letter of Department of Anthropology, I reached the office of DMS at Samli Hospital Dr. Ameer Haider who was in mid-fifties. He had been serving in Samli Hospital for last 20 years. He belonged to Sialkot.

He had done MBBS[24] and MPH[25]. Dr. Ameer was very respectful. He gave me full space to speak. At the end of meeting, Dr. Ameer said,

> *"I have taken acting charge of MS for this week, and I don't want to give you permission on my own. The best I can do for you would be to present your soft image to MS and take your side. Majid! It may happen that I give you permission today and MS cancels my order next week, and I will not be able to do anything in that case. I don't have any personal issue with you, but the reality is that you do not know the local staff of the hospital. This is what you would come to know on your arrival."*

Dr. Ameer asked to visit on Monday, March 28, 2016, for meeting with MS. Dr. Nasir Mahmood who was the MS and later on, was appointed National Program Manager of NTP. On Monday, I reached Samli Hospital at 9:30 A.M., and went to Dr. Ameer to show my presence before going to MS. Dr. Ameer advised me to go to Kazim who

[23] "Bagh" means Garden in English Dictionary
[24] Bachelor of Medicine/ Bachelor of Surgery
[25] Masters of Public Heath

was PS to MS. I asked Kazim for meeting with MS. Meanwhile, I saw Dr. Ameer entering the office of MS. I waited for 20 minutes as there was a conversation going on between MS and Dr. Ameer. The PS entered MS office along with letter of my university and written application for permission of one month research in OPD. MS called me into his office. He asked me about the objectives of research in the hospital. I had started responding and Dr. Ameer, in a low tone, said, *"He is a good boy. He met me last week and I know all about his research. I was interested to keep you updated and get sign from you. So, I asked him to visit today."* MS looked at me before writing *"Permission Granted"* on my application and directed me to go to OPD and to give approved application to Dr. Qaisar.

Dr. Qaisar was appointed chest expert in Samli Hospital and had extra charge of OPD. As I entered OPD, it was full of patients who were waiting for their turn to be examined in Room No. 3. Dr. Qaisar had his office in Room No. 1 of OPD. I knocked and entered his room, handed over the signed application from MS but Dr. Qaisar got furious by looking at the application. He wanted me to get a written permission from Director General (DG) Health Punjab for working in his OPD. I was astonished as he rejected the permission of MS. Dr. Qaisar said:

> *"I don't know about you. There are people who get data of patients from hospitals and go to their homes and do theft. I cannot trust you. You know what Shakeel Afridi did in Abbottabad? He [Shakeel Afridi] was spying for Americans. Whatsoever MS has written on your application is not sufficient. You should get permission through proper channel from Director General Health Punjab or the MS should write me a letter on the letterhead of Samli Hospital and then I will allow you to start research."*

These words were unbearable and painful to me. Dr. Qaisar said that he would talk to MS in person and will let me know through a mobile call about the decision. Dr. Qaisar asked me to return home and not to get back if the permission was not granted. On his demand, I wrote my mobile number on the back of approved application and dejectedly left the room.

I became hopeless at the response of Dr. Qaisar. Instead of going home, I went to Dr. Ameer and narrated the whole story. He advised me to go to MS. I did so and again

placed a request to Kazim for the meeting, and again waited for five minutes. I met the MS and narrated the recent happening. He asked me to bring back the approved application from Dr. Qaisar. He was busy with his mobile when I entered his room. I waited and when Dr. Qaisar finished the call, I requested him that MS *Sahib* had asked him to return the application. Dr. Qaisar got furious at my words and took the application out of his drawer and rising from his chair said that he would himself meet MS there and then.

I followed Dr. Qaisar to office of MS. Outside the admin building Kazim met us and asked, *"Why so much hurry?"* Dr. Qaisar replied, *"Friend, this boy wants to do a research and I asked him to get permission through proper channel."* Kazim said, *"Yes, it is very necessary and for this, he will have to go to Lahore to meet DG Health."* Dr. Qaisar entered the admin building by pointing to me and saying, *"This is what I have tried to make him understand, but he is not getting this as a serious note."* At the entrance of MS office, Dr. Qaisar asked me to wait outside. As I turned to sit on vacant chair, I saw Kazim was already in his seat. Dr. Qaisar spent a few minutes in MS office to have a discussion on the said permission. Meanwhile, Kazim kept on discouraging me by narrating the story of permission of a researcher.

I don't know that what transpired in the office, but Dr. Qaisar angrily came out and addressed to me, *"You can start your research from next week, but remember to stick to OPD and not to extend your study more than one month. Got it?"* He left Kazim's office and I was calm. MS was alone in his office. I entered to pay my thanks for his support. I also met Dr. Ameer to thank him for his all-out efforts.

Later on, I visited TB dispensary for a few minutes before it was closed. There I met Ihsan, a 29-year-old employee, son of a retired primary school teacher, and father of two children. Ihsan was very interested in literature and had privately completed Masters in Library Science. Ihsan was a ward boy, but he was working as a dispenser. I explained objectives of my study in Hospital. Ihsan welcomed me and extended his full support by giving me access to the record of patients and interaction to targeted registered and new TB patients. Ihsan was my first key informant in Samli Hospital.

Case Study: Healthcare in OPD at Samli

Matloob, a 47-year-old man, was in the 5th month of his TB treatment. His family comprised his 43 years old wife Rasheeda Bibi, a daughter Mehreen 23 year, and his three sons Nisar 25, Zulfiqar 23, and Tayyeb 8. Matloob used to work as a daily wage labor. He was living in a very remote village of Union Council Tret. He narrated the story of his visit to Samli Hospital as following:

> *"This was for the first time I was going to Samli Hospital. Before that, I never felt a need to visit Samli. We are living on the border of Murree and Islamabad. The road of the village is totally broken. I remember the misery of my first travel and the way I was treated in Samli hospital. I was very weak. My son Zulfiqar borrowed a motorcycle from our neighbors to carry me to Samli, but the neighbor gave us Motorcycle just for thirty minutes. It was not possible to visit Samli in such a short time. My son Zulfiqar rode motorcycle; I was in the middle, and my younger son Nisar was at my back. Zulfiqar dropped us at Salgraan Pul [bridge] and went back to return motorcycle. From there, I and Nisar took a coaster. It took around 35 minutes to reach Company Bagh. I was coughing and spitting during this time.*
>
> *My son Nisar held my arm and helped me to cross the road. On crossing the road, I saw some passenger-taxies. A driver, looking at me, offered to give us drop to Hospital. Nisar inquired the fare and the taxi driver demanded Rs. 150 which was quite unreasonable. The distance was hardly 4 or 5 Furlongs [800 to 1000 meters]. Nisar bargained, but that man was adamant that he won't go below Rs. 120. I could not believe his selfishness. I was in a very bad condition and he was merciless. If he had asked for Rs. 50 I would have managed, but Rs. 120 were out of my reach. I was thinking that we might have to pay for medicine to a medical store [private pharmacy]. I placed my arm on Nisar's shoulder. It took around 30 minutes to walk for the distance of 4 Furlongs. During this journy, I took rest twice. I remember my sitting at the main gate of Hospital and my son fetched water from a pitcher of a hotel.*

There was a slope at the entrance of Hospital [OPD]. I was tired and wasn't able to walk up the ramp. I sat on the floor and took some time to gather my breath. I gained energy and walked up the ramp with the support of Nisar. My son took me to the sitting area. It was probably 10 A.M. and the sitting area was full of patients. There was no vacant place in the sitting area. I was unable to stand any more. I sat on the floor. Nisar went to the reception desk to get a registration slip. It took Nisar a few minutes to get back. I was coughing and spitting on the floor. A man came and shouted at me and asked not to spit and to go out of OPD building. He pushed me with his hand. I was scared. I told him that my son was coming and he would take me out. The man walked away.

Nisar came to me holding a mask in his hand. He gave me the mask to cover my mouth and said that he had given the slip to the man on the door of the doctor's room and he would call my name very soon. The color of the mask was green. I was suffocated in that mask. I threw that away in a few minutes. It took an hour to wait for our turn. During this time, Nisar went to the man at the door many times and requested to help us to get to the doctor. More than once, I asked Nisar what was wrong. Everyone was going to doctor but why my turn was not being announced. All the time Nisar made me calm by asking to wait a few minutes more.

Our turn to go to the doctor came. There was a mob gathered at the door of the room. Patients were pushing each other. There was just one doctor in the room. Another man was standing on my side and he was also writing medicines on the slips and was asking people to get the medicine from hospital dispensary. I do know how he checked me. He neither checked my temperature nor used his ear instrument [Stethoscope]. There was a distance of almost 4 foot between me and doctor. The doctor just asked about my feeling and what was going on. He even did not check my pulse. What was this examination? And he did the same with every patient. He wrote something on the paper and asked to get X-ray and tests. I was in tension about the money to be paid for X-ray and tests.

There was a cabin in the corner of the sitting area of OPD where Nisar paid the money. I asked Nisar that how much he had paid. He said that it was Rs. 35 in total. I was glad for saving money by not using a taxi. We went to the X-ray room. There was a gallery and X-ray room was on its right and laboratory on its left. There were some benches placed in that gallery. The benches were full of patients. There was no vacant space on those benches. The patients were standing for their turn. And so did I.

There was also a man at the door of X-ray room. This man was collecting receipts of payment for X-ray and was loudly calling out names of patients. He was holding a lot of receipts in his hand. I was coughing continuously. This X-ray man was very kind. He gave a suggestion for visiting laboratory first because it was still time for the turn of X-ray as X-ray man was serving on the basis of first come first served.

Laboratory was hardly a few meters walk. The man in the laboratory was collecting samples of blood and sputum. He collected the blood sample and gave a Dabi [small plastic box] to put Garaha Balgham [thick sputum] and get back for the test. It was around 11:30 A.M. and laboratory man wanted me to give sputum by 01:00 P.M. so that we might get the results at by 02:00 P.M. Otherwise, either I would have to bring the sputum in the morning or I would have to get the result in the morning. This was again a problem for me. We had hardly managed one visit to Samli and the other visit was out of the question. Nisar had missed his labor that day and missing labor for another day was not acceptable.

The laboratory man had saved my next day's visit to the hospital by giving a free advice to drink Kahwah[26] *or green tea. Nisar brought a cup of Kahwah in 15 rupees from the hotel situated at hospital gate. I drank and it gave sputum sample fifteen minutes earlier than the said time. Turn for X-ray was close and I lined up outside the X-ray room. Later on, it took an*

[26] Kahwah was a traditional green tea preparation. Generally green tea was boiled and served. The people of Murree were using four types of Kahwah as household remedy during illness. It included (1) by boiling black tea: (2) by boiling ginger; (3) by boiling green tea and dropping few drops of lemon; and (4) by boiling cinnamon, mint, cardamom, and ginger. The most consumed were first and the fourth one.

hour to wait for the collection of X-ray film. This time I found sitting space in sitting area. Nisar collected tests reports from laboratory and X-ray.

We went to the doctor. This time the doctor was very relaxed. There were just two patients in the room and there was no man at the door. We gave all reports of tests and X-ray to doctor and he diagnosed TB and asked us to go to the dispensary. This news was not welcomed by me as it had shaken me at first. I was very upset by thinking that how I would live on medicines for a long period of six months. We went to TB dispensary. There were 10– 12 patients in TB dispensary. The dispensary man was very rude. He was writing in different registers.

I had to wait for almost 30 minutes for my turn. He asked me to get on the weight machine. He asked my father's and grand father's name. I was astonished at him for asking the name of my grandfather. He gave me medicines and asked not to do break in taking TB medicine. It was late noon and I was third last patient in the dispensary. On leaving the hospital, I was thanking The Almighty God that I had not borrowed the bike, otherwise, it would have been humiliation.

On return, there was no pickup from Salgraan Pul [bridge] to home. After a long wait one of our neighbors, Abid was going home on his tractor. He gave us a free ride. You know it is almost 5 km distance from the main road to here and I would not have been able to reach home."

This case study has presented a social suffering and lack of access to one of the TB centers of Murree and status of its service delivery. The overburdening of OPD supported the idea to utilize social capital and it was against the norms of civility and had resulted in anxiety among marginalized patients. Discussing patients perspective to manage TB (Soomro et al., 2013) in Rawalpindi considered existing healthcare structure of Pakistan highly effective for dealing with TB, whereas the results of this ethnographic study has revealed that healthcare structure of Murree is inadequate for providing equal access and for treatment to TB patients. In his study (A. Khan et al., 2000) claimed that in Sindh Province of Pakistan, TB program was not being properly implemented. The outcome of this inadequate and overburdened healthcare structure

to estimate TB burden and case detection in Pakistan can be verified when (Fatima, Harris, et al., 2014; Fatima, Qadeer, et al., 2014) it was said that there was low proportion of cases notified to NTP, with actual incidence rate. This study has not presented an insight reason for this failure of NTP but my study has discussed reasons for this failure that have been discussed in analysis of this chapter.

4.5.4 Indoor Healthcare at Samli

Azhar Abbasi was 43 years old, a resident of Dewal, had a 34 years old wife Asiya, father of a 14 years old daughter and a son 11 years old Ahad. Azhar was diagnosed TB during the first phase of this study. I was with him from the start of his treatment. Azhar was working as a private servant for a retired military officer before his diagnosis. I met Azhar on the day he was diagnosed with TB. I asked for his consent to become respondent for the study. He agreed and filled up the form of MPI survey. I asked for his willingness to become a respondent for further research to which he showed his inclination. I knew that Azhar was admitted to men's TB ward, but due to the limitations of hospital administration.

It had been four days since Azhar's admission in men's ward. I was tired with day-long interaction with patients and filling the MPI forms. I was sitting on a bench in waiting area outside of OPD. It was 04:00 P.M. and I was waiting for Ihsan to lock dispensary so that I might relax and enjoy a cup of tea with him. Meanwhile Azhar came to me and asked if I had forgotten him to which I said no, I still remember him. Azhar was very hopeless and wanted to talk to me. He offered me to have a cup of tea with him in his room in men's ward. I made it clear that I did not have permission from Hospital administration to visit wards. Azhar said:

> *"You come with me as my guest. I will manage whoever asks about your visit. They [hospital administration] don't know my approach."*

Meanwhile, Ihsan came and said,

> *"O friend, you are very scared. Dr. Qaisar is in his private clinic. He will come in the morning. Nobody will follow you in the ward. They are all my friends. Come with me."*

Three of us walked to men's ward. I went to Azhar's room and Ihsan went to the nursing room on 1st floor. Ihsan entered Azhar's room and introduced me to Imran who was a ward boy and was working in the evening shift from 02:00 P.M. to 10:00 P.M. Ihsan said goodbye and pointing to Imran said, *"Majid is my own man, and do care for him."*

Azhar remained in men's ward for next seven days and I kept on visiting him till his discharge. Azhar used to share his daily experience of men's ward. I have presented dilemmas faced by TB patients of men's ward through Azhar's experience in his words:

> *"Do you know? They put me on the second floor. There are stairs only and you have to forget the ramp or elevator to go to the second floor. I requested the ward master for shifting me to first floor, but he was talking about the policy. I spent two days on the second floor and kept on requesting, but he didn't bother much. Finally, I contacted General Sahib who made a call to MS and the policy was taken away from ward master. Finally they gave me this single bedroom on third day of my admission.*
>
> *The medicine is being provided on time and patients are being given full care. I do not have any issue in this regard even before the call of General Sahib. Food is very good. Everyday food is different. Milk can be a dream for a poor man, but I have it here. What else does a poor patient need? I think the cleanliness is good. The sweepers come twice a day.*
>
> *This hospital is good in all aspects, but I could not find a solution to my loneliness. Passing time has become very difficult. What else can a patient do other than coughing and spitting on the bed? Do you know there was a time when this hospital was supposed to be an ideal hospital for TB patients? My father suffered from TB 25 years ago and I was 18 years of age at that time. I had been doing duties as an attendant with my father here. There was a working TV room, library, carrom board game, and a good environment. After 25 years, now I came here and I can see a lot of change. There is no TV, carrom board, the library is locked and no entertainment and no indoor games. I can read the newspaper, but there is no newspaper for patients here. This loneliness is seriously a killer.*

For mobile charging patients have to go to this market and pay Rs. 20 for mobile charging, because sockets have not been provided for mobile charging. The mobile network is total failure here. You have to go out and walk around for catching mobile signals.

Drinking water facility is not available in this hospital neither in the wards nor in OPD. If you accompany, only then would you know that it takes fifty minutes for round trip to fetch water from an unsafe spring. I have got tired of a daily walk to fetch water. The first day I requested a boy who was going to fetch water for his father. But I cannot place such requests daily. The restrooms are extremely dirty. Last day, a man from the government came to do a survey. He was holding a form. It was his bad time that he met me at the entrance. He asked me some questions about the cleanliness of bathrooms. I said to him that if he was talking about the towel, soap for hand wash, and cleaning, sorry these questions were bullshit. I told him that there was no water in hospital.

Listen, Majid, I would oppose if somebody talks about the behavior of nurses. I am not their relative, but as a reality during the time of my admission, whenever I called them they came. It is the problem of people who call them for no reason."

This story has presented a pathetic picture of indoor health service delivery in Samli Hospital. A broken structure of Samli Hospital had existed. The patients had no access to basic necessities during the period of their admission. Although patients had trust in TB medicine of Samli Hospital, the facilitation method to get to TB medicine and indoor healthcare structure was not good enough to attract the trust of patients. It was the duty of hospital employees to provide utmost social support to TB patients during their admission. Discussing the role of social support during critical illness (Sohail et al., 2018) have said that it has a very important role for the nursing of patients, that was partly in practice in Samli Hospital. Part of the nursing is responsibility of hospital staff and part of nursing for social support is obligation of family, kinship or clan members. I have discussed the mechanism of social support to TB patients in the culture of Murree in chapter five and eight of this dissertation.

4.5.5 Healthcare in Women's Ward at Samli

I was sitting in the dispensary and a woman in her mid-thirties was in dialogue with Tahir. Her mother was a TB patient and newly admitted to hospital. The patient was in OPD and was to be shifted to women's TB ward. Women's TB ward was a separate building. There was a sharp steep slope and a cemented ramp had been constructed for the facilitation of patients. Mostly, the cars could not reach women's ward. She wanted Tahir to help her by managing shifting of her mother to ward. She was the only attendant with her mother.

Tahir said, *"Ambulance of the hospital is out of order. Either you take a stretcher or wheel Chair and call someone from the ward and take your mother. I cannot be of any help to you."*

The woman got agitated and yelled:

> *"What system are you having here? The ward boy is not in the ward and I have been standing here for last one hour, waiting for hospital staff to help in shifting my mother. I took her in a wheelchair, but the slope of the ramp does not allow me to stake any risk. You have gone insane. I think you want me to drag my mother on that ramp."*

Tahir angrily said,

> *"Silent! Silent! Go and put a complaint against me wherever you wish to complaint. I have told you that I am a dispenser and this is not my duty. Go and grab Aya from the ward. She will help you. And next time do not come to me for this. And leave now."*

The woman left TB dispensary and I followed her with the help of Imran. She was Sabia, 34 years married woman and resident of Lora Abbottabad. Maryam Bibi, the TB patient, was her mother. I had an informal discussion with Sabia. Speaking about the issues she faced in the women's ward, Sabia said:

> *"The biggest issue of women's ward is its location. It is on the top of the mountain and there is no facilitation for shifting patients from OPD. Lower staff of women's ward is not co-operative. If you have to shift a*

patient up or down, you will not find a ward boy or Aya. Do you know why the ward boy and Aya get lost? It is because they expect us to pay them small amount for shifting the patients. I am a poor woman and do not have the capacity to pay them. It was my good luck on that day when a woman took pity on me and offered her help. Nobody from the hospital came forward. It is too hectic to walk up and down for collection of tests reports and bringing some material from the market. There is no canteen in women's ward. There is no facility to cook tea or heat the food. It is cold here and food gets cold very quickly.

The women's ward is out of connection with rest of the hospital. There is no intercom. If you have to call a doctor for emergency, you will have to go down yourself and call the on-duty doctor. To avail water facility, you have to walk all the way across the mountain to fetch a bottle for your use. I don't have an issue with the medicines and services of nurses. These are the basic things for which a patient and attendant have to face a lot of difficulties. And I have faced all of these issues during last few days."

A government healthcare center was based on the ideology of equality for all, but it was not being practiced in general and this gender-based discrimination was against the social norms of a society where women are given equal respect. I have discussed women status of health and social capital in chapter five, where women have been considered to be doubly marginalized. The geography of the hospital, the location of women ward and lack of facilities for women were an evidence of inefficient management as well as a damaged healthcare structure of Samli Hospital.

4.6 Barriers to Quality Healthcare for TB Patients

During the second phase of the study, I conducted interviews with Dr. Ameer, TB facilitator at TB dispensary, in-charge of laboratory and X-ray department, had informal discussions with doctors and staff of Samli Hospital and also conducted three Focused Group Discussions (FGDs) as per my research design. I asked for an interview with Dr. Qaiser (In-charge OPD) and Dr. Athar (In-charge Indoor Healthcare) but they demanded a formal permission from the office of DG Health, Lahore. This part of the chapter gives the perspective of Hospital administration and

staff along with observation about issues regarding the provision of quality service delivery. Dr. Ameer Haider talking about the issues of hospital said:

> *"Firstly, this hospital is overburdened with patients from a very large periphery and we do not have doctors as per requirement. The daily OPD is around 400 patients and for this many number of patients, we have normally two doctors. New doctors are appointed, but they resign very soon. Hospital is facing lack of resources such as staff and funds for which we have locked the third floor in men's TB ward and the operation theater has been closed since long. We have to refer patients to Rawalpindi for operation. The ward boys are working in dispensaries. Is this not the worst situation? There is no electricity most of the time, so we have to turn on the generator. The existing funds are being utilized on some unforeseen purchase, such as the purchase of diesel for generator. The contribution of this hospital to deal with TB in Murree and Galiyat region cannot be set aside. This hospital has a history for which people trust us . . . the most important need is to have a modern laboratory and an X-ray machine."*

TB dispensary was independent and separate in its work. It was a small multipurpose room being used as record room, store room, and waiting area. It was dealing only with pulmonary and extrapulmonary TB patients of every age. There were working three paramedic staff in the dispensary and one of them held a dispensary class certificate. TB dispensary was pivotal in all respects and means to control the spread of disease. The staffs of this dispensary were in close contact with the patient as compared to doctors of Samli Hospital.

There was unfortunately no drug management and record system in TB dispensary. Register for the stock of medicine was not provided to TB dispensary and TB drug distribution was not updated. The record of a TB patient included a chest X-xays, laboratory reports, TB card, doctor's diagnosis and other reports (if any), was in possession of TB dispensary staff. There were racks in the small room of TB dispensary where the record of every TB patient was placed for ten months to a maximum of one year. At the end of every month, the record of the most previous month used to be sent to the central storeroom where every year X-ray films and scrap

was sold out through auction. Talking about the record of data and its entry, Ihsan said:

> *"I can give you maximum 10 to 12-month previous record because we do manual work on registers and send the record to the central store. Right now we are being asked for digital data entry for which we have not been provided any facilities, such as computers, internet, and staff or training. There are only two computers in this hospital and only one out of those has the internet facility. We have to do online data entry and mostly internet is not functioning. Kazim [PS to MS] holds possession of this computer, who has to do work of MS as well. This extra burden is affecting our work because one out of us [three] has to carry record and sit in Kazim's office for online data entry. We are far behind our target of data entry. It is May and we are doing data entry of February."*

In this research, the concept of dropout concerned those patients who had started and quit TB medication at some stage. The record of these patients was available in the racks of TB dispensary, but their dropout status was not in the notice of staff. Some patients visited Samli Hospital after a considerable gap of treatment and staffs of the dispensary were not aware of their dropout status and were giggling while tracing their record. It was observed that the dropped out patients, because of some reason, were not traced through available patient record at TB dispensary.

There are multiple reasons for patient dropout. Social stigma of TB and patient behavior is on the top. In a systematic review of qualitative research on patient adherence to TB (Munro et al., 2007) applied meta-ethnography approach and stated that treatment interruption was also reportedly related to perceptions about TB as a disease; some patients did not believe that they had TB, only wanted a cure for their symptoms and ceased treatment.

Naveed, a 30 years man, was resident of Nathia Gali and had started taking his TB medicine from Samli in September 2015. Naveed carried on his treatment for four months but later quit his TB medicine and visited Samli after a gap of almost 5 months. Talking about the reason for quitting TB medicine, Naveed said:

"I had heard that even if I miss the medicine for one day I will have to re-start from day one. I have been taking a regular dose with utmost regularity for four months. I was feeling much better. My father died five months before and I could not take tablets for a few days, I got confused and quit medicine. I started a normal life. I thought that nothing would happen to me because my breathing was perfect and I was all good. During this time, nobody contacted me from the hospital. It has been 15 days since I have started coughing. I feel tired. I was feeling same changes in health as I have had last year. This is why, I came to doctor and he said I was having TB."

The healthcare system of Samli had an acute shortage of modern treatment technology. The staff had not been provided with modern tools. The oxygen concentrator was outdated and limited in numbers. The sphygmomanometers were obsolete. There was a very traditional mechanism for the sterilization of thermometer and other routine equipment by inserting them in spirit. Talking about the poor performance of the government, Dr. Wahid said, *"Overall healthcare budget gets decreased every coming year and the government hospitals have to face the budget limitations. The government hospitals have to compromise on available treatment technology."* Dr. Ameen confidently said that the availability of treatment technology for indoor and outdoor patients at Samli Hospital was available. But on the other hand, Amber, a young woman nurse, working in men's ward of Samli Hospital said,

"We are giving care to TB patients [admitted] within available resources. Didn't you see how I opened the injection vial? In this age, I do it with scissors. It is very risky and sometimes we get a cut on our hands too. I did purchase hand soap and hand sanitizer out of my own pocket."

Water supply was one of the basic issues of Samli Hospital. Water supply system available to the hospital was in a poor condition. Water reservoirs were too small to cater the need of large number of hospital people. Water supply for washing and drinking was being provided through government pipeline which was outdated and very often the pipes used to either get leaked or broken. Then owing to load shedding of electricity, there wasn't a fixed schedule of water supply. Moreover, some people

were involved in water theft during supply hours of the hospital as if it were their right. Owing to these reasons, there was always water deficiency in hospital.

Samli Hospital was rated as a top TB specific hospital but did not have an emergency facility for other diseases. Generally, patients were getting routine facilitation though outdoor facility, but for any other health emergency situation neither the hospital had technology nor expertise. Farhat was working as a senior ward master in night shift at Samli Hospital and during an FGD he said:

> *"Some admitted TB patients do have diseases other than TB such as heart, kidney, diabetes or high blood pressure and they concealed this from the doctor at the time of admission. Such patients demand medicines other than TB, which the hospital does not possess and we have to face shortage issues. I think that basic emergency medical service should be available in the wards so that we may treat the patient in an emergency situation."*

Samli Hospital had become a cause of spread of various diseases in its surrounding areas through multiple situations. There was no proper mechanism for the management of hospital waste. The most primitive and traditional method of hospital waste management was being used. There was a small room with a chamber where a total waste of hospital including sputum of patients used to be heaped and burned.

According to Dr. Ameen,

> *"The hospital does not have enough resources to build a modern incinerator for burning the daily waste of hospital. It is the responsibility of the government to allocate a special grant in this regard. Currently, the hospital has a self-made incinerator where we burn the daily waste. In this case, the hospital is spreading more diseases rather than controlling one."*

The usual practice to burn the waste was a good mechanism to control the spread of disease as it was better than throwing out in open where scavengers collect the vials and plastic bags and sell it to people who recycle the infected waste. The hospital might have been spreading some other diseases through air pollution produced from incinerator but the spread of TB in this way was not a valid argument.

Local political involvement was also one of the issues for the management of the hospital. A vast majority of the hospital staffs belonged to Tehsil Murree, whereas the senior management was from upper Punjab. For management, it had become a big issue to deal with the local staff of Tehsil Murree. For providing better services, the management used to rotate employees in various sections. This resulted in local political involvement in official matters. A nurse, married in Samli Tajal, was rotated on the night shift. Her husband, working as a lab technician, got involved and forced the management to change her duty. The younger brother of local political leader Member of Provincial Assembly (MPA) Raja Ishfaq Sarwar intervened on demand of employee and pressurized the hospital management to settle the issue as per wishes of that woman nurse. Disappointed, Dr. Ameen said that favoring one employee was violation that snapped the rights of others.

During the study, a staff of TB dispensary prescribed a medicine and asked the patient to purchase it from a private pharmacy. For doing so, he had a physical brawl with in-charge of OPD Dr. Qaisar. Both belonged to Samli Tajal. The issue was brought on media and First Investigation Report (FIR) was registered in the local police station. It became talk of the town for a few days. OPD In-charge was Abbasi and staff was Raja by caste. The hospital management failed to initiate an inquiry and settle the issue. Finally, MPA Raja Ishfaq Sarwar Provincial Minister for Labor and Manpower and Murtaza Javed Abbasi Member of National Assembly (MNA) Deputy Speaker of National Assembly amicably processed the reconciliation. In this way, through political intervention, the problem was resolved.

4.7 Informal Healthcare Providers

The informal healthcare providers hold an important position for sharing the overall healthcare burden in Murree. Talking about patient treatment seeking behavior (Kapoor et al., 2012) in Delhi said that informal healthcare providers (quacks), private chemists and qualified practitioners were most common pathways of TB patients to finally reach TB center. During this study, it was found that homeopaths, religious clerics and shrines were also pathways in addition to described pathways in Delhi. The poor segments of Murree had preferred to visit informal healthcare providers, because they were easily available and practiced their profession in every nook and corner of the area.

4.7.1 Quackery

Quackery is at the top of the list of informal healthcare providers. The quacks get informal training from the dispensers or other quacks. They do not hold any legal status. The medical clinics of quacks were found in the far-flung areas of Murree where medical doctors do not visit to facilitate their patients. It was also found that some quacks used to provide on-call service as well. They used to ride motorcycles to reach their patients by the bank of river Jhelum. The quacks did not have any facility for diagnosis. They just see the symptoms and gave medicine. They were more trusted because their prescribed medicines brought quick recovery to the patients.

4.7.2 Medical Stores

In comparison to quacks, the medical stores are limited to large and small towns. The life-saving drugs were not easily accessible to a vast majority of the population living in villages. The medical stores are not mobile. But the medical stores do not hold any legal standing as well to sell any un-prescribed medicine. None of the medical stores in Murree is following the directives of Drug Regulatory Authority of Pakistan. The poor patients are always deeply interested in saving their money. They want to avoid the fees of a doctor. The poor patients are of the belief that a doctor will prescribe the same medicine that can be directly purchased from the medical store. There are two ways for buying the medicine here. One is oral self-prescription criteria where an individual himself decides to take certain medicine for a certain disease. The second way is to share the health condition at the medical store and request for medicine.

For TB patients, this is the riskiest situation within which they are not screened and diagnosed. They are carrying the disease and spreading around. The patients do not keep on getting medicine from the same medical store. On not getting relief from the medicine of first medical store, the patient approaches the next. These informal healthcare providers are equally dangerous for TB patients just like quackery.

4.7.3 Homeopaths

Homeopaths have a legal position because under the government, some private and government institutions are awarding degrees and certificates to homeopaths. The homeopaths' dispensaries are registered by the government, but here also no formal system exists. Through informal learning, some individuals open a homeopath clinic,

but these are very small in numbers. The share of homeopath for sharing the health burden of Murree is very low. Generally, people do not visit a homeopathic clinic because they are already introduced to allopathic medicines as a shift in local belief from homeopathy to modern allopathic medicine has occurred. During this research, only one TB case was found that was a frequent visitor to the homeopath doctor at THQ hospital.

4.7.4 Shrines and Local Religious Clerics

Some people visit the shrine at the early or later stage of their disease. They pray there and ask charms for their undiagnosed disease. Besides this, the local Maulvi (local religious clerics) hold a very vital position in a local culture where they are part of daily life decisions of people. In the villages, the Maulvi is observed for giving charm to an uninvestigated disease. For some people, having strong religious belief, the solution to their health problem exists in offering prayers and getting a charm from local Maulvi.

4.8 History of TB and TB Control in Pakistan

Pakistan has been suffering from the issue of TB since its creation. Ministry of Health (MoH) conducted its first survey in 1962 to gauge TB incidents in Pakistan. The results of the survey were alarming that led to begin a joint effort between MoH, United Nations International Children's Emergency Fund (UNICEF) and WHO to establish a twenty-year program to control TB in Pakistan. The program focused on mitigation of TB by the establishment of TB wards and specialized TB centers at DHQ Hospitals in Pakistan. The financial support to eliminate TB from Pakistan was withdrawn by UNICEF in 1985 for which Pakistan had to face very serious implications. By 1993, WHO had declared TB a global emergency and had revised its policy to control TB. At that time, there were drafted technical guidelines and a National Policy for controlling TB. Till this time, a draft for operational guidelines remains missing.

MoH introduced 5 DOTS pilot sites in 1995 for which locations were decided, but only one out of five could become operational. After that Federal NTP developed a five-year plan but the provinces expressed certain reservations against the plan and became a barrier for the approval of the plan. In 1996 the Directorate for TB was

abolished in Pakistan and no additional support was provided for controlling TB disease. In 1998 Pakistan was declared one among the 16 countries which did not have an applicable NTP because of the negligence of past.

In 2001 NTP was revived under MoH and TB was declared a national emergency in Pakistan. Although DOTS was initiated in 1993, by 2006 there emerged new challenges to overcome the issue of TB that included TB-HIV co-infection, MDR-TB and childhood TB. In 2006 WHO launched Stop TB strategy to address all these newly documented issues. For achieving Millennium Development Goals (MDGs) by 2015 NTP has been highly noticeable as one of the public health programs. Meanwhile, in 2010 National Assembly of Pakistan made Eighteenth Constitutional Amendment and MoH was dissolved and its responsibilities devolved to the provinces for providing quality health to masses. This constitutional amendment resulted in a barrier to achieving the estimated MGD targets of 2015. Right now NTP has its 2025 goals for which it has a new planning (*National TB Control Program Pakistan*, 2017).

After the 18th constitutional amendment, Punjab TB Control Program (PTP) started functioning in Punjab province. Murree being part of Punjab was also covered by PTP for the control of TB. PTP along with all other Provincial and Federal Government TB Control Programs of Pakistan worked under the umbrella of NTP and followed all the provided guidelines and directives of WHO through NTP. Health had become a provincial subject as enshrined in the constitution. Dr. Ahmad said, *"Because of 18th constitutional amendment, Punjab had to establish its own TB control program. From 2010 and onward the program has been functioning very slowly.*"

4.9 Standing of NTP to Treat TB in Murree

In December 2016, I visited the office of PTP in Lahore. I had a meeting with Dr. Ahmad with a request to conduct his interview in order to know the role and functioning of PTP/NPT to overcome TB in Punjab and Murree. Dr. Ahmad was acting Program Manager. He provided me with a lot of details about NTP and PTP.

To achieve the mission to get Pakistan free from TB, NTP had the vision to deliver a widespread access for TB diagnosis and treatment so that any death might not occur because of TB. For this, it envisioned a goal to reduce the prevalence of TB disease

among the general population to 50 percent by 2025 as compared to 2012 (*National TB Control Program Pakistan*, 2017).

4.9.1 DOTS Strategy

In 1993, Directly Observed Treatment Short Course (DOTS) strategy was launched to overcome TB worldwide. This strategy is being considered to be highly efficient and cost-effective for last three decades. It comprises of five components including; (1) sustainable political and financial commitment; (2) ensuring the diagnosis by using sputum-smear microscopy; (3) ensuring a standardized short-course anti-TB treatment under the direct and supportive observation; (4) a regular and uninterrupted supply of high quality anti-TB drugs and (5) doing a standardized recording and reporting (WHO, 2017c).

4.9.2 Functioning of NTP

NTP had been financially and technically supported by WHO since 2001 with a vision to extend and upgrade its nationwide TB laboratory network at all levels. By providing such services it aimed to reduce mortality, morbidity and spread of TB. After 18th constitutional amendment in 2010, NTP worked in collaboration with Primary Health Care (PHC) system that was implemented by the district health authorities with the support of Provincial Tuberculosis Control Programs (PTPs) and had developed a network of four PTPs and four TB programs of Federal Government, Gilgit Baltistan, Azad Jammu and Kashmir and Federally Administrated Tribal Areas.

Responding to a question about key performance indicators of PTP, Dr. Ahmad said:

> *"NTP has a mechanism to measure the performance and success of program, for which it has developed four major indicators including, annually notified all forms of TB cases by NTP per 100,000 populations in Pakistan; percentage of successfully treated TB cases; number of cases tested and counseled for HIV-TB co-infection in sentinel site in Pakistan and enrolled number of cases and also put on treatment among estimated MRD-TB cases."*

The spread of TB related knowledge and information was also a determinant to control TB. Dr. Ahmad was in favor of awareness-raising campaigns to control the

spared of TB in communities and talking about the response of PTP in this regard, he said:

> *"Advocacy, Communication, and Social Mobilization (ACS) are advocacy components of PTP. Under the components of ACS, campaigns are launched in the province and people are advocated to get close to TB facilitation centers if they observe TB symptoms. For this purpose, posters and banners are used. The other element of ACS is communication. Mass media is considered to be an effective tool for communication of TB related knowledge and information. TB related messages are published in print media and also broadcast on electronic media. For the purpose of social mobilization, a team of social mobilizers has been hired. In the year 2016, a truck of PTP travelled throughout the province in 15 days and the artists presented short dramas to spread information about the disease."*

Practically social mobilizers during field work neither observed nor did they interact. Every year on March 24, International TB day is observed and a march is held to raise public awareness against the deadly killer disease. World TB Day is held in Tehsil Murree and a press release is shared with local media reporters. The advocacy campaign through banners, placards and posters carrying different messages was of no use to interact with poor and marginalized segments of the society because they couldn't read the script. Issues discussed in chapter three on usage of TV and radio point towards the fact that the messages being sent through electronic media were being delivered to those who generally were not being affected by TB and the target population was being skipped. The best way for advocacy, communication, and social mobilization is to engage the local population nationwide. On micro level, patient activation had been in discussion to overcome the disease as (Frosch & Elwyn, 2014) has put emphasis on functions of health literacy and patient activation.

PTP had not developed any way forward to address the economic limitations of the patients. Although PTP was providing free medication and diagnosis facilitation to poor at TB centers of Murree, the economic limitation of the poor was observed among one of the top-rated reasons for becoming a barrier to visit government TB centers of Murree. Responding to the question about economic limitation of TB patients, Dr. Ameer said,

"The poor get sick and get affected by TB, but they remain undiagnosed for weeks and months. There are many reasons for this, but one is an economic limitation. The poor have to pay not only travel cost out of their pocket but also have to sacrifice daily wage. Right from the time of TB diagnosis till the completion of treatment, the patient should be paid travel cost, but only to the patient, not his attendants."

Majid: *"Dr. Sahib who should pay this travel cost?"*

Dr. Ameer: *"I do not know who should pay; either government or NTP should pay it. But, in this area along with other limitations, this economic limitation is also a barrier."*

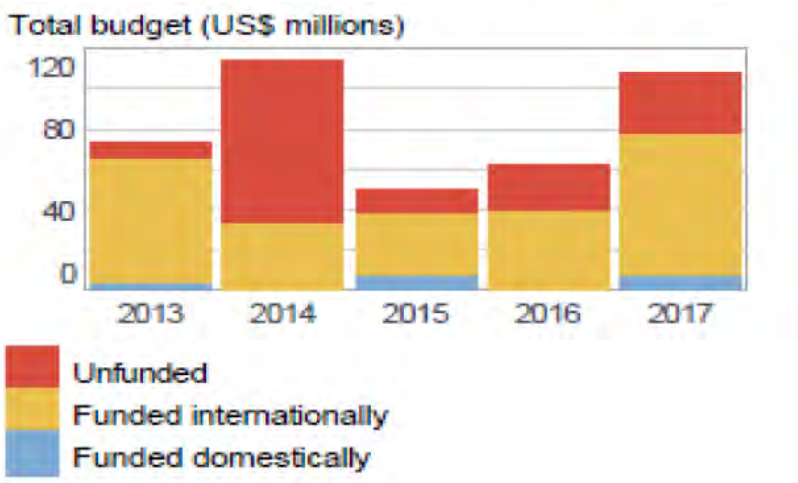
PTP was not providing any special facilitation to TB facilitation centers in Murree to overcome the issue of TB. During the phase of selection of research site and also during data collection, the researcher had a number of informal discussions with staff of Federal Government TB Center Rawalpindi, Benazir Bhutto Hospital Rawalpindi, Federal Government Polyclinic Hospital Islamabad, Samli Hospital, THQ Murree and RHC Phugwari where it was revealed that PTP was not providing any special facilitation to the TB centers of the hospitals other than medicines. The staff of BHUs of Kali Mittee, Rawat and Tret claimed that BHUs were not being provided with TB diagnostic and treatment facilities. Waseem, a TB facilitator at Samli Hospital, stated,

"PTP is not giving any facility for staff and patients not to mention any incentives or facilitation, as we have to purchase even stationary for the official use out of own pocket. Here is a stapler, a writing book, a pack of pens and common pins I have purchased from my salary. TB medicine is not supplied to Samli Hospital and we have to go to Islamabad for self-collection after every three months. PTP and hospital do not give us transport charges for that."

It was the responsibility of Government of Pakistan rather than WHO to provide quality equipment for TB diagnosis and required facilities for office management. The demand for such supplies from NTP was rational because it was a government institution mandated to implement DOTS key components in Pakistan in a most

progressive manner that benefits the patients. TB control program of Pakistan was having a budget gap as the table below reveals.

Figure 5. Annual TB Budget of Pakistan



Source: WHO Data Base for Country Profile (WHO, 2016c)

According (Hermund et al., 2009), Pakistan spends a very small amount of its gross domestic product (GDP) on health care, and public health researchers are very exceedingly few. Further it argues that the scarcity of health resources in Pakistan and the weak government commitment to health care result in ignoring the detection and prevention of may communicable disease. As (A. H. Khan, 2017) concludes that the lack of access to TB services is a barrier for empowering TB patients.

First component of DOTS had demanded its member countries to ensure a sustainable political and financial commitment. Earlier I have discussed the history of TB in Pakistan and have presented sustainable political commitment by Pakistan for controlling TB. But, here the above table reveals a short history of budget gap and shows the reality of sustainable financial commitment in Pakistan. So, with this much funding gap, it was not possible to overcome TB and achieve targeted goals.

4.9.3 Engaging the Private Sector

The private sector comprised all private healthcare providers including General Practitioners (GPs), private hospitals, private clinics, medical stores, quacks, and homeopaths. The PTP had realized the importance of the private sector to mitigate the issue of TB. Dr. Ahmad had said that around 70 percent of the population was visiting

private healthcare providers. PTP had evolved a mechanism of Public-Private Mix (PPM), within which it had engaged GPs under PPM-I, who were being directed by its partner NGOs, whereas under PPM-II, III & IV some private hospitals had been engaged that were directly being observed by PTP.

In reality, the private sector was working with the motivation to earn a profit. This philosophy of free market and multiplication of profit had created questions on the reason for providing free healthcare to poor segments of the society. On the other hand, I could not find any channel of private health providers giving free TB treatment to poor patients of Murree. The doctors of Samli were doing private practice but were not giving free advice to control TB in their private clinic.

4.9.4 New Technology and Access

The genexpert test was a modern and updated molecular test technology for TB which not only used to diagnose TB by detecting the presence of TB bacteria but also used to test for finding the resistance of TB drug Rifampicin. WHO was monitoring the working of genexpert machines and updated its website by claiming that by the end of 2016 a total of 6,659 genexpert machines that comprised 29,865 modules along with 23,140,350 xpert MTB/FIR cartridges were produced in public sector in 130 of the 145 countries (WHO, 2017b). The same year, 6.9 million cartridges were produced.

In Pakistan, the facility of genexpert is available at DHQ hospitals only. It is very fortunate for the masses of Murree that they had access to this machine at Samli Hosptial. MDR-TB section of Samli was provided one genexpert machine that was not sufficient in accordance with its TB patient burden. Sultan – a 28 years lab technician of MRD-TB section – was not happy with the results of genexpert machine – said,

> *"The capacity of provided genexpert machine is very low. We have been provided with only one machine, which is not good as far as the TB burden on this hospital is concerned. It takes almost two hours for one test. I am working 08:00 A.M. to 04:00 P.M. and during this time I can do only 4 tests. Suppose I put the next sputum in the machine and leave for home at 04:00 PM and there is fluctuation in voltage fearing the machine might get out of order and I might lose my job. I do not want to put my job*

at risk. I do 4 tests in a day and receive 10 new samples. We have to send sputum samples to NIH [National Institute of Health], Islamabad for sharing the burden. We do not get money for this sputum sample transportation."

The TB patients from all three TB centers of Murree were asked to go to NIH Islamabad, DHQ Rawalpindi, Pakistan Institute of Medical Sciences (PIMS) Islamabad or Polyclinic Hospital Islamabad for genexpert test. In Samli Hospital, the preference for genexpert test was given to the samples of patients whose sputum was positive three times during treatment. Ideally, the patients were supposed to get a microscopic test of sputum in 1st, 3rd and last month of treatment.

PTP did not have a mechanism to monitor or measure the evaluation of the performance of its staff. PTP had criteria to measure the functioning of its program that has earlier been discussed. As Dr. Wahid was of the view that absence of monitoring and evaluation had developed the idea of not being observed and who considered themselves not to be answerable. The Government of Punjab (GoP) had one way forward to evaluate the performance of its staff and that was through Annual Confidential Report (ACR). It was just a formality because GoP did not have any specific format to monitor the progress of staff during working hours.

The doctors of Murree and the bureaucrats of Lahore had put the responsibility of finding new TB cases upon LHWs, who had to visit every house at least once a month. LHWs were considered to be responsible for giving TB medicines to patients under their observation. In reality, LHWs were working under National Program for Family Planning and Primary Health Care which was a separate provincial health intervention with their own SOPs and their core responsibility was to take care of Family Planning pre and post natal care of pregnant women of the communities. The field register of LHWs did not have any column of TB. They were found to be overburdened because of extra responsibilities of Polio Campaign, EPI, Dengue, and other programs.

A qualitative study conducted by (Soomro et al., 2013) in Rawalpindi talk about the engagement of community health workers/lady health workers for providing TB medicine to TB patients on their door step. This sort of management can support

patients and can be resource to minimize the barrier of distance to reach to health care facility for reaching TB medicine. Whereas, in Murree the Community Health worker/Lady Health Workers/Lady Health Visitors denied for being part of any engagement for facilitation of TB patients in their respective areas. The barrier in the form of distance for the management of TB patients exist which needs attention to overcome non-adherence.

According to a report of WHO, global progress toward the control of TB is not on pace to meet post-2015 TB elimination goals of by 2030 an 80% reduction in TB deaths, 60% reduction in TB incidence and zero catastrophic costs for families affected by TB, compared with 2015 levels (WHO, 2015b). It is very obvious that to meet these targets, biomedical advances alone will be insufficient; a more targeted public health TB strategy is also needed by focusing local context. It is now clear that the standard public health approach used against TB, which relies primarily on passive detection and treatment, is not sufficient to bring TB under control in many high incidence settings (Dowdy et al., 2014).

The author states that the time for a *"once size fits all"* approach to global TB control has come to an end and to achieve global targets in TB control, we must embrace heterogeneity in TB epidemics at local level. In its report (WHO, 2013b) suggested to start public outreach programs through engaging community health workers, that can help in providing TB related knowledge and information in community. This study finds similar gap in Pakistan where community health workers are not part of TB control programme. This will help in early identification of presumptive TB cases and treatment of the infectious cases well greatly decreases the transmission rate in the community.

A study conducted on screening outcomes of household contacts of multidrug-resistant TB patients in Peshawar, Pakistan by (Javaid et al., 2016) focused the importance of early in time detection of TB in household contacts of MDR-TB, who represent a high risk group. Health care providers either did not enquire about TB contact history or respond appropriately indicating casual attitude. Furthermore contact based investigations for TB are needed to enhance diagnosis (Saqib et al., 2011). The study hoped that early identification and treatment of potential cases will

eventually translate into reduced morbidity, mortality and transmission of infection in the community.

A study conducted on management of pulmonary tuberculosis patients in an urban setting in Zambia conducted by (Mulenga et al., 2010) claims that the success of a national TB control program is complex and multi-faceted. The author mentioned that important components of a successful TB control program include community awareness, patients' adherence to treatment, patient access to quality health care through competent healthcare staff who are efficient and able to provide quality of health care through prompt diagnosis and referral, prescription of correct treatment regimens and treatment follow-up, and accessible TB services. Few of these components were either missing or malfunctioning in Murree owing to which TB control program of Pakistan was partly not successful to overcome TB.

Although this discussion is in the context of MDR-TB cases but according to the protocols of existing TB control program of Pakistan the contacts of positive pulmonary TB are also to be screened, but the finding of this ethnography shows that in actual functioning of TB control program this screening is not being practices in Murree.

4.10 Analysis

The microanalysis of guidelines of WHO and neoliberal economic models can be made through finding the functioning of given guidelines and policies at grass-roots and linked to existing healthcare practices with historical past. This analysis describes the functioning of the healthcare system in Murree, implementation of WHO guidelines, and implementation of DOTS components of PTP.

Ideally, the people should visit their nearest government healthcare centers. The doctor should examine, give required treatment, and the referrals should be sent to secondary or tertiary care hospitals. In the structure of Pakistani healthcare system, BHUs had been considered to be the backbone. BHU was the first level screening facility for referral of patients for further diagnosis and treatment of any disease. In Murree, BHUs were not playing their due part because of lack of trust of the population. The trust does not develop overnight; rather there is always a historical past for the development of trust between individuals and institutions. Samli had

gained the trust of people because of its history and success stories of treating TB patients. This was the reason for low TB patient burden on RHC and THQ hospital.

The first reason for this lack of trust was linked to the historical health policies of Pakistan in the light of Structural Adjustment Policies under Neo-liberal reforms. Required basic medicines were not being provided by GoP and a culture of prescription for private pharmacy had become very common in Government Hospitals of Murree. The doctors of Murree other than Samli Hospital were giving a prescription to private medical stores and had links with pharmaceutical companies for their commission for referring the patients to their outlets. Because of this reason, the poor of Murree did not have overwhelming trust in BHUs and this was a barrier between the poor and BHUs.

The claim of government for providing free TB diagnosis and treatment at BHU level was a misplaced denial. Displaying a banner about the availability of free TB diagnosis and treatment in every BHU of Murree and not providing diagnostic technology and medicines was a true story. There was not a single patient among 93 respondents of this study who had visited any TB center of Murree with the referral of BHUs. This practice had betrayed the role of BHU for contributing to overcome TB in Murree.

RHC was the lowest basic level outlet where the facility of TB diagnosis and treatment was being provided. The irregularities were being practiced at RHC. The X-ray machine was out of order for a year and laboratory was being operated by a peon. Such practices were not in line with developing the trust of general patients. This situation had raised a serious question mark on the output of laboratory.

In all of the TB centers of Murree, PTP had not appointed its staff for providing facilities to pulmonary TB patients. The Government had not appointed any staff particularly for the functioning of TB center at RHC and THQ hospital. The existing staff of these centers had been given the extra responsibility of TB program. The poor planning of district government was quite obvious in case of rotation of laboratory technician of RHC to Adiala Jail and not providing a replacement. The appointment of ward boys in TB dispensary of Samli Hospital had illustrated an inefficiency of hospital management. Such small disorganized practices had a long-lasting history.

Health policies of Pakistan based on political economy of health had their deep-rooted history in economic policies of 1980's and 1990's. The existence of poor health policies was the legacy of its past under which Pakistan had been getting conditional loans and following structural adjustment policies of International Financial Institutions (IFIs). The Structural Adjustment Policy of IFIs demanded to cut off annual health budget, because of which quality healthcare was not being provided and vulnerability to health had grown manifold. This had developed the compromising health behavior among poor segments of society, due to which the undiagnosed and unidentified TB patients had become a serious risk.

The practical implementations of most imperative concepts of Neo-liberalism were in contradiction with its sole essence. It wanted countries to privatize healthcare, but in reality, TB treatment was being provided free of cost. It had an emphasis on cost-effectiveness, whereas the policymakers at Health Secretariat Punjab, PTP and healthcare providers at micro levels were not aware of the cost-effective policies of WHO and demanded extra funding to alleviate TB. The concept of monitoring and evaluation of healthcare providers had not been developed at any level for which there was no culture of accountability for various misconducts.

This debate of political economy of health and its history had developed a concept of binary opposition in health care in form of public and private, where the element of good, trustworthiness, care etc. were linked to private and bad, untrustworthy, carelessness with the public. This cultural construction of binary opposition had developed cognitive barriers and people were hesitant in deciding to visit a government hospital. The trust in a philanthropic NGO for healthcare had challenged the status of government for public welfare by providing quality healthcare.

A Modern Facilitation Mechanism (MFM) was missing in health care structure of Murree. The gathering of patients outside the doors of doctors in Hospitals of Murree was a reason for increasing inequality and had survived the primitive culture of 'might is right'. This had boosted the concept of utilization of social capital. The agenda of IFIs for the promotion of democracy and democratic values were to be introduced through MFM, which would have developed the concept of citizenship, equality and had affected the behavior of people. It would have strengthened the state

citizenship relationship and developed a trust in bringing a change in health preferential behavior of poor segments of society.

All of DOTS components were connected with each other. The negligence in one of the components affected the set achievable targets. A macro and micro level analysis of DOTS program of WHO presents the functioning of its core components. Firstly, the component of sustainable political and financial commitment to the state had not been observed since the creation of NTP in 2001. Apart from that, the history of TB and TB control program in Pakistan had already generated an interest of policymakers to overcome TB on a broader canvas. The political and financial commitment of Pakistan was more towards its formal military defense as in 1998 Pakistan had become a nuclear power, whereas the health was not a prime concern and this was reflected in the meager budget allocated for Public Sector Development Program (PSDP) and annual document for providing budgetary resources for different sectors on annual basis year after year. During last decade, none of the new health policy had been introduced to overcome TB. The core focus of last two governments remained on infrastructural development of Lahore (Provincial Capital of Punjab) and health sector was totally ignored.

Secondly, TB diagnosis by quality ensured sputum-smear microscopy was also not being practiced. The story of RHC and THQ hospital was quite clear about the use of microscopy analysis. The laboratory technology currently in use was outdated. The staff for TB screening in the laboratory was overburdened and performed extra responsibilities. The non-fulfillment of vacant posts of pathologists and laboratory technicians was the result of low budget of health generally and to districts particularly.

Thirdly, DOTS demanded PTP to ensure directly observed treatment of the patients, for which the TB facilitation centers had to register a caretaker of every TB patient, issue a DOTS card and assign responsibility to ensure medicine under his/her observation. This mechanism was not being followed in any of the TB facilitation centers of Murree. If there had been a staff evaluation mechanism, such negligence would have been avoided. This may be termed as core misconduct of TB facilitators, but they were already overburdened with extra responsibilities besides those mentioned in terms of reference of their jobs.

Giving reasons behind drug resistance and risk factors associated with development of drug resistant Mycobacterium in Punjab, Pakistan (Ullah et al., 2016) stated that the major risk factor for the development of drug resistant TB was history of previous TB treatment. The study further emphasized the need for properly functioning of TB control programme with strict supervision of patients ensuring compliance and completion of treatment. In the context of this finding, the argument generated on the basis of this ethnography that failure of DOTS functioning is observed not only in Murree but in whole Punjab, this is supported with findings of this article, so where DOTS need to be improved on the other hand this patient support component of DOTS needs more attention.

Fourthly, the regular and efficient supply of TB drugs was not being ensured from PTP. It was the responsibility of TB facilitator of every TB center of Murree to get a demand slip for every upcoming quarter from the office of MS and travel to Islamabad for the release of TB drugs supply. TB health center where medicine was available was at a great distance from residences of TB patients, but it was obligatory for them to visit government hospital every month. TB facilitators had managed to provide regular drugs to patients, but in this management, PTP was not having any credit. TB medicine was not easily accessible to the patients and it took decade to complete the journey from DHQ to THQ and to RHC.

And finally, a standard recording and reporting system of TB cases was out of the question in Murree. This component was absolutely overlooked and absent. The traditional data entry method was being used. Because of this, TB dropout cases could not be tracked and recorded. TB facilitator had not been given any patient follow up directives.

PPM method of PTP was against the philosophy of Capital Market. WHO wanted to engage private sector through PTP and had also banned production and sale of TB medicine in private market. Without any incentive, why would a private hospitals or registered GP collaborate with public sector? This PPM method was initiated as a pilot project in Lahore, and its implementation was not observed in Murree. TB drugs were still available in private market that was the violation of WHO guidelines for Pakistan and this was also one of the reasons for which Pakistan had jumped from 6th to 5th high burdened TB country in the world. It was not because of the

implementation of TB program, but it was because of the political economy of health and malfunctioning of healthcare system of Pakistan. A major chunk of the poor population was connected with private informal health providers, who were not being considered for PPM.

Method of PTP to measure the performance of its program had become successful in a government record because there were all positive indicators to support the program. There were a large number of unidentified and undiagnosed silent TB patients who expired without reaching any of the health facility. Besides this, what if the numbers of TB cases were reducing every year, then can we claim the program as unsuccessful because the annually notified number of the patient had not increased and the program had lost its outreach capability?

In nutshell, the BHUs in Tehsil Murree were the foundations and were very important referral points for TB suspects to government TB centers of Murree for diagnosis. However, because of existing gaps in the physical structure of government healthcare centers of Murree, the BHUs were not able to diagnose TB. Profoundly, TB program of Pakistan was sitting within this crumbled healthcare system that was fragmented at various levels. It was important to understand how far lack of supplies and resources affected TB Control Programme. Lack of human resource, equipment, poor supplies of medicine and routine necessities affects entire healthcare structure and TB Control Programme is on the sidelines of this broader system. It was not possible to treat and satisfy people in a scrappy physical healthcare structure.

Part of the story was that people might have been affluent in having the currency of both social and financial capital, and with the help of social capital they could have jumped to the front and could have cut off a long line, but even then they might not have been treated well because of a fragmented healthcare structure. A strong social capital was not influential to fix the issue of a dysfunctional X-ray machine at RHC. Possession of a higher level of social capital could provide access to right things but this might not have carried value because the worth is with currently functional facilities and the center does not possess facility of MDR-RB diagnosis so important for the treatment of the patients. One cannot hope for a hopeful change.

Chapter 5

IMPACT OF SOCIAL CAPITAL ON HEALTH OF TB PATIENTS

This chapter addresses one part of statement of the problem and highlights a significant question about the correlation between inequalities based access to facilities and utilization of social capital of TB patients. The chapter unfolds existing forms of social capital and its utilization in various conditions; forms of inequalities and their impact on access to healthcare facilities; the practices of citizenship principles on government healthcare centers; micro-level analysis of Neo-material realities; and drawbacks of social capital. This chapter has been divided into four parts. First part explores various forms of social capital in the community and culture of Murree. The second part talks about existing forms of inequalities. The third part analyzes outcomes of inequalities and the effects of utilization of social capital on public health facilities. Finally, part four of this chapter discovers various factors that signify development of the concept of power.

5.1 Determinants of Social capital

The chapter on "Literature Review" has discussed the theory of social capital which mentions a number of forms and ways of utilization. I have considered the forms of social capital as its determinants. Here I have discussed determinants of social capital being practiced in government healthcare structure of Murree. In this study, every determinant of social capital had created a room for its carrier to have easy access to healthcare structure of Murree. Outcomes of various determinants of social capital have been different for numerous social groups. Determinants of social capital found to be part of selected TB patients of Tehsil Murree and widely practiced in healthcare structure of Murree discussed hereunder.

5.1.1 Human Capacity as Social Capital

Social capital is human capacity to possess mental and physical strength to deliver in high tides and every resident of Murree possessed this determinant of social capital. The TB patients of Murree were living with their families and were carrying both high and low levels of social capital. Level of social capital among the respondents of this

study have been discussed in chapter seven which express the measurement of social capital through public participation. Literature review chapter has defined social capital as a human capacity to negotiate or to solve the joint problems (Glaeser et al., 2002). The capacity to negotiate was natural to every TB patient of Murree and their family members irrespective of their socio-economic, political, religious, gender, and cultural or any other difference.

Area profile part of chapter three has discussed the social and political organization of Murree and has described that every resident of Murree was tied to a network of a relationship through a formal or informal membership of a family, kinship, community, caste, *Biradary*, religious groups and political affiliation. Describing health through association (Szreter & Woolcock, 2004) said that social capital has become just like castes, gender and race that are based on strong network of association and (Farmer, 2004; Farmer & Gastineau, 2002) have considered these factors of social capital as motor force behind most of human rights violations where violence against individuals has been considered as embedded in entrenched structural violence. TB patients and their family members were also part of similar social and political organizations. It was observed that patients, for the purpose of TB treatment, were using their capacity to negotiate TB at individual level only after getting illness. On the other hand, TB is an airborne disease and every member of household and community had an equal chance of being affected by TB in the existing socio-cultural context within which TB had prevailed. But in real time practices, TB was not being negotiated at the community level as far as human capacity was concerned.

5.1.2 Language as Social Capital

The language was also a determinant of social capital among TB patients of Murree in two ways. Primarily, the local language was a good source to get some favors from the staff of government TB centers of Murree. The other was a formal language that comprised formal education and healthcare knowledge to talk to a doctor and TB facilitators of TB centers. According to (Swartz, 1997) asset of cultural capital comprises cultural goods and services including educational credentials. In the context of this study, the respondents had low level of cultural capital as they did not have good educational credentials due to which the patients occasionally could not express themselves fully, (Grimen, 2009) has said that in this situation, the patients

are manipulated as this was observed during data collection phase of this study. Besides this, the staff of TB dispensary had been providing favors to some of the TB patients irrespective of their expectations on the basis of ethno-lingual identities.

At the macro level, ethno-lingual identities had played a vital role to unite people in Pakistan for socio-political purposes (Niaz, 2010). But as far as the issue of TB was concerned, language as a social capital was not observed as a property of group to negotiate health or to solve the joint problem of health. The local people of Murree used to speak Potohari their mother tongue which was spoken in a large area of Potohar region with subtle difference of accents. The staffs of all government healthcare centers of Murree – other than all administrative posts; the majority of doctors and some technical staff – were local residents of Tehsil Murree. Most of the time language was an invisible form of social capital because it was unconsciously being used by its speakers to get the benefit or to solve their problem of accessing the doctor and getting TB treatment. I must reemphasize here that the language in both its forms local and formal was not being used by a group rather it gave benefit to an individual to acquire health-related benefits.

TB suspects from all areas of Pakistan used to visit Samli Hospital for TB diagnosis and a vast majority of them preferred to get TB treatment from there. It was a common field observation that the TB staffs of Samli Hospital were very soft in their response to Potohari speaking visitors of Samli Hospital. At the start of my research, I thought as if every other day the relatives of TB dispensary staff visit Samli Hospital. Initially, I could not ask this question to staff of TB dispensary of Samli Hospital because of ethical concerns.

By the end of third week of study at TB dispensary of Samli Hospital, I had developed rapport and I was in a position to ask this question in the fourth week of study. One day at tea, after the closing of OPD, I asked Tahir about his occasional tilt towards Potohari speaking TB patients. Responding to my question, Tahir said,

> *"These two patients today were not my relatives. I talked nicely to them as they were very respectful to me and it is most common 'do respect and have respect'. Otherwise, every patient is equal in my eyes."*

This was one half of narrative about respect because no disrespecting patient was found during this study. I had observed that this change of tone and soft-spoken behavior of the staff of TB dispensary used to be practiced only during their non-busy hours. This tilt to Potohari speaking TB patients was gender specific as well. Most of the times lingual social capital based beneficiaries asking favors from staff of TB dispensary were young Potohari speaking women.

5.1.3 Political Social Capital

Ideally, political social capital becomes the property of only those individuals or groups who provide various services to their national or local political elite at the macro or micro level. This form of social capital was not a common property of poor TB patients of Murree. Talking about the concept of inequalities within the context of theory of social capital (I Kawachi et al., 1997) said that it emerges after widening economic disparities and in this study it was also observed that selected TB patients were also victim of social inequalities along with economic disparities. I have presented a case study of Qaisar Aziz in the context of political inequalities in later part of this chapter. This helps to understand role of various disparities for becoming a barrier to develop political social capital and to gain political favors for health. None of the selected TB patients had carried a reference of their local political representatives. Similarly they did not carry the contact number of their local councilor. This form of social capital was observed very commonly among affluent groups of Tehsil Murree. TB had belonged to poor people. So, the affluent had not been using their political social capital to negotiate TB in Murree both at macro and micro level. The political social capital was being used for the health and disease of the rich.

The employees of government healthcare centers of Tehsil Murree were getting a regular salary and they had a strong standing in their society not because of their economic status but also because of their affiliation with government healthcare centers. These employees used to give extra protocol to patients carrying the reference or had any kind of relationship with the local political elite. In response to their service for the political elite, the staffs of all government healthcare centers of Murree were getting favor through lifelong postings on government healthcare centers near to their residences.

BHU Rawat was situated on Murree–Muzaffarabad Road. There were dozens of stairs from main road leading up to BHU building. The steps of the stairs were broken and one had to be careful while ascending. This hospital comprised 19 staff members including a Woman Medical Officer (WMO), a Dispenser, a LHS, a Vaccinator, a Food and Nutrition Officer, thirteen LHWs and a peon.

Ghulam Nabi has been working as a peon in BHU Rawat for last 30 years. Ghulam Nabi's house was on the other side of BHU's boundary wall. Ghulam Nabi was very happy because he did not spend time and money for reaching his workstation. Ghulam Nabi was once posted from his home station to BHU Angoori during his service. Ghulam Nabi narrated the story of his first posting and transfer from BHU Rawat to BHU Angoori and said:

> *"I have been working here since last 30 years. My first posting was at BHU Ghora Gali, Murree. I worked at Ghora Gali [BHU] for 3 years. I asked uncle of Shahid Khaqan Abbasi*[27]*, for my transfer. At that time, he used to live in Dewal. He helped me to get my transfer to BHU Rawat. After that, I was transferred to BHU Angoori in 2003. It was Musharraf's*[28] *era and there was a time for military monitoring teams and policy was changed and I was transferred to BHU Angoori. And BHU Angoori is far away from here. My relative was Chairman Union Council and I told him that I had been posted to a far-off BHU. He talked to the Tehsil Nazim of Murree and I got transferred back to BHU Rawat. Since then I am working here. You can see there is my home and here is my workstation."*

The transfer of Dr. Sehrish from BHU Tret was also a political one. Dr. Sehrish was not resident of Murree and she was transferred on political basis to oblige a resident doctor of Murree. Dr. Sehrish made her personal effort and used her gender card to call off her transfer and succeeded as she pleaded before Secretary Health Punjab that being a woman, BHU Tret was the most convenient workstation for her. The standing and history of Samli Hospital in healthcare structure of Murree was entirely different

[27] During the course of this study Shahid Khaqan Abbasi was Member of National Assembly (MNA) and Federal Minister for Petroleum and Natural Resources, but later on he became Prime Minister (PM) of Pakistan on August 01, 2017.
[28] General Retired Pervez Musharraf former President of Pakistan

as presented in chapter four. The appointment of MS was for a flexible term of two years and rest of the staff had to be appointed till the time of their retirement and there was no option for transfer to any other hospital of GoP. The local employees of Murree were very happy for their employment in Samli Hospital. Chapter six gives a detailed description on doctor-patient relationship and barriers for employment of doctors at remote healthcare centers i.e. BHUs and Samli Hospital.

5.1.4 Religious Social Capital

The religious social capital was found among the people belonging to the same sect of Islam. This sort of affiliation used to bring people of same sect close to each other. Samli Hospital had overburdened OPD, so very occasionally the people having Islamic religious appearance and using the sectarian kits were favored. This was an invisible currency for getting access to doctor and TB treatment which had a connection with commonality with sect.

Case Study

This case study is being presented in the context of sectarian social capital. During this study, few incidents for supporting patients were observed – during the process of diagnosis and treatment – because of their sectarian affiliations. Ihsan, my key informant, had beard and long hair on his neck. With this appearance, Ihsan's sect could have been traced easily. Ihsan used to put around cap *(Sindhi Topi)*[29] on his head.

One day, early morning, a bearded man entered TB dispensary of Samli Hospital. He was accompanied by his wife. He had long hair, wearing a green turban along with a long white shirt, and fragrance emanating from his body. His wife was fully covered with Abaya and veiled her face. The man asked about the location of Room No. 03 to get to a doctor. Ihsan waited for a while and directed him to his desired destination. After a few moments, Ihsan left the dispensary and followed that man.

It was general OPD practice of doctors at Samli Hospital to prescribe medicine to non-TB suspects for general dispensary and to refer TB suspects for diagnostic tests

[29] The hat is circular or cylindrical except for a portion cut out in the front to expose the forehead. Intricate geometrical designs are embroidered on the hat, and very often small pieces of mirror are sewed into it.

and X-ray to radiology department and laboratory. Usually at this time, TB dispensary and staff used to be in a relaxing posture because of very low burden of patients. I saw that Ihsan was leading that man to Room No. 03 for doctor's visit. He helped that man during the whole process of diagnosis and offered chair in TB dispensary that was denied. There was a delay in collection of laboratory tests. Because of this covert social capital, it took him around 15 minutes to reach the doctor, X-ray room, and laboratory. Ihsan returned to TB dispensary after this initial process of giving blood and sputum samples to the laboratory. During my routine lunch with Ihsan, I asked about the sympathy for that man and whether Ihsan knew him. Ihsan said:

> *"I was not familiar with him. It was his appearance and I just thought that I should help him. He belonged to Mohra Sharif*[30] *and was follower of my sect."*

The man got full support from Ihsan during the whole process of TB treatment of his wife. Another incident similar to the earlier took place, but this time it involved three young men in their twenties, belonging to Shia[31] sect. They got favor for getting TB medicine with the support of Iqbal who was working as male receptionist on registration desk of Samli Hospital and had the responsibility to issue a registration slip to patients after registering their particulars on OPD patient register of Hospital. Iqbal used to close his register around 01:00 P.M. daily, because after that the doctors did not examine any patient.

Those three young men reached OPD around 01:30 P.M. They hurriedly broke into TB dispensary. One of them said, *"Oh! Thank God, it is still open."* Waseem, the employee at TB dispensary asked, *"What do you need."* One of them replied, *"We are here to get TB medicine of my brother. I have his TB card. But no worries, you serve these people in line first and I will wait for my turn,"* and handed over TB card of his brother to Waseem who looked at it and asked for the OPD registration slip.

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[30] Mohra Sharif (Holy Village; Mohra for *small village* and Sharif for *holy* or *noble*) was a spiritual center and home of the Sufi order was a Naqshbandi in origin, and was based in a small village called Mohra Sharif located at a distance of 30 minutes road travel from Murree City. It was made into a spiritual center by a pious man Khawaja Muhammad Qasim Sadiq in 1263 A.H., a purported Sufi Shaikh of this area. Its 3 days annual congregation used to be held in last week of May.

[31] Shia was a branch of Islam which holds that the Islamic prophet Muhammad (PBHU) designated Ali ibn Abi Talib (AS) as his successor.

Tahir interrupted the ongoing conversation and said, *"We are asking for registration slip. This is TB card that you have given to Waseem. This is also required for getting TB medicine. Did you get a slip from the door [reception desk]?"* This time the second one replied, *"There is no one at the door [reception desk]. We are from very far. Brother! Please do help us."* This time the tone of the boy was very humble. Tahir said, *"Go, get a registration slip and go to the doctor. Doctor Sahib will sign the slip and then bring it to me. I will issue you [TB] medicine only in this way."*

After hearing this response of TB dispensary staff, the third visitor standing in the end left the room to find Iqbal while two remained in TB dispensary. Iqbal had already closed registration desk and was expected to have lunch before leaving the hospital. The boys in the dispensary requested for support and told Tahir that they belonged to Mandi Bahuddin[32] and could not afford to spend a night for TB medicine. In response to this request, Waseem said,

> *"We cannot give you [TB] medicine without that slip and signature of the doctor. We have to protect our job and we cannot give you such out of the way favor."*

Meanwhile, fortunately for those boys, Iqbal passed through the corridor and dispenser heard his voice and hurriedly said, *"This is him. Go catch him. He is medium height and small bearded man."* I could not follow them to observe their conversation with Iqbal. I knew that Iqbal would do this favor on humanitarian grounds although he had done his final total for the day and had marked a line on his OPD register. After a few minutes, Iqbal was leading one of those young men in the room of doctor to get signatures on registration slip. After a few days of this incident, I had an informal discussion with Iqbal and inquired about the reason of his support. Iqbal said,

> *"In reality, I had to do this on humanitarian grounds. They had come from very far. Initially, I thought that I should give them slip after little scolding. I was just thinking that one of them said that they were from Mandi [Mandi Bahuddin]. I allowed down and gave them the slip. One of*

[32] Mandi Bahuddin is a district of Punjab and is situated at 4 hours by road distance from Samli Hospital

them accompanied me to the closet and I found a bracelet[33] *around his wrist. I came to know he was Shia, and he told me that he was Syed*[34]*. This time I did realize that they were not only belonging to my neighboring district but were also Syeds. I took them to doctor's room for signatures on slip and also asked Ihsan and Tahir to take care of them. And you witness this . . . in our Punjabi it is widely said that even if the dog of your soil comes to you then you should take his care."*

In both these cases, social capital was a covert currency and had unexpectedly helped visitors to Samli Hospital. The concept of social circumstances was presented by (Burt, 2000) that is observable in above discussed cases where social positions of individuals had developed a network of association for seeking favors. Every individual had carried some social position on his/her back that could have had helped him/her. But, all this depended on social circumstances within given time and space.

5.1.5 Neighborhood as Social Capital

The neighborhood has been a very important concept in the literature on the theory of social capital. It determines not only access to facilities around people but also a level of social relations among people (Blakely et al., 2006). The literature in the field of public health has also given special value to the concept of the neighborhood within the framework of theory of social capital. In the framework of this research, the concept of neighborhood has been observed in two different ways. Firstly, neighborhood as a form of social capital where it has been discussed that how it had played a role in the establishment of relationships with individuals and institutions around an individual and group. Secondly, this concept had been applied to the neighboring environment of an individual and groups within which they have been living. The concept of the neighborhood cannot be analyzed only through existing infrastructure around people or only through existing environment. The concept of the neighborhood had been further elaborated in following sub-concepts.

[33] A round bracelet made of metal and sometimes made of sliver is used to be kept in right hand. Sometimes there are carved religious writings

[34] Syed are the direct descendants of The Prophet Muhammed (PBUH) Of Islam and enjoy higher social status.

5.1.6 Neighborhood and Availability of Resources

Most common perspective about the concept of neighborhood stands for the availability of resources for healthcare. This meant that the distance of hospital from the household. It was observed that TB patients more close to government healthcare center were and were not health conscious. Among TB patients of Murree, it was proved so by observing their health-seeking behavior and number of visits to nearby government hospital. I have presented a detailed discussion on health preferences in chapter eight. Most commonly, TB patients who had government hospital in their neighborhood were not regularly visiting because of their low level of health preferential behavior and lack of cultural capital. The preference to use homemade remedies to deal with their sickness had determined their health preferential behavior.

TB patients used to visit government healthcare centers only during acute illness. It was common among the staff of Samli Hospital to take medicines from general dispensary to their homes. They neither used to bring their patients or family members to the hospital for medical examination during normal sickness nor used to get a prescription from doctors for medicines they used to take with them. This was a specific situation within which the people – having a hospital in their neighborhood and having a very strong social capital – were not visiting government healthcare centers of Murree. The neighborhood was very important social capital, but the health preferential behavior of people and family/kinship-based social capital had remained one of the barriers to visit government healthcare centers in Murree.

Case Study

Farhat was a 40 years old man and since last 16 years had been working as ward master in men's TB ward of Samli Hospital. Farhat was resident of village Samli Tajal and his house was at a walking distance of five minutes from Samli Hospital. Farhat had a nuclear family comprising of his wife and two sons. Farhat's house was very clean and had floors made of marble. His house was not overcrowded as it had two rooms, a separate kitchen and an attached bath with Indian flush system.

Farhat was doing a white color job and used to earn handsome amount. Farhat used to do his job in evening shift from 02:00 P.M. to 10:00 P.M daily. He was educated and had done his graduation. During 16 years of job as ward master, Farhat had a lot of

healthcare knowledge in general and knew causes and symptoms of TB on fingertips. Farhat had been taking a balanced diet before getting ill.

Farhat was in his third month of TB treatment at the start of this study. Farhat had been doing his scheduled job regularly before TB diagnosis. Firstly, TB hospital was in his very close neighborhood. Secondly, being an employee of Samli Hospital, Farhat had a strong social capital for direct access to senior doctors and modern TB diagnosis. Within these conditions, Farhat was not supposed to be hung up on lines to wait for his turn. Farhat had his social capital not only based on his neighborhood, but also a cultural capital, the local language, formal language, institutional power etc., but unfortunately, Farhat was affected by TB. It was fortunate for Farhat that at the time of diagnosis, his TB was in the first stage. Narrating the story of being a victim to TB disease, Farhat said,

> *"It was December last year [2015] and I used to get temperature every alternate day. Initially, I thought that it would be because of winters. This continued for, I think, twelve days and after that, I caught cough. For next fifteen days, I had a little cough, but not very severe and Meetha Bukhar [Sweet Temperature][35] in the evening. My wife was very concerned about my health. She asked me to get TB diagnosis, but I did not take her suggestion seriously.*
>
> *During this period of around one month, I visited general dispensary [of Samli Hospital] four times. During first three visits, I used to enter general dispensary. Ishaq [dispenser] had always placed the registration slips of patients in a box on his right. I used to pick a submitted registration slip placed on the top and used to write that registration number on a plain white page and used to prescribe medicine for myself. I used to place that unofficial slip among the existing slip in the box and used to put the medicine in a small shopping bag. And you know this is a general practice of self-prescription among staff here.*

[35] An irregular temperature with sweating was considered *Meetha Bukar* (Sweet Temperature) among respondents. It was sweet because it was usually in the evening and night along with sweating. The respondents had said that they had enjoyed this little temperature.

I remember that for the first time I took a pack of tablet Panadol C.F. and a pack of tablet Resochin. In my second visit to the general dispensary, I took a pack of Ponstan Forte and a pack of tablet Arinac. I did not take this medication on regular basis. I used to take medicine for two days and felt better and then quit the medicine. This was how it continued for around 15 days during the time of sickness. During this time, I felt better as there wasn't temperature for three or four days. I went for the third time [to general dispensary] followed the same practice of self-prescription and took two bottles of Hydraline cough syrup. I had cough at that time and used this syrup for a few days.

During this period, my wife asked me to get a TB diagnosis. I was amazed how I could get affected by TB. My fellow workers were observing my cough and weight loss. Honestly, it was I only who could not have observed these symptoms. The thought of TB never touched my mind. I did not feel any change in my weight. I did not feel any trouble in breathing because I had a motorcycle for daily use and my workplace was on the first floor. Owing to these things, I just skipped the idea of TB diagnosis.

My duty is always from 02:00 P.M. to 10:00 P.M and I could not catch OPD hours due to this time difference. One evening, I was coughing and Safder[36] *[Laboratory Technician] entered the ward to collect some belongings of his wife. He sat for a few minutes and had little chat. Safdar asked about my health. I said that it was usual and there was nothing to be worried about. He asked me for TB diagnosis and I rejected his idea by saying that I had been working here for 16 years and this had never happened to me. Safdar was of the view that I should go for diagnosis and if there wasn't any TB then I won't lose something. Safdar insisted on me and I promised to visit him in the morning during OPD Hours.*

In the morning, I went to OPD and got a proper registration slip. I asked the doctor for TB diagnosis and got his signatures. In a few minutes, I was diagnosed TB through chest X-ray and I was shocked. But I was waiting for the result of sputum test. I was thinking that there might be some issue

[36] Safdar was Lab Technician and married to a woman nurse of Samli Hospital

with an X-ray machine and I was confident of going clear in laboratory test results. Safdar called me into the laboratory. He gave me the result and I came to know that I was diagnosed with TB. I was really shocked and was so upset. It wasn't acceptable to me. I collected my TB medicines and went home. I was quiet and whispered to my wife about my TB diagnosis. She was sad to hear that. I asked her not to tell the children. I separated my utensils, clothing, and bedding from that day for one month.

Everybody in the hospital was informed about my TB next day. I did not ask for leave, but MS Sahib called me into his office and granted me leave for one month. I took my sickness for granted and never gave importance to diagnosis . . . the disease is always from God; He gives disease and what we can do as humans."

Farhat was a victim of TB and his neighborhood, rather than giving protection, because of his negative attitude had reverse effects. A close neighborhood of hospital, institutional status and social capital, and easiest access to TB diagnosis failed to become a barrier to an airborne disease i.e. TB. The neighborhood had held the equal role of barrier and resource to access to TB diagnosis and treatment. Although (Blakely et al., 2006) has considered the availability of resources in close neighborhood as a resource, but in this case study neighborhood had turned into a cause for the spread of TB because of Farhat's health seeking behavior. In the context of this case study (A. Khan et al., 2000) had said that low health seeking behavior was one of the chief reasons for spread of TB irrespective of availability of healthcare in neighborhood. It was documented that after one and half decade of above cited study, low health seeking behavior had remained among most influential factors for the spread of TB. Farhat's low health seeking behavior remained a barrier to get benefit from his neighborhood that he was a part of. Neighborhood cannot be considered a resource only.

A qualitative study conducted in Rawalpindi by (Soomro et al., 2013) highlighted limited knowledge of patients, loss of employment, financial burden, social stigma and long distance from health care facility as barriers in the management of TB. Aforementioned case of TB has all resources so it is not objective in nature rather it is subjective and does not matter either the person has or has not resources.

On the other hand, it was not the fault of social capital because Samli Hospital failed to protect its employees from TB as Farhat had not been using a mask during his duty hours. Mask was not being used by a large number of employees. The hospital was being provided two types of the masks; one was of green color and was of very low quality, whereas the other was an N-95 mask that was specially designed for TB patients. N-95 masks were in the closets of the TB dispensary and central store of Samli Hospital. On the other hand, TB centers of RHC and THQ had not been provided masks neither for staff nor for patients.

5.2 Aspects of Neighborhood

The aspects of the neighborhood include physical features and environment. Both of the aspects come under the umbrella of social capital and determine the health of poor TB patients of Murree. I have discussed both of the concepts separately.

5.2.1 Physical Features as Aspects of Neighborhood

The physical features decide the level of social capital. Physical features included the topography and road infrastructure of Murree. Physical features of Murree are being discussed here at two levels e.g. macro and micro. Chapter three has already presented a detailed discussion about the topography of Murree. It is a hilly terrain, where the population of villages is scattered and small clusters of houses can be seen everywhere. At macro level, people get a very rare chance to regularly intermingle with people other than their own village due to long distance. At village level, there was more social cohesion because the people were in regular contact whereas at macro level usually people used to interact with their relatives and peers residing in other villages on occasions of death or marriage. Least interaction at macro level was a sign of the low level of social capital in its bridging context. The people were not used to aspect of developing their social capital and in this way, physical features were a barrier to the interaction of people and development of social capital.

It was documented that mostly the targeted TB patients used to spend hours to visit their nearby small market or town. A TB patient said,

> *"I am living on the top of the mountain and it takes a day to get to a government hospital. We have to get down the mountain and wait for the*

local transport to reach the nearest bus stop to catch another bus for hospital."

This topographic factor was not only a barrier for public interaction but was also a barrier to easily accessing the government healthcare structure of Murree. Because of topographic conditions, TB patients of Murree had to spend both time and money for reaching government health facilities and their poor economic power limited their mobility for seeking treatment. On the other hand, the geography was barrier for public outreach campaigns as the LHWs had to walk through the unpaved path on mountains to reach the listed houses.

It was analyzed at the micro level that women, children, and senior citizens had fewer chances to go out of their villages. Generally, they had frequent interaction with their neighboring houses. They used to talk about their general affairs, but health was not a preferred topic of discussion. The topography of Murree had become a barrier for public interaction and access to government healthcare facilities at the macro level. This topography had been a barrier for the mobility of village population of Murree and had brought them more close to each other. The TB patients could find cultural mechanism of social support that I have discussed in chapter seven and eight.

5.2.2 Environment as Aspects of Neighborhood

It is also a very important concept in the discussion of aspects of neighborhood in two ways. Firstly, it decides the interaction among community members and the link between hospital and population. Secondly, it depicts health hazards of poor and marginalized people. The environment is not limited to weather only but also includes air pollution and household living conditions. Unhealthy Societies by (R. G. Wilkinson, 1996) help to understand that we get some benefit at the cost of something else. This was a commonly observable phenomenon that has been analyzed in upcoming discussion.

Chapter three has presented overall environment of Murree that used to get covered in snow during winters and mobility of TB patients of Murree became severely restricted. During three months of winter, the community's interaction used to be partly cut off and TB patients got stuck at home. Similarly, the heavy snow was a factor for partly disconnecting villages from Murree city and nearest towns. The case

study of Bushra presented in chapter eight has helped in developing the argument that extreme winters were also a barrier for not only reaching healthcare centers but also a delaying factor in the process of TB diagnosis and treatment. A number of times it was noticed that the patients had demanded TB medicine for more than one month to avoid their monthly visit during winters but staff of TB dispensary of Samli Hospital rejected their plea. PTP/NTP or even the district TB control office had not developed any policy to facilitate TB patients during terribly cold months of winters to get medicines and continue their treatment.

At micro level, the environment was a factor for limiting interaction of people with their neighbors. The extensive winters and the long span of rains that increased moisture and humidity were one of the reasons for developing chest and lung diseases in Murree. It also protected germs of airborne disease in the environment for the long duration of time. The people could not afford heaters for their rooms with non-carbon sources.

The other drawback in the context of environment and neighborhood was pollution. At the macro level, it was observed that Murree had hill forests areas and its air was very clean. The only sanitarium of Pakistan was situated in a place that had forests around and air was quite clean suggesting a good motivational factor for TB patients. The tourists of Murree belonged to industrial cities and used to gift air pollution to the environment of Murree along with their push to its local economy. Besides this, at the micro level, the household burned wood for cooking and heating their rooms because of lack of resources. This extensive use of fuel-wood continuously put TB patients and their families in a polluted environment.

The micro level analysis of environment within the context of aspects of neighborhood had placed the health of poor TB patients and their households at stake. The clean air of Murree had not supported the idea of healthy living neighborhood. The sanitation situation discussed in chapter three has described the situation of the unhealthy neighborhood at micro level. As talking about the influencing factors of health (Munir & Suhartono, 2016) said that among list of factors the behavior and environment contribute more for improving community health as every person had two obligations; maintaining cleanliness and behaving in a healthy manner.

It was observed that kitchens of TB families were highly unhygienic. All the selected TB patients for life histories had kitchens in their living rooms during winters. The kitchen utensils were washed inside the room. The kitchen waste was dropped outside in the courtyard and it was not dumped in a proper place to be disposed of later. Owing to water scarcity, the utensils were not being washed cleanly in winters. During summer some of the houses had separate kitchens, and the others had a kitchen in their verandah. It was observed that a housewife washed cooking pots with ash and in another case, laundry soap was used to wash cooking pots. Although this had nothing to do with TB directly, yet a healthy and hygienic living was among the key determinants of health.

5.2.3 Social Factors as Aspects of Neighborhood

The social factor in the context of neighborhood concept in theory of social capital was the location of community spaces. The discourses about the conditions for participation in formal and informal community spaces and distance from the residents of an area are presented in chapter seven. It also presents a detailed analysis of community spaces and public participation. There were few formal community spaces to which the poor could not have access due to their socio-economic status. Existing informal community spaces were at a distance from the poor TB patients. The earlier discussion about the availability of resources and aspects of the neighborhood had supported the observation about community spaces and their non-availability during winters due to their distance.

5.3 Gender as Social Capital

The existing literature on the theory of social capital has considered gender as a barrier to equal access to community spaces and development of social capital (Clopton & Finch, 2011; Hightower et al., 2013; Jang & Kim, 2013). The observation of this field research and local practices in Samli Hospital gave a new dimension to gender as a social capital. During this study, it was observed that first two forms of gender e.g. men and women had their different levels of social capital. Various levels of social capital had developed because of gender identity of TB patients. On the basis of gender-specific identities, the individuals and groups, around men and women TB patients, had expected and offered different sorts of favors. In this study, both men

and women were found developing social capital on the basis of their gender and were getting health-related social support.

Man

It was observed that the gender identity of man had given an open opportunity to men for having access to a number of social and community spaces. Because of the exposure to market and higher literacy rate than women, the men had more formal education and skills to negotiate their issues at an individual and group level. Some men developed a rapid contact in Samli Hospital with staff and used to get health-related favors. This was because of multiple reasons that included level of their formal education, dressing, personality, institutional affiliation, confidence and of course dealing with male counterparts with confidence. Though all men lacked the capacity, few exploited their social position and enjoyed the fruits of social capital to get easy access and benefit from the health facility. It was observed that the staffs of Samli Hospital were not interested in extending relations or offering support to unknown men with expectation. These were poor men who were found longing for the soft corner of staff of all government healthcare centers of Murree.

It was early morning and the patients were gathered outside the door of Room No. 03, whereas TB dispensary was unoccupied and waiting for patients. Meanwhile, a man entered the TB dispensary of Samli Hospital. He was dressed in grey colored *Shalwar Kameez* and black waistcoat, nicely polished shoes, black glasses, fresh clean shaved and had sprayed perfume. He was holding a very costly mobile and a key of his car in his hand. He was looking like a well-educated gentleman. His name was Tariq Malik and he was employee of Foreign Office of Pakistan.

Tariq softly and humbly talked to Tahir and requested for help in TB diagnosis of his friend. Actually, Tariq was assisting an auto mechanic of Khadda Market of G-7 Markaz Islamabad for the diagnosis of TB. Tahir offered a chair to Malik Tariq and acted as bridge for him. All of the treatment processes got completed in 20 minutes and Malik Tariq had to wait for additional 30 minutes to collect the results from laboratory. Later on, Malik Tariq and his friend Ustad Shafiq was presented tea in TB dispensary. Malik Tariq saved the mobile number of Tahir in the contact list of his mobile and offered his support in matters related to Foreign Office of Pakistan.

Well known links between poverty and health had been established by (Farmer, 2001; Sachs, 2004; Sen & Anand, 1997) that were documented during this study where economic conditions had played a vital role for determining access to healthcare. TB had been associated with poor and if Ustad Shafiq had come alone in his dirty workshop's dress then Tahir would not have offered him a chair. Ustad Shafiq was a very skilled and talented man; his poverty would have become a barrier and the day-long TB diagnosis not completed in 50 minutes. It was Ustad Shafiq's association with a man of higher echelons that was his resource to get immediate TB diagnosis and treatment.

Woman

The women are highly respected in the culture of Murree because of their gender identity. It was observed that in the waiting area of OPDs of hospitals and TB dispensary of Samli Hospital, the men used to spare sitting space for women. But knowingly or unknowingly, women's body and beauty was observed as a means for the development of social capital. It was observed that consciously or unconsciously very few women used to get easy access to the process of TB diagnosis in Samli Hospital because of men's attraction to their body and beauty. Otherwise the earlier literature on theory of social capital had supported women limitation to a very few social and community spaces; and exclusion from social and community spaces of men. This argument is supported through field data presented in below discussion.

Primarily, women of Murree were not encouraged to travel alone. Preferably they were expected to travel in company of men, but if the men were not available, they could travel by accompanying another woman. This gender-based limitation to travel was a barrier for women of Murree to have access to government healthcare center. Three different situations were observed within which gender-based social capital was developed in OPD of Samli Hospital.

Firstly, an aged patient was visiting Samli Hospital's OPD accompanied by a young woman who could have been his daughter, sister or daughter-in-law. Secondly, a female patient was accompanied by another woman who could have been a close relative. Thirdly, a woman patient was accompanying a boy of around ten years of age or below along with one or more than one woman. In Samli Hospital, there were a few employees who used to observe the patients and their co-visitors and used to find

their space for intervention. For the contact, they used to select a woman on the basis of her beauty and figure. I had not found a hospital employee following a woman in rags. The local term for such women was "*Shikar*", which literally means "Prey" in English. The women not having men in their company were easy target for hospital staff to approach for initial interaction to get their mobile number to extend social contact.

Tahir was very sensitive to this gender-based interaction in OPD for easy healthcare. I asked for his response to gender-based favors during an informal discussion. Tahir said,

> *"We cannot do anything to this sort of situation. We are responsible for our own actions. This type of interaction with women patients is usually taken for granted among the employees. Just name a person who is not interested in having such relationship. I bet everyone would have this type of relation here [among OPD staffs]. There is always whispering among employees [of OPD] on finding a colleague standing close to a woman in the hospital. And within no time the story becomes talk of the town. Here nobody can conceal his interaction. You will find almost every employee a culprit in the hospital. Those who are left behind might be either extra pious or they might not have availed the opportunity. Did you see the stairs to lower floor? Everybody knows that what happens there and who goes downstairs?. . . leave it Bhai [brother] everyone is happy here."*

On asking about this immoral hazard – during an informal discussion with a group of employees – an employee of Samli Hospital said I should not have asked this question nor get too much interested in internal affairs of hospital. He felt this was routine matter in hospital and said:

> *"I am not a sexual exploiter. There are just stories about my character assassination. I have very beautiful girlfriends. In comparison to the beauty of my girlfriends, the beauty of these women [OPD Visitors] stands nowhere. Whatever you have heard about me is false. I get the contact number of visiting women just for "Dil Pishori" [flirt]. I just do chit-chat with these women. I have hundreds of contact numbers of such women. I*

do help them in hospital. I do develop some good relations as well. There are some women who have been in contact with me since last five years."

Gulfam was 54 years old man. Gulfam's wife had died and he had four daughters. Gulfam was a daily wage laborer and was resident of Malpur that was a small village of Islamabad situated on Kashmir Highway. Malpur was around 1 mile short from Bharakhau. Gulfam was the only source of bread and butter for his family. It was around 09:00 A.M. when Gulfam entered the TB dispensary accompanied by eldest daughter Nasreen. Gulfam had white beard and head. He was putting on dirty clothes. Nasreen seemed to be in her late teens. Nasreen was putting on a clean presentable dress and had veiled her face. Nasreen looked attractive as her eyes were deep and eyeliner had made her look very gorgeous and attractive.

Nasreen held registration slip in her hand. The bench in TB dispensary was vacant and Nasreen asked her father to sit on the bench without the permission of Tahir and Ihsan. Waseem wasn't present in TB dispensary at that moment. Nasreen said,

"Bhai [Brother] my father is very sick. He was taking TB medicine from Polyclinic Hospital Islamabad. He was not getting better. We are four sisters and my father is the only caretaker. Please, help me. Here is his previous TB card and please give me TB medicine."

Tahir was sitting on the first chair for distribution of TB medicine and was busy in reading text messages on his mobile phone. Tahir took the card, threw to Ihsan and asked him to handle the matter. Ihsan looked at the card and said:

"He [Gulfam] has not taken his TB medicine for last one month. You go back to Polyclinic Hospital and continue medicine from there because they are giving the same medicine. It will cost you more to visit Samli every month and the treatment will commence from day one."

Nasreen interrupted and said,

"My father is not getting better from Polyclinic and my neighbors have told me that Samli is TB [specific] hospital and we have come here. You please give us medicine."

This interruption made Ihsan furious and he asked Nasreen to bring a migration certificate[37] from Polyclinic Hospital. Nasreen could not bear such anger and left the room to complain to the doctor. Meanwhile, Waseem entered TB dispensary and saw Gulfam coughing and spitting. Waseem said, *"Baba Gee [O' old man] why are you coughing and spitting here? Move out, this is not a place to spit. You are a TB patient and spreading disease all around. Where is your mask?"* Gulfam gathered his breath and said, *"I have a mask and I cannot have it because it gets me suffocated."*

Nasreen re-entered the TB dispensary and complained against the rush of patients in OPD. Tahir asked Nasreen to take her father in the open air. She left the room and Waseem got active by saying, *"Yara Gee [O Friend] what is the matter?"* Ihsan narrated the story of Gulfam. As Waseem left TB dispensary, Ihsan said, *"Majid, now you will see after a few minutes. The prey is in his hands now."*

After 30 minutes, Waseem came back and said that Nasreen was very poor and she was really in need of help. This was a gender-based social capital I have argued about at the start of this discussion. Initially, Waseem helped Nasreen to see the doctor without a queue. Nasreen was waiting in the line for X-ray, and it was taking a lot of time. She came to TB dispensary and asked Waseem for help. Waseem scribbled on a small piece of paper and asked Nasreen to give it to the man at the door of X-ray room. I asked what he had written. Waseem did not respond. Waseem also helped Nasreen for the admission of Gulfam to men's TB ward. Waseem asked Nasreen not to go back for bringing patient migration certificate from Polyclinic Hospital Islamabad, as this could be done tomorrow. Waseem personally met Farhat and asked him to take care of Gulfam.

5.4 Economic Social Capital

The theory of social capital has considered economic capital as the mother of all forms of capitals (Swartz, 1997). In Murree, economy was the foundation to determine the level and development of social capital. Chapter seven gives a detailed analysis of economic social capital. For now, it was observed that low personal and household incomes of TB patients had become a barrier to the development of all

[37] It was policy of NTP/PTP to issue a migration certificate to a patient to get registered on any other TB treatment center.

other forms of capitals. The economic social capital was not the property of poor TB patients. Economic social capital had made the people of Murree unequal for which they had not foreseen certain expectations and favors from staff of government healthcare centers of Murree.

5.5 Caste Based Social Capital

A strong local support system had existed in Murree. As discussed by (Eglar, 1964; Eglar & Chowdhry, 2010) the caste system of Punjab had developed a strong network of social connection among members of a caste setting aside their economic class. The major castes of Murree were Abbasi, Raja, Satti and Kiyanai but TB was not negotiated among these groups at macro level. During this study, it was documented that caste system had offered a very limited support to TB patients as the case study of Azhar Abbasi presented in chapter four has reflected that he was not supported on the basis of his caste based network of social connection during his admission to Samli Hospital.

Every selected household of Murree belonged to a specific caste-based social group. It was observed that some members of above mentioned caste groups of Murree were richer than others, had higher social status and were very powerful because of their economic and political influence. These factors were the reasons for higher literacy rate among this social group and had provided gateway to all the government institutions. This rich social capital was not used to negotiate health on a large scale. In this context, I have presented a case study of Abida in chapter seven that depicts the strength of bonding social capital and health seeking behavior.

On the other hand, poor TB patients also belonged to caste-based social groups, but the low economic status of poor TB patients had shrunk their level of social capital. Poor TB patients had been negotiating TB after their diagnosis, but their link to higher castes had not supported them to get easy access to government health centers of Murree. A strong relationship between caste system and social capital was observed only in the situations where association of honor to castes mattered. Few street fights were observed where the members of a caste were infuriated and bent upon showing off power by holding a gathering. The caste-based social capital was found to be weak

in health related matters. Chapter eight talks about the life histories of the patients and presents the concepts of caste based social capital and social support.

5.6 Class-based Social capital

Social class determines the accumulation of social capital among individuals and groups. Every social and economic class of Murree had a different level of social capital. In this study, it was observed that income of a group or an individual or a household had created social classes, which eventually defined the level of social capital of selected TB patients. The table below gives an understanding of the formation of social capital for members of various income groups and social class in their supposedly fixed situations.

Table 14. Income and Class based Social capital

Income Group	Social Class	Social Capital
Low	Low	Low
High	High	High
Low	High	Low/High
High	Low	High/Low

Source: Filed Data

This table shows the level of social capital among people belonging to various income groups, and social classes, but the level of social capital is not something fixed in its nature as it is fluid and changes abruptly across time and space irrespective of income, class or caste-based associations. According to this table, a family or individual belonging to low income group falls in low social class and eventually holds low level of social capital. High social capital of a family or an individual depends upon its belonging to high income group that cuts off its association with low occupational caste. It was revealed that economic capital was major determining factor for the level of social capital. Besides this, there are factors for the development of social capital that help in its measurement.

Fayyaz was 52 years old. He had completed his TB treatment during the first phase of this study. He was resident of Lora (KPK) and was working in Nathia Gali (Galiyat Region) in the house of a retired military officer as a personal employee. Fayyaz narrated his story as:

"I have five children. I was very poor and used to work as daily wager on a car service station. I had to work hard to manage my household needs. I was tired of my work because in winters there was hardly any work. I had to earn in summer for winters too. One of my relatives offered me to work for General Sahib. I accepted his offer there and then. Now it has been eleven years since I am working as General Sahib's personal servant. I am very close to General Sahib. Although I am poor yet he supports me to the great extent.

One of his [General Sahib's] daughters is a doctor and whenever she visits Nathia Gali [General's House], I request her to prescribe medicines for my wife. I had cough for three weeks and there was blood in saliva [sputum] and during that day Bibi Gee [General's Daughter] had a visit and suggested to me to visit Samli Hospital. On my TB diagnosis, I was paid one month salary and leave.

Once I placed a request to General Sahib for support in legal affairs. My relatives got registered a fake FIR against my son in Police Station, Lora. General Sahib supported me to cancel FIR."

Fayyaz had been working against Rs. 13,000 (almost $US 100) per month and this salary was not more than per month income of a daily wage labor, but Fayyaz had developed his social capital with a resourceful man. It was similar to that of Ustad Shafiq and Tariq Malik. So, social capital is not something fixed as it is fluid in its nature and even in a controlled environment, some social positions cut off all other factors.

5.7 Education and Social Capital

A close nexus was found among formal education and development of social capital. Theoretically, formal education develops social capital in three ways (Bourdieu, 1986). Firstly, it helps in establishing links with an educated class on every level of education. Secondly, education can provide a regular income opportunity with institutional power as well as a capacity to negotiate healthcare providers. Thirdly, education helps in negotiation for formal communication and in the context of this

study; it helps to boost confidence for formal communication with healthcare providers.

It was observed that TB patients and their families had low literacy level. The school dropout rate was higher among families of TB patients. Low level of formal education among TB patients had affected not only their skill of communication with doctors but had remained a barrier to their interaction with their school-going fellows. Besides this, TB patients had missed the opportunity to earn through getting a formal education. The given literature has supported findings of this study that most of the time low level of education had turned into a low level of social capital. But in some of the cases, social capital had nothing to do with the level of education. As the earlier case studies of Ustad Shafiq and Fayyaz in this chapter and case study of Azhar Abbasi in chapter four are concerned, these had described other ways for having more social capital to that of education. So, above mentioned theoretical outcomes of formal education in the context of social capital were not applicable to selected poor TB patients to a great degree.

5.8 Institutional Status and Social Capital

The affiliation of people with different institutions had defined their level of social capital. This status might or might not have required formal literacy or education for developing social capital. Every government institution of Murree had various job titles for people with various levels of formal education. It was observed in the OPDs of government hospitals of Murree that people having an affiliation with any government or private institution were given favors. The case study of Malik Tariq presents a strong argument in support of role of institutional status and social capital. The institutional status had not been something seen in isolation, but it is again the product of a number of capitals where economic and cultural capitals e.g. formal education falls at the top of it.

5.9 Private Patients and Social Capital

There were some TB patients who found it affordable to visit private clinics of doctors of Samli Hospital. The doctors used to refer these TB suspects to their private clinics but not before visit to Samli Hospital for TB diagnosis and treatment because TB medicine was not available in open market. These referred patients were respected

in OPD of Samli Hospital. The staff of TB dispensary always paid regards to such patients because of their prior contact with doctors at their private clinics.

I observed a welcoming gesture of TB dispensary staff. Iqbal said:

> *"The patients of private clinics of Dr. Qaisar and Dr. Ather come to me and say that they have to meet Dr. Qaisar. I give them registration slip and direct them to Room No. 1. These patients do not hang in line."*

During absence of Dr. Qaisar, these patients used to visit TB dispensary. The staff of TB dispensary would give extra protocol to them. This out of the way facilitation was not confined to TB dispensary only, it extended to X-ray room and laboratory where staff used to deal with them with good manners.

The OPD of Samli Hospital used to close by 02:00 P.M. daily. MS of Samli Hospital, Dr. Nasir, used to start his private practice at his government residence from 02:00 P.M. to onwards. Usually, Dr. Nasir used to have his private practice for two hours. Dr. Nasir used to prescribe X-ray and sputum smear microscopy test from private diagnostic centers. In such cases, the diagnostic facility of genexpert for MDR-TB and XDR-TB was only available at Samli Hospital.

The private patients of Dr. Nasir had been enjoying more facilitation than the private patients of Dr. Qaisar and Dr. Athar. The TB dispensary of Samli Hospital had remained open till 03:30 P.M. and an employee of TB dispensary was supposed to be present in the dispensary for registration and dispensing TB medicine to newly diagnosed TB patients of Dr. Nasir. The employee of TB dispensary said,

> *"We have to protect our jobs, for which one of us keeps the dispensary open. With regard to this, we do not get any extra incentive from the hospital or commission from Dr. Sahib [Dr. Nasir]. These private patients of MS are registered with Samli and they get their medicines from here. TB medicine is not available in private medical stores for which we have to be present here. We close this dispensary at proper time only if MS is on leave."*

This debate on determinants of social capital had reaffirmed a central argument of the discussion that economic capital is the mother of all types of social capitals. The case of facilitation to private patients of doctors was also because of economic capital. The selected TB patients for the in-depth study were not able to pay a hefty fee for private healthcare. Their low economic worth in the context of state and staff of TB dispensary had become a barrier in determining their right to health and facilitation in government healthcare centers of Murree.

5.10 Forms of Inequalities

It is very difficult to close the expanded topic of inequalities in a nutshell. The concept of inequalities was an overlapping occurrence because very often one form of inequality transformed into an integral part of many other inequalities. As I have earlier presented in my argument with the support of field data and literature review that economic capital was mother of all other forms of capitals, similarly economic inequalities had been the mother of all types of inequalities in the culture of Murree. Discussed below are types of inequalities that affected the health of poor TB patients by becoming a barrier to social inclusion in community spaces. Effects of social exclusion of TB patients and their status of health have been discussed in chapter seven where social capital has been analyzed through community participation. This part of the chapter describes existing forms of inequalities and their outcomes in the context of the health of TB patients of Murree. During this study, various forms of inequalities were observed that had been affecting the health status of TB patients. These had multiple effects on health in the aftermath of discussion hereunder on inequalities among TB patients of Murree.

5.10.1 Economic Inequalities

Ideally, economic inequalities were based on unequal distribution of resources among the people of Murree. Patients were treated with indifference in government hospitals of Murree on the basis of their economic value. The economic capital of poor TB patients determined limited access to public facilities such as education and healthcare. Because of poor economic conditions, the families of TB patients had low literacy rate. Poor TB patients could not find suitable worth in state institutions such as health, education, police, judiciary etc. because of low economic status. The

economic inequalities were also observed in small units of families. The individuals with low economic worth for family were treated unequally. The section of structural inequalities of this chapter further unfolds this discussion.

5.10.2 Social Inequalities

The social inequalities in Murree existed because of dual standards for poor and affluent segments of society. The social inequalities were based on caste, class, occupation gender and disease (TB) related stigma and according to (J. Y. Kim et al., 2013) such social and cultural factors were influencing access of populations to local healthcare structure. The people belonging to lower castes faced social inequalities. Occupational identities also resulted in social inequities. The working class with low standard and less paid occupation countered barriers for participating in some of the community spaces because of social inequalities. Poor economic conditions of individuals and households had laid the foundation of these inequalities. Owing to existing social inequalities, the health of TB patients of Murree was at risk of deteriorating. TB patients of Murree were not getting equal chance to participate in community spaces. The social inequalities were one of the reasons for having a low level of social capital and least knowledge/information about health among TB patients of Murree.

5.10.3 Political Inequalities

The political inequalities were observed on the basis of the voting behavior of poor TB patients and their participation in political activities. The field data shows least political participation and voter turn-out among selected TB patients. It was observed that due to least political participation the TB patients were affected at two levels. First, because of their non-political participation, they were not taking part in any of the important community space. Second, they were not being owned by the local political leaders. The effect of this was observed in form of refusal of political support for their social and legal issues and rights.

Case Study

Qaisar Aziz was 34 years old man and the only brother of four sisters. His parents were old and he was the only source of income for his household. Qaisar owned an outdated 1974 model corolla car. Qaisar got TB and was in last month of his TB

treatment from Samli Hospital. Talking about the political inequalities and health-seeking behavior, Qaisar said:

> *"It was the local bodies' election of 2015. Sohail Abbasi was the contesting candidate for Chairman of my Union Council (UC) New Murree. Sohail asked me to spare my taxi car for his political rally. At the moment, I promised, but on the day of the rally, I did not participate in his rally. I powered off my mobile for the whole day. Yara Gee [O' Friend] as a reality it was winter season and during those days there was a rush of tourists. I was interested to earn and so I did. Why I should have spoiled a day in a political rally, where I had to burn [consume] fuel out of my own pocket. They [Sohail] were not short of cars. Generally, my family does not cast vote because it is a full day fatigue. And on the day of voting weather was not good in Murree and none of my family had cast vote. Sohail Abbasi lost the election with heavy margin as Chairman and in this case, the vote of my family was of no worth.*
>
> *After that election, I twice faced trouble and was in need of political support. First time, I had an accident and when my car hit a sheep. The sheep died and compensation issue with the owner could not be settled. It was an accident and nobody deliberately hits his car. The accident had happened in Sohail's Village and I requested him to help as a mediator to settle the matter. Sohail refused to help me. He was angry with me for not sparing my car for his election campaign. Sohail knew that my family had not cast vote. It was very annoying. I had to pay Rs. 5000 [around $US 40] to settle the matter.*
>
> *The second time, I contacted to Raja Ramzan who was elected Chairman UC New Murree in local body election of 2015. You know I am the only earning hand of my family. After TB diagnosis, I had to stay on the bed and I was not able to drive the car for one month or so. I was very weak. I rented out my car so that I might earn at least something. Ashraf [friend from taxi stand] asked me to request Raja Ramzan for providing financial*

support. He [Ashraf] told me that Chairman had money through Bayt al-mal [38] *[Punjab Bayt al-mal] and many people had got it on request.*

I went to Raja Ramzan's house requested for financial support. But he flatly refused to support me by saying that I had hoisted the flag of his political opponent on the top of my roof and now was asking for help. He suggested to me to go to Sohail Abbasi for all sort of help. Raja Ramzan had said that first, he had nothing for me and second, even if he had he would not have supported me financially. This is the life pattern of poor people here. We have to suffer either way."

According to democratic values, there should have been an equal distribution of social goods and financial aid for the poor and marginalized segments of Murree. The case study of Qaisar Aziz has presented the practical exercise of local political leaders for distribution of social goods. This political distribution is against the values of citizenship and democracy. In reality, this exercise of political power is a mechanism to regulate poor and marginalized segments of Murree in order to purchase their loyalties. In the context of political economy and social capital, a nexus between loyalties and favors has been elaborated by (Chen et al., 2009; Westlund, 2006) where individuals not only seek favors but also develop their social capital. The political culture of Murree expected from Qaisar Aziz to show his loyalties for seeking health related and all other types of favors. A similar study conducted by (Keshavjee, 2014) in Tajikistan claimed that political loyalty with Communist Party resulted in favors to its followers. Low level of political social capital was the outcome of low political participation that resulted in political inequalities for poor TB patients of this study.

5.10.4 Educational Inequalities

Educational inequalities were the results of formal policies of the government and poltitical economy. Chapter three has described the overall situation of education in Murree and also among TB households of Murree. Relating political economy with

[38] Bayt al-mal (بیت المال) is an Arabic term that is translated as "House of money" or "House of Wealth." Historically, it was a financial institution responsible for the administration of taxes in Islamic states, particularly in the early Islamic Caliphate. In Pakistan Punjab Bayat al-mal was being run by Provincial Government of Punjab and Pakistan Bayat al-mal was being run by Federal Government. These institutions were provided funding from Provincial and Federal Government separately for helping poor and marginalized segments.

citizenship entitlement (Altman, 2000) has said that it helps people to get access to their right of health and education. The distance of poor households from government schools was one of the barriers to education. The economic preference of poor households had pushed them to the verge of sending their boys for earning during their school going age. Private schools were found close to the houses of TB patients, but most of the selected respondents did not have enough economic capacity to pay school fees, cost of books, uniform, and transportation.

The educational inequalities were not only linked with the household income, but also with the transportation and road infrastructure of Murree. The school dropout rate was very high among the poor households. Because of educational inequalities, TB patients lacked confidence in narrating their sickness to a doctor. Discussing personal social capital scale (Chen et al., 2009) and commenting on social capital and health (Ichiro Kawachi, 2006) had said that bridging social capital had required education for the development of trust through better communication. In the context of this argument, it was observed that selected TB patients had not enough formal education that had been a barrier for communication with staff of hospitals to initially explain their health issues and later on for developing trust. This channel was partly blocked for the poor TB patients of this study whereas the cultural system of *Bradari* and caste was a source for developing bonding type of social capital.

5.10.5 Social Capital Raising Inequalities

Social capital was also among the list of factors for promoting inequalities among different socio-economic groups. TB patients had low level of social capital that is why, they were not only being treated unequally in the routine affairs of their social life but in the issues of their health as well. As discussed earlier, determinants of social capital were generally found to be low in respect of TB patients of Murree. Commenting on improvements of health objectives through enhancing quantity and quality of bonding and bridging relations (Szreter & Woolcock, 2004) said that it exists among either or both social support or inequality. The selected TB patients of this study were the victims of inequalities for multiple reasons and their low level of social capital was one out of these. The outcomes of inequalities and utilization of social capital have been presented in the next section of this chapter.

According to field observation and analysis of field data, social capital raised inequalities in two ways. First, the people with low level of social capital were excluded from social community spaces. Secondly, the people with high level of social capital had rewarded inequalities to TB patients in their approach to existing government healthcare structure. Presented case studies and discussion of this chapter has helped to develop the argument that right to health of poor segments was being snatched away by affluent segments of Murree. The poor TB patients were waiting in long queues to get to a doctor and a patient with social capital had landed directly on doctor's table bypassing the trust of government healthcare facility and thrust frustration onto poor TB patients.

5.10.6 Household Inequalities

Inequalities can be observed at both macro and micro levels. The household inequalities are considered as micro level inequalities. The household inequalities had a direct link with the economic worth of household members. The women, in the context of gender, had low economic worth in households because they were not contributing to household income. The men had worth because they were considered as future assets of household, whereas in a patriarchal and patrilocal society the women had to get married and start their separate living. The household inequalities had affected the health of women at micro level.

Men TB patients had been earning and contributing to household income before getting diagnosed with TB. After TB diagnosis these men, who were head of nuclear households, were given more care than any other man of joint or extended families.

5.10.7 Gender and Inequalities

From micro to macro levels, gender-based discriminations were observed in every sphere of life in Murree. The survey conducted by (Rosaldo & Lamphere, 1974) stated that in all of the selected societies men had dominated political, legal and economic institutions whereas status of women was much inferior. Even in first quarter of 21st century the idea of "Natural" male superiority presented by (Leacock, 1981) was commonly observable phenomenon in Murree. The earlier discussed topic of household inequalities had presented the existence of gender-based inequalities in

small units of families in Murree. The details of gender basis inequalities have been discussed below in form of structural inequalities that support above given argument.

5.10.8 Structural Inequalities

During this research, the concept of structural inequalities was applied both at micro and macro levels. Here structural inequalities are being discussed with reference to its micro level approach that is based on social and household structures of Murree, where gender had been affected in the context of health. The existing social structure of Murree had supported the development of different levels of social capital for various genders. These inequalities had directly affected possession of social capital among different genders. This had not only harmed the status of health of its affected ones but also the health of its other members. Below have been discussed various types of structural inequalities with reference to gender difference.

5.10.8.1 Limited Access to Health and Education

Within existing social structure of Murree, women were not considered equal to men. This was observed from the birth of a girl child till the end of her life. The women were dually marginalized in the social structure of Murree. Firstly, on the basis of economic inequalities, they had become part of poor families and secondly had faced domestic inequalities. Because of this, the women had limited access to health and education. In the earlier discussion in the section of determinants of social capital, I have presented a very short debate on gender and access to healthcare and it is detailed here.

Gender biases had been a barrier to girls' access to education. Area profile part of chapter three has revealed more literacy rate among men than women. Owing to lack of formal education as compared to men, the women of Murree had not developed social capital equal to that of men and comparatively women had very little TB related knowledge and information.

5.10.8.2 Women Mobility

Various social insecurities associated with gender were a barrier for women mobility in Murree. The women realized in their early age that girls were not supposed to go out of their homes. The mobility of girls was a barrier to their education. Besides economic worth of women in household, their mobility was also a reason for low

literacy rate among women of Murree. The water springs were part of women community spaces as there women were free to go to collect water. Most of the households had water spring at walking distance. In this case, it was not important for men whether their women were visiting alone or accompanying someone.

Talking about the structural inequalities and women mobilization, Riffat Bibi said that during her childhood she was told that girls were not supposed to go out of their home. This narrative had developed her cognition for restriction of women from a number of spaces belonging to men. Riffat had a daughter and a son. Riffat used to tell the same narrative to her daughter. Riffat was affected because of this barrier of mobility for women before her TB diagnosis. Riffat said,

> *"During the illness of TB, I could not visit a government hospital at its earliest stage because of restricted movement. First of all, I was not allowed to visit alone. My relatives had not allowed their women to accompany me to visiting hospital [RHC]. In the village, every man is busy with work. And why anybody should spoil a day. Secondly, poor transportation facility is an issue. It takes around two hours to reach RHC and you must know it is the closest government health facility. It takes more than three hours to reach THQ hospital. Most importantly, we do not have enough money to travel to these hospitals."*

The women mobility was affected at two levels. On a macro level, the road infrastructure and environment of Murree had limited the mobility of populations in general and women were equally facing a barrier to access healthcare facilities. Secondly, because of structural inequalities and limitation for women mobility had dually marginalized women for accessing government healthcare facilities. The studies conducted in rural Maharashtra, India by (Atre et al., 2004, 2011) to know gender and community views of stigma and tuberculosis have supported this argument in case of Murree also that women had not developed social capital equal to men as they were restricted at home and they remained protected from TB in case there wasn't any TB patient at home.

5.10.8.3 Economic Burden and Income Distribution

The women were considered economic burden in small units of families. First, the women were not contributing to household income. Second, parents had the responsibility of marriage of their daughters for which they had to spend a lot of money. Apparently, parents had given the gesture of being happy for having baby girls in their home, but I further probed during life histories and came to know the low economic worth of women. During illness, women had not been taken to hospital for a routine checkup. Their health had been taken for granted.

Case Study

Madeeha, 25 year old unmarried girl, was living with her parents and had two brothers and three sisters. Madeeha was living near Chitta Moar which was one of the highest points of Murree and an open horizon presenting a clear map of Islamabad. Chitta Moar was three kilometers short from Murree. It was a small business hub of the automobile. Madeeha's house was situated at a distance of 40-minute walk from the main road. There was no paved path to reach Madeeha's house. It was a walk down the mountain, where a pedestrian – on his way back to the main road – used to get out of breath while hiking the mountain. Narrating her life history, Madeeha said,

> *"I had been sick for many days. I had cough and little temperature. Initially, I took it for granted. I thought it might be because of change of weather. After two days of cough, my mother observed my indisposition and she started giving me Kahwah for next three days. I took tablets for temperature. I spent around two weeks in this condition and nobody took me to doctor. After fifteen days of sickness, for the first time, my father brought a cough syrup for me. It gave me temporary benefit from cough, but meanwhile, I had started losing weight.*
>
> *Finally, I think after twenty days I was taken to doctor [a quack] at Chitta Moar. He gave me medicines for five days that included tablets and syrup. He had also given me an injection. He charged only Rs. 100 [less than $US 1] for everything [including fee, tablets, and syrup]. His medicine was a timely treatment. The temperature was somehow good. I felt better for a few days, but I had lost a lot of weight. I was getting weaker. This*

round of five days medication continued for two more times. And I guess it had been more than a month in this condition.

My father works on a tire shop and we cannot afford a good doctor. You know we have to pass through the courtyard of many houses to reach the main road and everyone in the neighborhood knew my sickness. There were rumors about me being bewitched. Balkees Khala [Madeeha's Mother's Sister] visited me to ask about my health. She had pity on me and suggested to my mother to take me to Samli Hospital. This suggestion was not easily absorbed by my mother. She refused to see me suffering from TB. Finally, I was taken to Samli Hospital."

Madeeha remained on household remedies for more than a month. Partly, poverty of her father was a barrier to take her to a doctor and partly her gender for spending money on her deteriorating health. The visit to Salmi had cost Rs. 120 (almost $US 1) for transportation, Rs. 37 for hospital charges to get TB diagnosis and a loss of half-day labor of Madeeha's father, whereas the quack had charged Rs. 100 for treatment. Gender identity of Madeeha was the reasons for this taken for granted attitude towards her sickness. Talking about the cultural concept of TB and gender among the general populations without TB in rural Maharashtra, India (Atre et al., 2011) had validated findings of this study where women were facing greater socio-economic barriers and this had resulted in poor access to TB treatment, diagnosis, and treatment adherence. This study also concludes that there was limited community support for women TB patients have to access to TB treatment centers of Murree and more limited access to information about TB from informed sources. A study conducted in India by (Balasubramanian et al., 2004) to highlight gender disparities has also stated that women TB patients were under notified due to various socio-cultural factors. Similarly in Murree, these factors had included reduced access to health care services, under-reporting of respiratory morbidity and greater stigmatization.

5.10.8.4 Freedom of Expression

In a patriarchal social structure of Murree, the women were not having freedom of expression. The women in this sort of social structure were dually marginalized in the context of freedom of expression. At macro level, the poor segments of Murree had least freedom of expression and the women were dually marginalized in overall

society and did not have freedom of expression under the umbrella of patriarchy. The freedom of expression was connected with a number of other indicators such as economic prosperity, level of education and socio-cultural practices. It was observed that women were not part of the decision-making process of family matters. They were not asked for the decision of their marriage. A woman TB patient during an informal discussion said,

> *"Our parents take the decision of our marriage and we [women] are conveyed a final decision. I think it would be better to say that we are told about our marriage rather than asking our consent. If such a big decision is taken without our consent, why bother us in normal affairs of life? We are not asked about our choice to select a doctor for a checkup."*

It was documented that women had not been given freedom to select a doctor for healthcare visit. The men used to prefer a cheap doctor for the first visit. The continuation of sickness used to compel them to switch to another doctor.

5.10.8.5 Women Empowerment

The earlier discussion in the context of structural inequalities with regards to gender had presented a picture of women empowerment. The women were worst for not having knowledge about their right to health, being a citizen of Pakistan. The micro level situation for the rights of women over men of their families was very dismal. According to women, their only right towards their men was their livelihood. The women of Murree were happy at getting a meal and social protection. The health was not being considered their basic right at macro and micro levels. Further probing had revealed to women that their health was also their right over their husband and head of household.

The women of TB affected households were not taking part in economic life. Such women were not being provided with any of the opportunities in this regard. In the case of gender, this economic dependency of women and illiteracy was one of the reasons for compromising health behavior. Talking about patient adherence to TB treatment in a systematic review of qualitative research by (Munro et al., 2007) stated that female patients were perceived as being more motivated, but some countries they

required permission from men or heads of household to reach to a heath facility for getting TB medicine.

5.11 Outcomes of Inequalities and Utilization of Social capital

Existing determinants of social capital, all forms of inequalities, and structural inequalities among TB patients of Murree had given various overlapping outcomes. Earlier discussion has supported the argument that economic capital was the mother of all types of capitals, which also had decided the determinants of social capital. People had been utilizing their social capital framework of earlier discussed inequalities. The outcomes of inequalities and utilization of social capital had been barriers for poor TB patients have to access to government healthcare centers of Murree for TB diagnostic and treatment facilities.

Case Study

Riffat was resident of UC Phugwari. Her house was situated far down the mountain and was almost near to River Jhelum. A single road was Riffat's only connection with nearby government healthcare facility and main road. This was a metalled road but was damaged due to rains and landslides on most of the winding curves. There was very limited transportation facility for Riffat to reach RHC or the main road. In chapter four, I have highlighted overall economy of Phugwardi and its infrastructure. There was no paved path to Riffat's house. It was just like a cliff and a walk like mountain climbing.

Riffat's house was hit by heavy rains in 2014 and the only room of her house was grounded. Since then Riffat's husband could not save enough to construct a room for his family. Riffat was residing as a caretaker in the house (comprising two rooms) of her husband's brother (Muneer), who was working in Karachi and had migrated his family to Bhara Kahu for the education of his children.

Riffat's husband (Zameer) was a daily wage laborere in *Sabzi Mandi* (Fruit and Vegetable Market) of Islamabad. Zameer's work was loading and unloading of loader trucks. Zameer used to visit Riffat fortnightly and bring vegetables for domestic use. Riffat was in the 4th month of her TB treatment from Samli Hospital. In absence of her husband, Riffat was living with a daughter and a son. Irrespective of her poverty,

Riffat was feeding a homeless man who was deaf and dumb and nobody in the village knew his origin.

Riffat was living at a distance of almost 7 km from RHC. The only government school in her village was on a 15-minute drive through local Suzuki pickup or at a 45-minute distance by walking through a number of shortcuts. Riffat said,

> *"My children are too young and I do not want them to walk this much distance. I am taking TB medicine and cannot walk this much to drop my children to school. And we do not have enough to pay for pickup [Suzuki Pickup Van for transportation to School]. They play at home. Here is the mosque [100 meters distance] and my children go to read the Holy Quran there in the morning."*

Riffat had four brothers and two sisters. She was fifth in descending order among her siblings. Being a girl, Riffat could not get education. Riffat's brothers had education till 8th standard. Riffat could read a few common words of Urdu and could not write more than her name. Riffat belonged to a poor family that is why; she was married to a poor man and was leading a family of poor. Riffat's husband had not much social interaction in the village. Riffat said:

> *"Zameer comes home after 15 days [fortnightly] on Thursday night, because he has to do all of his work in Mandi and takes the last coaster for Murree. He spends a night and next day at noon, he leaves for Islamabad. He just manages to come for the condolence in the village."*

Riffat, her two children, and long-term homeless guest had to manage on the provided vegetables by Zameer for fifteen days. She could not afford egg for her children in winters. Riffat was holding goat of her relative in her home in partnership. The milk of the goat was used for her children and morning tea. Riffat had the tendency to be restricted to the low quality of food and clothing. Riffat said:

> *"At the time of my TB diagnosis, I was told by doctor [TB dispensary Staffs of Samli Hospital] to eat well [healthy] diet that includes eggs and milk. I do not have hens at home and you know an egg costs Rs. 14. Eating an egg daily was out of question and this goat started giving milk only a*

month before and it gives half liter in the morning and a half liter in evening. And this hardly caters to the need of my kids."

Riffat used to burn wood for cooking and heating her room. After having been diagnosed for TB, her husband purchased a small gas cylinder for her kitchen use. She had used that gas cylinder only for a month. She had a kitchen in her room and used to burn woods for both cooking and heating the room. This was not only a very poor quality of life but dangerous as well. This kind of living also polluted the environment. The roof of her room had become black with burning woods. Riffat said,

"I cannot afford to use a gas cylinder for cooking the food and heating the room because we can hardly manage the kitchen and basic necessities of life."

The effects of neo-material realities can be observed through earlier discussion in the context of the determinant of social capital, inequalities in general and structural inequalities. The neo-material realities had raised a tendency among TB patients to be restricted to the low quality of food and clothing, poor quality of life and dangerous housing, polluted environment, and low access to effective medical care.

The result of all of the inequalities was social and environmental disparities. The poor had been living in poor environmental conditions. The TB patients were living in overcrowded housing. The source of energy consumption for cooking and heating the house was wood and because of their economic barriers, poor TB patients could not afford to use electricity as a source of energy for these purposes. During an informal discussion, a TB patient said:

"I have six children and I work at a local hotel. I get Rs. 600 per day. I have one room where I am living with my six children and wife. Out of this income, it is not possible to construct an extra room. During winters, we cook in the same room where we live. It is said, "Hajj ve vich ty Khareed ve vich" [it means two in one]. Like it is cooking the meal and heating the room with same fire. What else can I do . . . we have to sit in the smoke of woods."

Social, economic, environmental and geographic disparities had resulted in low literacy and low social capital among poor TB patients and their families. Existing forms of disparities in Murree had become a barrier to have access to a number of formal and informal community spaces. Earlier discussion has reaffirmed argument in chapter one of this dissertation that low education and low economic status of TB patients were basic barriers to participation in community spaces. It was reaffirmed that household inequalities had limited the choice of education for the girl child, who had to develop a nation in future. In this way, the women were exempted from one of the community spaces and had a low level of social capital to that of men.

5.11.1 Easy Access and Barrier to Health

One of the outcomes of inequalities and utilization of social capital was easy contact with government healthcare facilities for affluent segments of Murree and barrier for poor TB patients. In fact, the affluent segments of Murree with a higher level of social capital had been getting benefits from their peers. This easy access to resources, based on inequalities and utilization of social capital, had ensured timely healthcare to some affluent people of Murree. In the context of New Zealand (Park & Littleton, 2008) stated that timely treatment has potential to reduce TB notification rate. The TB patients of Murree had been facing a barrier of easy access and in this way, they were not confident of equal access to government healthcare structure of Murree. This situation had become a health risk for poor TB patients. Owing to the barrier to easy access to resources, none of the TB patients of this study had been referred by BHUs of Murree to Samli Hospital for TB diagnosis. This was the sound reason to strengthen an argument that lack of trust in government health centers of Murree was because of inequalities and had developed a health risk among poor segment who had been the easiest victim of TB.

5.11.2 Establishing Connection and Losing the Trust

These inequalities helped to affluent segments of Murree to establish contacts (social capital) in all spheres of life. The one who had strong connections (social capital) in government institutions or had formal association with government institutions got easy access to healthcare system and the one who did not possess any or all of the determinants of social capital faced difficulty in reaching government healthcare

structure of Murree because of lack of connections. This situation had resulted in lack of trust of poor in government healthcare facilities.

Favors based on social capital had developed an environment of mistrust among poor TB patients as they found it difficult to travel to government hospitals for treatment. A detailed discussion on the role of doctors in boosting the environment of mistrust among poor patients in government health facilities has been elaborated in next chapter. Besides this mistrust, the concept of inequalities and utilization of social capital had developed a local perception among residents of Murree about healthcare at government hospitals of Murree. During an informal discussion, Sardar Khan had said:

> *"Nobody even spits on poor in government hospitals. If a sweeper is known to you in any of the hospitals of Murree, you can have your work done very easily. I do not have any connection in the government hospitals. How can I trust a system where all of the work is being done on reference basis? Internal staff of the hospitals of Murree takes great care of those who go with reference. The bigger the reference, the bigger is protocol, and that is all."*

This is an ongoing cycle of connection between outcomes of inequalities and barriers for the development of social capital within which every determinant of social capital gives an extra opportunity to its possessors to have easy access to healthcare facilities. This further gives birth to inequalities, and this again turns into a low level of trust in the government hospitals.

5.11.3 Debilitating Citizenship Behavior

One of the devastating outcomes of inequalities was debilitating citizenship behavior. On one hand, government healthcare structure of Murree had not developed any concept of modern facilitation mechanism to facilitate OPD patients while on other hand, the inequalities and utilization of social capital had resulted in devastating citizenship behavior of OPD patients in general and TB patients in particular. The argument of debilitating citizenship behavior has been supported by the earlier discussion of practices of modern facilitation methods in chapter four of this dissertation.

The neo-liberals concept of democracy and citizenship had not been introduced to TB patients of Murree under the WHO's TB DOTS program. The inequalities had provided an opportunity to affluent people for not only getting easy access to doctors but also in consuming the time of poor patients. TB patients of Samli Hospital had to wait for their turn whereas their time had already been consumed by VIP patients. The verbal wrangling was a very common sight in the OPDs of these hospitals.

This overall situation had boosted anxiety among TB patients of Murree and had fueled the element of stress among TB patient during OPD hours. Poor TB patients with low level of social capital had to bear this situation on every visit. Shaukat was a TB patient and was in the third month of his TB treatment. He was resident of New Murree. Shaukat had to face the consequences of his limited social capital during his every visit as he said:

> *"Bhai [brother], this is not for the first time I am being humiliated. This man at the door of doctor's room is a shameless creature. He has no respect in my eyes. This is my 5th visit today at Samli hospital. Every time he holds my registration slip in his hand and keeps me on hold for a long time. Now I was not having any special checkup but I had to just get doctor's signatures for getting TB medicine. How much time does it take for signatures? But no way, I am on hold and some other patients are going in. I hate him and these people. What should I do? I am silent and what else can I do because I am dependent. By God, it is a real insult."*

These identified malpractices among doctors and lower staff of Samli Hospital were basically the result of various inequalities and unfair utilization of social capital. These malpractices had developed an overall culture of favoritism shown to the dear ones. This is the other picture of social capital, where the visitor and poor TB patients had been a victim of anxiety, felt stressed and had also developed poor impression of government healthcare structure. Besides the issue of provision of free basic medicines, utilization of social capital had also become a reason for mistrust. The overall impact of mistrust either because of utilization of social capital or because of not providing free medicines had become a barrier for poor TB patients prior to their TB diagnosis.

5.12 Factors for Development of Concept of Power

The debate of determinants of social capital; forms of inequalities; structural inequalities; outcomes of inequalities; and utilization of social capital has helped in determining factors for the development of the concept of power in existing government healthcare structure of Murree. Power of political economy of health and health economy was apparently being exercised by staff, but in its short value, the affluent patients (private patients of government doctors) used to exercise their power.

The institutional power of doctors and staff of government hospitals was a very commonly observable occurrence. Ideally, the staffs were public servants and they were supposed to facilitate every visitor irrespective of their inequalities. But, practically, it was institutional power based on political economy of health that had developed an authoritative behavior among the staffs.

The debate of private patients and social capital has helped to understand the behavior of private patients. Talking about special treatment to private patients, Tariq, the lab technician and TB facilitator of THQ hospital Murree, had said:

> *"The patients of all types having a reference of some influential person always demand that they should be given a priority and consider it their basic right. And in reality, we have to give favors."*

The idea of a right to being special had developed mindset of power based on social capital which was contextually being exercised by patients over the staff. Tariq said that every reference based patient had his different level of power. Tariq said,

> *"The patient with reference to MS has influence over a surgeon and a patient with my reference can request a physician, whereas he will not bother a vaccinator of the hospital. I have spent a lot of time here and now I am known to many people and I also oblige patients. Suppose, today the X-ray technician is obliging my man [referred patient] and tomorrow I will do the same."*

It has been discussed that unequal distribution of resources was the reason for poverty and low level of literacy among poor segments of the society. This had triggered institutional power of staff. The behavior of dependency on government healthcare providers rather than the right to healthcare knowledge was based on low literacy and

poverty. The staffs were taking advantage of this power and used to misbehave with poor TB patients.

The concept of power was not new in government healthcare structure of Murree, but a weak structure of state-citizen obligation had boosted already existing concept of power. A patient said, *"It is their [TB Staff of Samli Hospital] kindness that they give us medicine."* This submissive behavior of TB patients towards staff of TB dispensary of Samli Hospital and dependency based relationship among government healthcare providers and TB patients was based on patients' ignorance with their right to health.

The practices to oblige favor and provide special welcome were barriers for equal healthcare. Poor TB patients were aware of the fact of being deprived, but these had never documented as a public reaction against such inequalities based practices.

5.13 Analysis

The determinants of social capital were overlapping each other in most of the conditions and it was difficult to define each of the determinants of social capital. The overlapping of various determinants of social capital had made it an interchange of crossroads where overall social capital was difficult to measure. Social capital was not a fixed entity; rather it was very flexible and fluid in its nature and had been situational, contextual, and accidental and had fluctuated in time and space.

Social capital was a human capacity, but human capacity could not be utilized in a number of situations to negotiate health in general and for TB in particular because it was in need of formal education and exposure to the world around. Human capacity had worked both as a resource and barrier to TB patients of Murree for accessing healthcare.

The political social capital was not in the reach of poor TB patients and it was not being used for access to healthcare facilities. Murree was going through its critical phase of TB disease and political elite of Murree were highly insensitive and demotivated to address the issue of TB. Although TB had been documented as a disease of poor but in reality, TB being an airborne disease, every individual of Murree was equally vulnerable to TB.

On macro level, political response to negotiate health in general and TB in particular remained almost a failure. The political leadership of Murree, both at the micro and

macro level, had not raised their voice for the development of government healthcare structure of Murree or to bring transparency in its structure through the restoration of democratic values and citizenship. The residents of Murree had not negotiated health with their local and national political leadership. Most of the people were in need of political support for getting a Medico Legal Certificate (MLC) from government hospitals for registration of FIR at the local police station. In Murree RHC and THQ hospital were authorized to issue MLC and this had politicized the environment in RHC and THQ hospital. The utilization of political social capital for seeking MLC had developed an argument that residents of Murree used to value their legal affairs more than that of their health affairs.

The neighborhood provides access to resources and this concept of social capital had remained unsuccessful to protect Farhat from TB. According to the philosophy of social capital, a man close to healthcare facilities could have more easy access, but the case of Farhat had rejected this philosophy. TB was an airborne disease and it had affected Farhat irrespective of all his visible treasure of social capital. It was also not necessary to have good health by having government healthcare center in close vicinity as it was the health seeking behavior of people that mattered most it was very weak. Thus poor TB patients were deprived of this sort of social capital.

Gender-based inequalities were a barrier for women to have equal access to government healthcare centers of Murree. Gender identity of women had provided them an opportunity to have access to healthcare facilities of Samli Hospital. A few women had developed their social capital on the basis of their body and beauty. This was a new dimension of social capital. But the equal status of women to state was being affected in this context and some women were snatching equal right of others by exploiting the attraction of their body and beauty. This new dimension of social capital was missing in the existing literature on the theory of social capital. Gender-based facilitation to women in Samli Hospital was not socially acceptable and was not in favor to promote trust in government healthcare centers of Murree.

Government institutions remained a fiasco to provide equal healthcare to all genders irrespective of their socio-economic status. Besides this, the state had not evolved a policy for controlling harassment of women patients. The women were not aware of their right to health. Most of the women were not having the ability to write a formal

complaint against the misconduct of staff of government hospitals. This had a link with inequalities to women and their low literacy rate and was affecting their health on both micro and macro levels.

Similar to determinants of social capital, types of inequalities had too various forms. The economic inequality was the mother of all types of inequalities, but all of the inequalities were interlinked and interdependent in most of the cases. None of the inequalities had existed in isolation and were overlapping each other. A macro and micro level analysis of inequalities had presented an argument that equal citizens to the state were not being facilitated equally and unequal gender was not being treated equally in small units of the family to provide access to healthcare.

Social capital was equally beneficial and controversial in its utilization. Social capital had favored an easy approach to government healthcare facilities but had gifted stress, anxiety, depression to TB patients of Murree. This use of social capital had resulted in mistrust in government and its healthcare institutions.

Summarizing the debate on social capital and inequalities for affecting the health of TB patients, it is argued that existing utilization of social capital for access to government healthcare structure of Murree was against the values of citizenship which in essence had wanted equal distribution of social goods & services and health delivery. Social capital had helped some people and it was opposed to a system that was a kind of democracy where social goods were supposed to be distributed on the basis of citizenship and equality. This malfunctioning had revealed that democracy and citizenship were not being observed.

There were micro inequalities that had been a barrier to have access to government healthcare centers of Murree. Affluent segments of Murree were utilizing their social capital to avoid existing inequalities. If these inequalities had not existed, social capital would not have had any standing for giving easy access to government healthcare centers. Utilization of social capital had been fueling micro inequalities in government healthcare structure. Ideally, there were micro inequalities which were transcended by social capital, but the social capital had allowed or acted as a barrier. Social capital was an instrument to access to healthcare but the usage of social capital by affluent had been a resource and its utilization had become a barrier for poor and marginalized.

A dual function of social capital as a resource and as a barrier have to access to healthcare had made its status controversial. Micro inequalities were barriers, whereas social capital was an instrument through which people were overcoming their inequalities. Barriers to inequalities were being erected by micro-politics that had taken place in given space of Murree. Various forms of inequalities between rich and poor had been socially constructed and people had been supporting such inequalities in the local environment of Murree. Social capital was the currency to overcome all types of inequalities.

Chapter 6

DOCTOR-PATIENT RELATIONSHIP AND SOCIAL HEALTH INSURANCE PROGRAM

Doctor-patient relationship occupies an extremely important place in the field of public health. Ideally, this relationship is required to be strengthened for developing the trust of the patient in government healthcare centers so that they may not become victims to health-related risks. This chapter comprises four parts. The first part discusses general practices of doctors in the government healthcare centers of Tehsil Murree and describes components of existing doctor-patient relationship in the context of clinical ethics and barriers to providing quality service through proper communication. The second part is based on barriers to employment of healthcare providers in Primary Healthcare Centers of Murree situated in remote areas. This part also deliberates upon management issues, irregularities, and malpractices. The third part is about policy measures for bringing change in existing government healthcare structure of Murree for developing and sustaining the trust of patients through quality service. Part four describes the important elements of Prime Minister National Health Program in Punjab and its limitation to achieve success, attracting patients to OPD and outreach activities in the peripheries of Murree.

6.1 Doctor-patient Relation: OPD Practices in Samli Hospital

Preferably, the room of a doctor should have been spacious and with more chairs for patients and attendants. There should have been privacy for the patient so that he/she could narrate his/her story of illness without being disturbed. It should be mandatory for the doctor to have in his personal possession a thermometer, a sphygmomanometer, a stethoscope, torch and all instruments required for initial examination of the patient. As a part of his training, the doctor should welcome a patient and be polite to him/her. This is an important factor to boost the confidence of the patient so that he/she feels is welcomed by the doctor and examined carefully. As a practice, the doctors should give sufficient time to satisfy a patient but this ideal situation does not exist here at all.

It was 08:00 A.M. and the waiting area in OPD of Samli Hospital was full of patients. There was not a single vacant space on benches and quite a huge number of patients

were standing. Around dozens of patients were holding their registration slips in their hands and were waiting for the doctors to arrive. Room No. 3 (room of doctors) was locked by then, and Irshad came to collect registration slips from patients. According to common practice, Irshad used to collect registration slips from patients before the arrival of doctors and kept in his hand. The slips of new arrivals were placed at the bottom of existing pile of slips. Usually, the doctors used to start examining patients at 08:00 A.M. but on that Monday doctors were little late. It was 20 minutes past when Irshad opened the lock of Room No. 3, went inside and locked the door from inside. The patients were in anxiety and longing for the doctor to call their names.

I had been observing this routine practice of OPD for last two weeks and it was not anything unusual for me. I kept on observing the conduct of Irshad and uneasiness of patients in waiting area for a few more minutes and finally went to TB dispensary. On that day, I was interested to observe the practices of doctors and the way they examined the patients and how doctor-patient communication transpired. I knew at that hour of day that TB dispensary was usually not burdened with TB patients. I requested Ihsan to help me to sit in Room No. 3 for the purpose of observation and notes taking. Ihsan was on very good terms with Dr. Haris and asked me to wait for the arrival of the doctor. It was almost 08:30 A.M. when Dr. Haris took his seat in Room No. 3 and I followed Ihsan to seek permission from the doctor.

Irshad was holding a number of registration slips in his hand and was calling names of patients and five patients were allowed to enter the doctor's room in one go. Irshad was calling the name of the patient and returning the registration slip. Every patient was collecting his registration slip from Irshad to present it to Dr. Haris at the time of consultation.

As we entered the room, there were five patients already present and Irshad had lined up a set of five more patients. Dr. Haris had not started his day yet. I had met Dr. Haris before this interaction and had introduced myself too. Dr. Haris was in his late twenties. He belonged to Rawalpindi and used to visit Samli on daily basis. Once in a week, Dr. Haris performed his rotation duty in the ward. It used to be his 36 hours rotation and he got a compensatory day off the next day. On that day, Dr. Adil had taken a day off in compensation of his rotation duty in the ward and Dr. Haris was managing OPD. Ihsan paid his Salam (greetings) to Dr. Haris and said, *"He [Majid]*

is my friend and is doing his research with the permission of MS Sahib and wants to sit with you to talk to patients." Dr. Haris seemed to be very supportive and calmly granted his verbal permission without any further questioning.

It was a small room with an attached restroom. There were two chairs in the room. There was a stretcher – covered with white bed sheet – placed next to the table of doctor. The stretcher acted as a barrier to prevent patients to walk into the sitting area of doctors. Ihsan was about to leave when Dr. Haris asked him to sit beside him and help in examining the patients. Ihsan had always been doing this favor to Dr. Haris and this was the only reason for Ihsan's good terms with him. Ihsan pushed the stretcher to create room to enter the sitting area of doctors. The vacant chair was offered to Ihsan and OPD started its functioning 35 minutes late. Dr. Haris asked Irshad to bring a chair for me. I was sitting on the chair on the side of patients. I could observe the practice of doctor and Ihsan whereas Irshad was in front of me and was allowing five patients in a go to enter the room.

Ideally, there were supposed to be two doctors in OPD, but because of rotation on every Monday and Thursday, there was only one doctor in Room No. 3 and Dr. Qaisar used to examine patients for the second opinion. This was the reason for a total burden of patients on Room No. 3 and it was very difficult for one doctor to examine an OPD of almost 400 patients.

There was no thermometer, sphygmomanometer and other necessary instruments to examine the patients. Dr. Haris had a stethoscope over his shoulders and had not used it during my observation. Ihsan was a dispenser and at the moment, he was working as a Medical Officer (MO). Dr. Haris used to ask every patient for registration slip. The patient used to place registration slip on his table. After holding the slip, Dr. Haris asked a set of initial questions to every patient such as, *"Yes, what had happened to you? Since how long do you feel this?"* Dr. Haris kept his head down to prescribe medicines or write TB diagnosis tests on the registration slip and was directing patients either to go to general dispensary or to go for TB diagnostic tests.

Irshad was doing initial scrutiny for the support of the doctor. Irshad used to look at the apparent condition of every patient and directed some of the patients to see Dr. Haris and some of the patients to see Ihsan on the basis of his personal judgment.

Ihsan asked same questions that Dr. Haris put to patients and prescribed medicine for non-TB suspects according to his wisdom and directed them to collect medicines from general dispensary. During that two hour observation, the doctor referred one patient to get his Blood Pressure reading from the emergency room. On an average, a patient was examined in one minute.

After spending an hour, Ihsan left the room to resume his responsibilities in TB dispensary. Dr. Haris prescribed medicines or announced TB diagnosis without even looking at the face of the patients. He did not take trouble to use his stethoscope on any of the patients. None of the patients was sent to Dr. Qaisar for the second opinion. Generally, very few patients were sent to Dr. Qaisar for the second opinion after going through the results of TB diagnostic tests and chest X-ray. In the presence of two doctors in room No. 3, the practices of doctors were found to be the same. The examination by doctors was a mechanically programmed kind of activity without human touch or emotion. How such practices by doctors find favor with patients and trust was the final causality?

The study on blame the patient, blame the doctor or blame the system by (Daker-White et al., 2015) underline the human elements in patient safety primary health care. The key to patient safety lies in effective face to face communication between patients and health care staff or between the different staff involved in the care of an individual patient. Another study by (Frosch & Elwyn, 2014) talks about engaging of patients in the process of diagnosis and treatment and also talk about the health literacy programs by health care providers. The study stated that how health care is delivered requires a far-reaching mandate and the social movement it needs well be most effective when mobilization is broad and inclusive. Heath systems need to implement solutions that recognize that it is not patient who are deficient, but rather the systems of care that do not serve them well.

6.2 OPDs of Primary and Secondary Healthcare Centers of Murree

Chapter four presents the situation of OPDs of all government hospitals of Murree and elaborates the situation of patient burden. In this part of the chapter, I present the practices of doctors to examine patients. The general practices of doctors were more or less the same as those the doctors of Samli Hospital. The doctors of Primary and Secondary Healthcare Centers of Murree had claimed of being overburdened and the

patients were not satisfied with the conduct of doctors. This dissatisfaction had drawn a line in doctor-patient relations.

During my multiple visits to BHU Tret, Kali Mittee, Rawat, RHC and THQ hospital, I had observed that the patients were mostly not offered a stool to sit during their medical examination and they kept standing. The patients were asked about their health condition and a number of other questions. The basic tools of doctors to examine patients were either not present on the table of doctors or were not being used for the psychological satisfaction of patients. These practices in all of the government hospitals of Murree had breached the doctor-patient relationship.

The residents of Murree were very disappointed at existing practices of doctors in Primary and Secondary Healthcare Centers. The patients wanted government doctors to check their pulse, temperature and blood pressure. The doctors did not bother to give any information to patients about their health and hygiene. This situation left a highly dismal psychological impression of doctors and Primary and Secondary Healthcare Centers of Murree among general population. Talking about the effectiveness of face to face communication between a patient and healthcare provider (Daker-White et al., 2015) has said that it carries a lot of meaning for an individual patient. But according to earlier discussion, a broken and so called non-satisfactory communication existed in this regard.

6.3 Components for Effecting Doctor-Patients Relation

The power of doctors was based on political economy of health, institutional status, authority and formal education. Through this power, the doctors exercised authoritative behavior toward patients. The feeling of dependency among patients had further boosted this concept of power. This power of doctors was directly linked to the trust of patients. The exercise of power, a discriminating and discouraging behavior towards patients had resulted in health risk for patients. Talking about the components of power, Dr. Ameer Haider said,

> *"The relation of trust between doctor and patient exists on the basis of power and the power comes through authority, formal education, knowledge, and general information, whereas the poor patients do not*

hold formal education and do not have confidence while negotiating with the doctor and poor patients start with the trembling voice."

Apart from other theoretical reasoning of power, there was one more cause of power among doctors in the existing healthcare set up as well. This was overburdening of patients in the hospitals that had a clear connection with theoretical reasons of power. Elaborating the relationship of overburdening of patients and its relation with concept of power and resultant behavior of doctors, Dr. Wahid said,

"Power and trust are two important factors. Why there comes the element of power? The overburdening [of government hospitals] is the reason . . . government healthcare facility is the only option for poor people . . . there is always a long line of patients that made OPD overburdened and doctor considered himself as powerful and his patients as dependents. He [the doctor] does not have time to pay proper attention to every patient and does not satisfy him."

This overburdening and behavior of doctors toward patients had dented the trust of patients who felt neglected. The TB patients, during in-depth study through life histories, trusted quacks more than doctors. Talking about the conduct of doctors in a government hospital and a quack in private clinic, Dr. Wahid said,

"The doctor-patient relationship has become very weak because a doctor seems more to be a merchant than a doctor . . . we are doctors in our private clinics and here in government hospitals, we are officers. The doctors want to earn money and government hospitals are overburdened. These are two reasons for becoming a barrier to strengthening doctor-patient relation.

A quack does not have knowledge [of medical science], social status [among formal degree holders], formal registration, institutional status and formal degree, whereas a doctor in a government hospital holds all of these things but the poor patients hold more faith in a quack than in a doctor serving in government hospital. The reason behind lack of trust is that in a government hospital, a poor patient is always taken for granted

by the doctor and staff, whereas a private clinic of a quack is his shop where a quack has to extend his business.

This is the issue of space. On a private clinic, a doctor or a quack has to discuss the health of a patient in detail. You will find a doctor polite to patients in a private clinic whereas in government hospital, the same doctor will rush onto a patient. On our private clinic, we use thermometer, stethoscope and check the blood pressure. We try to win the trust of patients by following all of the protocol of health. Through this, we earn some money from patients. And most importantly, we know that every patient will work for our marketing.

As a reality, if a doctor or a quack does not practise this [protocol to examine a patient] in a private clinic how will we develop the trust of patients. This will not develop the faith of patients in us. In a government hospital we say aggressively 'CHAL BIBI CHAL' [Move on] to women. These words show our bad communication and disrespect for women and poor patients. The quack has to present his welcoming and friendly disposition because in this way, he has to trap the poor people. This welcoming and friendly conduct of a quack is supporting his fraud."

The element of trust in a doctor of government hospital was not confined simply to the behavior of doctor, but the use of the medical kit of doctors was also an important factor for psychological satisfaction of patients. The doctors of government hospitals of Murree were not using medical kits to examine patients. This common practice of doctors of not using medical kit was because of overburdening of patients. The patients were not satisfied with the conduct and behavior of doctors and staff of government hospitals of Murree. A power based doctor-patient relation was very weak and had resulted in risk for the health of poor patients as in most of the cases quacks had replaced doctors and formation of this relation had turned into health risk.

Nisar was 55 years old man and resident of Banasra Gali, Murree. Nisar had started TB treatment in the month of March 2016. Nisar had been admitted to Samli Hospital in the initial stage of his TB treatment. He was head of an extended family. Nisar's family comprised a single daughter and a son, two married sons with wives and their

4 children. He owned a small truck. Nisar used to drive his small truck to deliver construction material to off-road under construction houses.

Nisar's house was on the top of the mountain and a metalled road was connected to his village with Bansara Gali Stop. Nisar's house was situated at a walk of 15 minutes distance from the metalled road of the village. Nisar used to park his truck on a small plain patch of land on the sidelines of the village road where other residents of the village used to park their vehicles. There were occasional passenger vans for villages. The nearest government healthcare center to Nisar's house was BHU Ghora Gali and the nearest private clinic was situated at Bansara Gali stop. There were few shops on Bansara Gali stop from where Nisar used to purchase daily grocery.

The private clinic at Bansara Gali stop was being operated by Sultan (a quack). Nisar's family and a large number of residents of the village were regular patients of Sultan. Nisar narrated the story of his visit to private clinic of a quack (Sultan), private clinic of a doctor practicing at Sunny Bank Murree and Samli Hospital. Nisar made a comparison of his visits and said:

> *"Don't ask about the behavior of government doctors. They are very rude and humiliating to poor people. We are insulted by doctors in government hospitals and the man standing at the door of the room. I was sick for a few days and I went to Dr. Sultan [a quack]. His [Sultan's] clinic is situated at Bansara Gali stop. All of my family gets medicine from him. He [Sultan] is a very good doctor. Dr. Sultan's medicine is always effective . . . the cure belongs to Allah [God], but there is always a sense of morality and manners.*
>
> *Dr. Sultan is always respecting. There were four or five patients on his clinic at the time of my visit. I sat on a vacant bench. I waited for my turn. Dr. Sultan asked about my health. I told him that I was having little fever for a few days. He put a thermometer in my mouth and examined my throat. He used his instrument [stethoscope] to check my chest and back. He [Sultan] gave medicine for five days and an injection and charged from me just Rs. 120. I was satisfied with his behavior and medicine.*

I took his medicine for five days. I felt good for a few days but there used to be temperature again in the evening and I started coughing. I went to him once more and Dr. Sultan said to me that my medicine was going to be changed. This time, he [Sultan] gave me tablets and capsules. He [Sultan] gave me a shot as well and prescribed a cough syrup. But it was his honesty that he charged Rs. 120 although he had given me capsules.

I was not getting better and I went to a private doctor [forgot his name] at Sunny Bank. This doctor welcomed me in a proper manner. The compounder asked my name, age, and address to fill in the prescription pad of doctor. The compounder checked my temperature and blood pressure and wrote something on that prescription pad.

This doctor was originally employed in civil hospital [THQ] and I remember his conduct in government hospital at the time of the visit of my daughter-in-law to civil hospital [THQ]. Last month, I took my daughter-in-law to civil hospital [THQ] for some checkup. There was a rush of patients and a number of patients were waiting for their turn. I cannot forget the difference of conduct of this doctor at civil hospital [THQ] and at his private clinic. He had not bothered to check the temperature and blood pressure of my daughter-in-law. The doctor had just asked about health and had prescribed some tests and medicine for her.

In private clinic, however, that doctor examined my throat with a torch and gave a lot of respect. He charged Rs.200 for his fee and prescribed medicines. I had to purchase medicines from his medical store. And in total it had cost me Rs. 550. Now you look he had not given me an injection and I had to pay for a medicine separately. I was considering him a good doctor but his medicine failed to cure my disease.

It was almost a month in sickness. My friend [Babar] asked me to visit Samli Hospital. I told him that I was not suffering from TB because it was never ever in my family. I told Babar that Dr. Sultan was very competent and would fix this minor disease. And you know, Majid, men get minor diseases and I told my friend that as a man I don't bother this disease.

After visiting doctor of Sunny Bank and taking his medicine, I was interested to again visit Dr. Sultan, but it was Babar who pushed me to visit Samli Hospital.

Brother Majid, you are going to Samli Hospital and you are aware of the practices of doctors at Samli [Samli Hospital] . . . I went to Samli and had to wait for a long time for my turn . . . the interaction with the doctor was very unsatisfactory. There was a distance of a yard between me and doctor. He even did not look at my face. No fever check, no blood pressure check. It does not cost to speak well to people. I was coughing and he said in a very angry way that why I was not putting the mask. I could not utter a single word. Yara Gee [O Friend] set aside everything; the doctor even did not check my pulse. This is the behavior of government doctors.

I was diagnosed TB and I have been taking medicine since then. The issue is that TB medicine is only available at Samli Hospital. If this had been available at the clinic of Dr. Sultan, I would have preferred his clinic. I do not have any choice other than visiting Samli [Hospital]."

This case study of Nisar presented an overwhelming trust in a quack. First, it was respect for patients on the clinic of a quack. Second, the clinic of a quack was not overburdened. Third, it was the application of medical kit of doctor for examining a patient. Fourth, it was psychological impression and satisfaction about the power of medicine. Fifth, it was because of cost-effectiveness and lastly, it was because of access to quack. A respondent said that their family quack was also available on call to examine a critically ill person. The doctors of government hospitals were not prescribing injection for fever and cough, whereas the high potency dose through injection, tablet, and capsules was a timely relief from TB symptoms at early stage.

In the context of medical and clinical ethics (Brody, 1993) had suggested that the word "Power" was to be essentially absent from the vocabulary that scholars of medical ethics had constructed for their discipline. Talking about the implications of these ethics in the context of "Power" beyond the borders of world's most developed countries (Farmer & Campos, 2004) had raised serious questions. But during this

study, it was observed that power was commonly being exercised by healthcare providers and some affluent patients with social capital.

Similar to a large number of TB patients of Murree, Nisar was also not aware of the fact that TB was an airborne disease. Nisar's negotiation with Babar and considering TB as a genetically transferable disease presented his limited knowledge and information about the spread of disease. Moreover, Nisar was not aware of the availability of TB treatment in other government TB centers in Murree. Chapter 4 has talked about trust of patients in Samli Hospital and Nisar's case was not different from earlier discussion. But, the conduct of doctors in the OPD of Samli Hospital had forced Nisar to wish for having the option of TB treatment from the clinic of Sultan. In fact, the practice of quack through private service delivery for better health had won the battle of Murree by providing a better space to poor segments of society as compared to government hospitals of Murree.

6.4 Cultural Perspective of Health Economy

It was a sunny noon and I was waiting for Azhar Abbasi to conduct a session of his life history. His father's brother Riaz Hussain had a small shop in village Dewal. I usually used to wait for Azhar at Riaz's shop and used to have an informal discussion with Riaz. On that day, Azhar was unusually late and I had to wait for 45 minutes. Riaz Hussain offered me tea and I postponed it till my return. I promised Riaz to have tea after a session of life history with Azhar and as a surety, I placed my bag in Riaz's custody. Azhar came and we walked to a nearby quiet place.

After spending an hour and almost fifty minutes, we returned to Riaz's shop. We had an informal discussion on the behavior of doctors in their private clinic and in government hospitals. Riaz was 70 years old and a very interesting personality. Riaz had been driving a Bedford truck in his young age. During that discussion, Riaz quoted two cultural metaphors to make me understand this indifference in behavior of a doctor on his private clinic and during his job at a government hospital. Riaz Hussain said,

> *"I have traveled to all areas of Pakistan. I have been driving Bedford truck for more than thirty years. I have been transporting mangoes from South Punjab to Fruit and Vegetable Market of Islamabad. South Punjab*

is the land of agriculture and in past people used to do cultivation on their land for their bread and butter. There is a saying,

اُتم کھیتی مدھم بیوپار . . . نکھد چاکری بھیک خوار'

'Higher is agriculture followed by business . . . disgusting is job and begging is curse'

There was a time when respect and repute was associated with agriculture and second to agriculture was business. Nokari [Job] was considered as a disrespectful profession. And begging was a curse. But now Nokari [Job] is everything."

It could have been easily understandable that over a period of time, the trends of life had changed and a well-respected occupation of life had turned into disrespect. *Nokari* (Job) was based on formal education and had given an institutional support and a sense of power to individuals. The formal knowledge of doctors and their institutional affiliation had given the power to be exercised on dependents; the patients. Talking about *Nokri* (job) Riaz Hussain said,

"Nokari [Job or service] is from [word] Nokar [servant] and how much rich you are you will remain a Nokar [servant] during your Nokari [Job or service]. In fact, every laborer [employee] is a Nokar [Servant] either working in government or private sector in Pakistan. Every Mulazim [Servant] works to get paid. And Nokar [Servant] has nothing to do with the loss of Maalik [owner]. During Nokari [working hours], the doctors pass time and have no concern with the satisfaction of people.

You were talking about the private clinic. Listen, it [private clinic] is a Dukan [shop]. It was a very common saying among our forefathers that Dukan [shop] is with Darri [Care] and Dukan Darri is the combination of these two words . . . before truck driving, I used to work as a Mulazim [Servant] on a shop in Murree and the owner once said to me that Dukan [shop] was with Darri [care] of customers. Now listen, the doctors have to do Dukan Darri [customers' care] on private clinics for their earning. Nobody will visit a private clinic if there is no Darri [quality care] for patients."

This discussion was very helpful to understand the concept of the modern marketing behavior of doctors within the framework of cultural metaphors. The modern trends of education and institutional power had reshaped the existing grading of occupations and respect. The new grading of occupational and institutional power had brought *Nokari* (Job) on the top of newly emerged grading. I have earlier discussed the exercise of power through the conduct of doctors during OPD hours.

Dr. Wahid had said that the doctors were merchants in their private clinic and officers in government hospitals. The doctors were doing *Darri* (care) of patients on their private *Dukans* (clinics) for the expansions of their clientele (business). The *Darri* (care) at *Dukans* (clinics) was to satisfy patients to earn more. *Nokari* (job) at government hospitals was being considered to be state's employment where from the doctors were supposed to get institutional and financial benefits. Generally the doctors, during their working hours in government hospitals, were asking patients to visit them in their private clinics.

The case study of Sardar Khan presented in chapter four supports this argument that the government hospitals of Murree had not enough supply of general medicines and the doctors were prescribing medicines of multinational companies to be purchased from private pharmacies. These companies were giving various benefits to doctors. This political economy of health was a barrier to develop a trust based doctor-patient relationship in government healthcare facilities of Murree.

Chapter four presents an ineffective mechanism of monitoring and evaluation of government staff. So, the doctors had no fear of being accountable either by prescribing medicines to be purchased from private pharmacy or by demanding patients to visit their private clinics. Every *Nokari* (job) of *Saith* (businessman) was very tough because of regular monitoring and terms of reference for every job. I found doctors as *Saiths* (businessmen) on their private clinics and were very strict to their supporting paramedic staff.

The availability of doctor in a government healthcare center of Murree did not mean that healthcare or service delivery was good. Besides the availability, a doctor had to be seen in the light of strong and convincing doctor-patient relationship. Second to

non-availability of medicines on government hospitals of Murree, the core reason for lack of trust was a weak doctor-patient relationship.

6.5 Clinical Ethics

In the context of global health, the subject of clinical ethics was being promoted among a number of countries and the developed nations had introduced this subject for formal training of their doctors. Dr. Wahid had said that the subject of clinical ethics was not being taught in government medical colleges during graduation level studies. There was a gap in communication between doctors and patients. The earlier discussed low level of literacy among TB patients was a barrier to express and explain their health issues to doctors. Dr. Wahid had proposed a mandatory training of doctors for developing their communication skills to interact with patients and said,

> *"We have a problem in training method of doctors. We do not give any training to our doctors during their MBBS degree for interaction with patients. Right after completion of degree, we just put our doctors in an emergency. This is a very first interaction of a young doctor with patients, where they are welcomed by the overcrowded situation. In this situation, the doctors do not know how to interact with patients, what are the problems of patients, how to talk to them and what the communication skills are?"*

Medical colleges were a nursery and there was a need to change the existing syllabus by introducing the subject of clinical ethics and communication skills. I have discussed the policy measures in this regards at the end of this chapter. The teaching of these subjects during MBBS degree program could have brought positive changes in managing the issues of doctor-patient relation and (Mukherjee, 2017) has also supported this idea for bridging the gap in this relation.

The element of trust in government healthcare centers of Murree was very essential, which was not only based on the availability of free medicines and doctors but also amicable doctor-patient relation to avoid the risk of further illness among patients. Medical ethics were not being observed as the only chest specialist in Murree, appointed in Salmi Hospital, was to serve total population of 2,33,471 to cure TB. And as discussed in chapter three, the population of Murree had roughly grown

around 60 thousand during last 20 years whereas the healthcare infrastructure had remained almost static. According to (Zaidi, 2005, 2015) over period of time, healthcare structure of Pakistan had been overburdened and the rural population had been suffering more than urban population.

Talking about the history of Structural Adjustment Program (SAP) in Pakistan and Pakistan's experience assessed by Pakistani NGOs, (Zaidi, 2005, 2015) said that Pakistan had been receiving loans from WB and International Monetary Fund (IMF) under its SAP and Pakistan had to cut off annual budget in social sector under their given policies. As a result of this long standing practice of 1980s and 1990s, the governments had not put attention to the development of healthcare structure in accordance with population growth. This had turned into overburdening of OPDs and lack of human resource in the government hospitals. This political economy had affected the doctor-patient relation. Because of overburdened OPD, the doctors were not in a position to give enough time to follow the OPD protocols for satisfying the patients.

During this study, it was observed that both medical and clinical ethics were not being observed as in the case of TB a trust based doctor-patient relation was very fundamental. TB patients were more in need of trust and a welcoming behavior of doctors. Dr. Ameer Haider was of the view that the element of trust could have been strengthened but more concerted efforts were required from the doctors in this regard. Talking about the need for counseling for TB patients, Dr. Ameer said,

> *"The doctors should do counseling of TB patients and should encourage patients for taking regular medicine by saying that TB treatment was not only necessary for the life of patients but also for the life of their families and people around them. The doctor should always be polite to patients."*

During interviews with head of hospitals and policymakers, such statements sound very pleasant to ears, but the reality of patient burden in OPDs of government hospitals of Murree did not support such statements. The clinical ethics not only comprised doctor-patient relation, but had included supply of drug administration for poor TB patients. I have discussed poor mechanism for supply of anti-TB drugs in chapter four. As (Farmer, 2010) has claimed that the issue of drug administration is

delay in treatment to millions of patients. It is clear that more human resource and development of new healthcare structure was needed to achieve the targeted goals for better healthcare. In this context, the violation of medical, biomedical and clinical ethics was because of unplanned and ineffective political policies to deal with TB in Murree.

6.6 Barriers to Employment on Remote Healthcare Centers

The government healthcare structure of Murree was facing an issue of vacant posts of doctors and dispensers in Primary Healthcare Centers. First, Murree was not a big city and second, it was located on a hilly terrain. So, doctors and dispensers usually did not prefer to work here. The Government of Punjab had announced Murree as a hard area for healthcare providers and was paying hard area allowance to government healthcare providers as compensation. Even then, the posts of doctors and dispensers were vacant.

Dr. Fatima was in her mid-twenties. She was resident of Islamabad and had completed her MBBS degree in March 2016 from Islamabad Medical and Dental College (IMDC), which was a private medical college. Dr. Fatima belonged to a rich family. Her degree from a private medical college was a key symbol of her economic status. Dr. Fatima joined Samli Hospital as WMO in May 2016 and resigned her job after two months and a few days of employment. During employment, Dr. Fatima used to travel from Islamabad to Samli Hospital on daily basis. Dr. Fatima had resigned her job for multiple reasons. Talking about reasons of her resignation, Dr. Fatima said,

> *"Samli Hospital is highly overcrowded and I had never expected an OPD of 400 patients per day. I got sick of this. Because of rotation two days a week I had to manage to examine 400 patients individually. I had refused to perform my services in ward of the hospital and I was not availing compensatory day off, but I had to manage the load of OPD. And the other reason is long hours of travel. It used to take an hour and forty minutes to reach the hospital and on my way back, due to the rush of traffic, it used to take more than two hours. My health was being affected and I wisely resigned my post."*

Samli Hospital had accommodation for doctors, but Dr. Fatima did not avail this opportunity because of her gender barrier. Her parents did not permit her to stay in the hospital and this was a rational excuse in a patriarchal society. It was Dr. Fatima's gender limitation and unmarried status that acted as a barrier to work in a remote TB care center. She belonged to a wealthy family and her father had spared a car with a driver for her pick and drop, but even then she had to pay around Rs. 20 thousand per month for the fuel of car out of her pocket.

Dr. Fatima wanted a job in a government hospital of Rawalpindi or Islamabad. The experience of not being able to manage highly overburdened OPD of Samli Hospital compelled her to withdraw herself from that situation.

Dr. Ejaz was native of Rohillanwali[39], District Muzaffargarh and had completed his MBBS degree from Rawalpindi Medical College in 2015. Dr. Ejaz was Saraiki speaking and resident of my native district. On the basis of this background, I had developed a good rapport with Dr. Ejaz and he had been a good source for developing my trust with staff of Samli Hospital. Dr. Ejaz belonged to a middle-class family and had the responsibility of educating a younger brother and two younger sisters.

Dr. Ejaz had joined MDR-TB Center of Samli Hospital as Medical Officer. Dr. Ejaz was working as project staff of PTP. Dr. Ejaz was not interested to work on BHU level and according to him, BHUs had not enough facilities to utilize his expertise. Dr. Ejaz used to serve at MDR-TB Center of Samli Hospital from 08:00 A.M. 02:00 P.M and after that he used to work at Abbasi Hospital[40] situated at Sunny Bank, Murree. Dr. Ejaz said,

> *"I am not interested in doing a private clinic here because I had not planned my future for Samli Hospital. It takes a lot of time to develop the trust of patients through private practice to earn more. And professionally, it is not good to move out after having considerable clientele."*

[39] A small town situated in District Muzaffargarh

[40] Abbasi Hospital was a most famous private hospital of Murree. It was situated at Sunny Bank, Murree city.

Dr. Ejaz wanted to continue his further studies in the field of Medical Sciences. He was preparing for his FCPS[41] examination. He was very sick of limited social interaction in an alien culture. Dr. Ejaz shared his plan for further studies and reasons for not doing work with PTP at MDR-TB Center of Samli Hospital as:

> *"I am moving according to my plan. I applied for this job with a hope to get an offer letter. I had a plan to do FCPS in Medicine. This job is very easy and there is no patient burden in my section [MDR-TB Center]. I find enough time to take rest and study. I will quit the other job three months before my FCPS examination and will resign this job as well by the end of September this year only if I remain successful in examination. Hope I will save enough money by doing these jobs to meet my needs. I will start FCPS training and will get enough pay to manage my needs. There is no future for me at this center. It is a project and there is no further promotion in this job. Even after serving for ten years, I will be working as Medical Officer. So, I think I should develop myself professionally and should think in futuristic perspective."*

Dr. Ejaz was of the view that doing a job in a remote healthcare center for longer duration could put the career of a doctor at stake. Dr. Ejaz wanted to further develop his abilities and to secure a bright future. It was his dream that had come true and he had passed his FCPS examination and resigned his job in September 2016.

It was the failure of NTP and PTP because the program had not developed a clear-cut Terms of References (ToRs) for the post of MO. There should have been a mechanism for long-term engagement of doctors in the program. Ineffective policy measures were observed as barriers for the attraction of doctors. The Government of Punjab and Health Secretariat also failed to win the attention of doctors for working in remote areas of Punjab and particularly Murree.

Married and non-resident doctors of Murree had some different reasons for not working in remote government healthcare centers of Murree. Dr. Salam was MO in BHU Kali Mitte, Murree. He was resident of Murree and used to do private practice at

[41] The Fellow of College of Physicians and Surgeons Pakistan (FCPS) is a postgraduate degree awarded by College of Physicians and Surgeons Pakistan to completing specialized training in chosen area of specialization and passing the examination in that specific specialty.

Jheeka Gali. Talking about limitations of married and non-resident doctors of Murree for working in government healthcare structure of Murree e.g. hard area, Dr. Salam said,

> *"Murree is a hard area and its life is more costly and difficult than other areas of Punjab. The doctors do not prefer to work in BHUs of Murree because modern facilities of life are not available in Murree. The house rent is very high. Load shedding is the first issue; gas is being supplied in Murree city and education facilities are not satisfactory. Lack of facilities makes life troublesome in winters. The kitchen items are costly here . . . the nearest big city is Rawalpindi and if you settle your family in Rawalpindi, you will have to visit Murree daily and it is very expensive. Every doctor wants to do his private practice, whereas the opportunities for private clinics are very limited."*

The most disturbing reason for not working in remote healthcare centers was economic interest. Officially the government had not analyzed barriers to working of doctors in remote healthcare centers. According to Dr. Wahid, the government salaries were very low and doctors could not meet their miscellaneous expenses. Talking about newly adopted policy to fill the vacant posts in all remote healthcare centers of Punjab, Dr. Wahid said,

> *"Most recently, a new policy has evolved to fill the vacant posts in all remote healthcare centers of Punjab. According to the policy, it will be mandatory for every medical graduate of Punjab to work in Primary Healthcare Center of Punjab before getting a job in a DHQ or tertiary care hospital. This policy is underway and would give positive results."*

Young Doctors Association (YDA) Punjab had protested against this new policy of Government of Punjab. They were of the view that it was not possible for a doctor having specialization (postgraduate) degree to serve in a BHU or RHC because primary care health centers did not have enough facilities to utilize the expertise of doctors with specialization. YDA had claimed this new appointment policy of Government of Punjab as a blind law and considered it as spoiling the skills of doctors having postgraduate degrees.

Dr. Wahid was of the view that there were multiple barriers for doctors to work in remote areas and had proposed to get consent and willingness of doctors before their posting or transfer orders. Talking about the barriers to extending services in remote healthcare centers, Dr. Wahid said,

> *"If I have family settled in Lahore and I have been transferred to Mianwali, how will I work in Mianwali? I have all my practice in Lahore and this temporary transfer would hurt my income through a private clinic. So, I will definitely find my sources [political social capital] to call off my transfer and I might consider bribe as a way out.*
>
> *The other reason is gender. The women do not prefer to work in remote or far-flung areas. Women prefer to work in their own district and on the other hand, the PPSC*[42] *[Punjab Public Service Commission] does ask to issue posting order for whole Punjab. So, owing to certain types of insecurities the women generally either not join or resign their job after few months of joining."*

This debate has helped to find economic interests of doctors as a most vibrant barrier for not working at gross roots e.g. BHUs, RHC and THQ. Although in this regard every barrier had its own worth, yet the financial risks through poor private practice and out of pocket transportation cost were indeed chief reasons among doctors for not working in remote healthcare centers. In reality, the doctors having domicile of Murree had not been interested in doing government employment in Murree.

6.7 Management Issues and Irregularities

A number of management issues and irregularities in government healthcare structure of Murree were observed that posed a barrier to providing equal, effective and quality healthcare. First and foremost was the issue of local political involvement in hospital affairs and a rift between local and out station staff. The case of political involvement in internal affairs of Samli Hospital has been discussed in chapter four. It had created hurdles for hospital management in weekly and fortnightly rotation of staff.

[42] The Punjab Public Service Commission (PPSC) is a government agency responsible for hiring and administering the provincial civil services and management services in Punjab Province.

The local staffs of government healthcare centers of Murree were very punctual whereas the out station staff were not regular and used to avail maximum sanctioned and unsanctioned leaves. They often arrived late at work. Dr. Wahid was of the view:

> *"Local staff of the hospitals and health centers do not provide up to mark service because of two reasons. First, being local to the area, a doctor has some popularity and has some private practice. For a doctor, government hospital is a pool up area where from he has to attract affording patients to his private clinic. Second, being local, he politicizes the work environment. There is political interference everywhere and the local staff makes all-out efforts for not settling the out stationed staffs. In the remote area, there is a great level of political interference. The local doctors consider every new appointment of the doctor as shareholders of their private patient pool."*

The preference to operate private clinic was not confined to local staff of Murree only; every government doctor wished to earn additional income through private means. Along with overburdening of OPD, this was also one of the reasons for poor service delivery of government hospitals because the doctors had more interest in their private clinics and wanted to save their energies for their private clinics in evening. Under the concept of political economy, it was closely observed that these choices of public and private healthcare had turned into low trust in doctors on government healthcare facilities. A similar case study of Dr. Sehrish has been presented in chapter four and supports this argument that as a result of political economy, people had more trust in private health delivery.

The local staff of the area had strong political backing and the management of hospitals lacked the moral courage to exercise its institutional power to deal with misconduct of local doctors. The staffs of Samli Hospital were divided into two groups i.e. Abbasies and Rajas. The only chest specialist appointed in Samli Hospital belonged to Abbasi group and was for most of the time absent from his duty and the hospital management had never issued a show cause notice for his absence. The chest specialist was of the view that he had extra responsibilities. So, he had to do a number of tasks. This situation had created unrest among Medical Officers of Samli Hospital. Dr. Harris said:

"He [chest expert] is being paid for nothing. I expect him to share the burden of OPD. And actually, he examines his private patients [referrals] during his OPD hours. He wants us to send to him TB cases for the second opinion. He had never shared the burden of OPD even for an hour."

Absence from duty was not confined to the specialist only. Other staff of Samli Hospital, too, used to be found absent from their seats during working hours and similar practices were observed in all other government healthcare centers of Murree. Social capital was also a contributing factor in the absence of staff from their seats during OPD hours. Local staffs of Murree were the social capital of patients to get easy access to healthcare. The staff used to provide their services to their acquaintances and used to give personal favor by accompanying them to other sections of the hospital and get the job done. This absence of staff was a barrier to equal healthcare for those who had not been holding the currency of social capital.

Among the list of irregularities, the prescription of paramedic and non-paramedic staffs (other than doctors) and role of dispensers as helping hands of doctors during OPD hours cannot be underrated. These practices had developed a psychological impression of dispensers and lower staff on patients who considered dispensers and lower staff as doctors. This had transferred the power of doctors to dispensers and patient, felt even more dependent. The TB patients had considered TB facilitators of three TB centers of Murree as doctors. Every patient had been addressing *"Doctor Sahib"* to TB dispensers of Samli Hospital and TB facilitators of THQ and RHC hospital. TB staff of government TB centers of Murree had never taken any step to correct the patients.

6.8 Malpractices in Government Hospitals

Malpractices had a very close relationship with the trust of patients in service providers and government healthcare centers of Murree. The exercise of power was evident through the moral and ethical corruption of staff of government healthcare centers of Murree. I had not found any documented evidence of financial corruption in government hospitals of Murree. The moral corruption was evident from not being present during duty hours. The prescription of medicines to patients by dispensers was

a clear legal corruption. The job of a man who was not assigned to a post and doing it against his ToRs was a kind of malpractice.

The cases of BHUs, RHC, THQ and Samli Hospital, where peon was giving injection, dispenser examining patients, peon working as a lab technician, X-ray technician and lab technician working as TB facilitator and ward boys serving in TB dispensary respectively was a criminal negligence in a corrupt environment. In such foul placements of staff higher authorities of said government hospitals and health department were equally responsible. In this case, the poor and ineffective role of political economy of health was easily observable as there had existed acute shortage of skilled human resource in government hospitals of Murree.

The favors on the basis of social capital were also malpractices. The concept of equality was total flop due to utilization and exercise of social capital. Other than this, the extension of social relations to women was against the norms of this profession. Such malpractices were being carried along only because of certain forms of power and conversion of currency of social capital among staff in government hospitals of Murree. All of the existing malpractices were resulting in cessation of trust of people and had resulted in causing greater risk to health of poor segments of Murree. This was also one of the reasons for the continuous spread of TB in Murree.

Above all, malpractices of political economy of health were also observed (Han, 2012; Sachs, 2004) had demanded developing countries to scale up public health investment as there was insufficient human resource for health in Murree. It has been considered a key component by (J. Y. Kim et al., 2013) for impediment in betterment of health. It was most frequently observed that the ratio of healthcare workers in government hospitals of Murree as compared to numbers of daily OPD visitors had illustrated the disequilibrium.

6.9 Policy Measures

Existing healthcare structure of Murree had not emerged overnight but had a context and historical past. The history of TB and TB-control program in Pakistan discussed in chapter four and earlier discussion on outcomes of SAP has helped to understand the gradual downfall of overall healthcare structure in Murree. Likewise, a trust based doctor-patient relation could not be materialized. So, in order to develop the element

of trust through providing quality healthcare facilities in the government healthcare centers, there was need to address earlier discussed forms of power and to overcome existing irregularities and malpractices.

These gaps in clinical ethics had emerged from the nursery of healthcare system. Medical colleges and universities were the nurseries for producing doctors. Dr. Wahid had identified institutional gaps that had started from the absence of training of healthcare providers. Besides this, there was a psychological impression of the social and institutional status of a doctor among government healthcare providers. Talking about the methods of formal teaching, Dr. Wahid said,

> *"I think this is the failure of formal teaching methods to doctors. We are not giving proper training to medical graduates to communicate with patients. But if we start a subject of communication skill, even then this situation will not get better because of a number of other factors."*

One among other identified hurdles for bringing change in the existing system for the facilitation of patients was selection criterion and induction training for the post of a doctor. Before joining Samli Hospital, Dr. Faitma had considered her job very easy and enjoyable. Dr. Fatima said that she had not been provided any induction training before her joining. Induction training was essential in every filed. But the response of Health Secretariat Punjab was in favor of induction training for all staffs of hospital but practically nothing much had been done. Talking about the effects of formal induction training of doctors and other staffs of hospital, Dr. Wahid said:

> *"In reality, formal provision of induction training was essential to medical students at the college level to interact with patients. But unfortunately, we are not doing so. Even then we bring change in college curriculum of medical students without introducing the subject of training and concentrate on teaching them the subject of clinical ethics. Induction training was very important and was expected to work as a refresher for newly appointed doctors."*

The policy measures were needed to address the omission of refresher training of hospital staff. There was a logical sequence of gaps that had begun from medical colleges and universities and ended up in absence of refresher courses to doctors. The

doctors of government healthcare centers of Murree were not updated on modern research in the health sector and had no updated knowledge of existing diseases. I have discussed the role of healthcare providers to spread social stigmas of TB in Murree in chapter eight of this dissertation. Social stigmas of TB – being spread among TB patients by TB facilitators and LHWs – were the result of dearth of induction training and refresher training.

The root causes of weak doctor-patient relationship, causes for low trust and exercise of the power of political economy of health were due to overburdening of OPDs and it had never been addressed by policymakers and legislatures. Dr. Wahid was in favor to change the work environment in OPDs and said:

> *"First of all, we need to change the environment of hospital OPD. It will be beneficial for both doctors and patients. Suppose a doctor has the capacity to examine maximum 20 patients and we have put a burden of 100 patients per day then there will be no quality healthcare service. The debate we were having about clinical ethics, induction training and refreshers courses will remain no more effective in anyway until and unless the issue of overburdened OPD is not properly addressed. If you bring well-trained doctors in this current situation [overburdened situation] even then the doctors will keep on resigning."*

There was a need to develop new healthcare structure to cater for the needs of the swelling population. Besides this, existing government healthcare structure was in need of improvement. The overburdening in the OPD could have been addressed only in following ways. The poor segments of Murree used to work as daily wagers during OPD hours of government healthcare centers and used to miss the opportunity of free healthcare from government hospitals. A visit to government hospital in daytime was to sacrifice one day wage. So, the underprivileged segments of Murree used to visit quacks that were present in their close vicinity and were available in evening. Talking about the importance of local factors which include climate, labor market characteristics, and demographic trends to study the pattern of disease and access to healthcare in any given setting (J. Y. Kim et al., 2013) has supported the findings of this study that suggest that there were multiple structural barriers to have access to healthcare in Murree.

There was a need to introduce evening clinics in government healthcare structure of Murree. The emergencies of THQ hospital and RHC were open round the clock but were not providing OPD service. The introduction of evening clinics in existing government healthcare structure of Murree was essential to serve a large number of patients either left unattended or those who do not find time in the morning hours for consultation in government health centers. This would also essentially discourage quackery in Murree.

Dr. Wahid was in favor of giving attractive packages to doctors for working in remote areas. He was of the view that doctors were not satisfied with their job, pay package, facilities, and work environment. Dr. Wahid said:

> *"We cannot expect an exemplary healthcare service from a doctor who is not financially and psychologically satisfied. The work environment of Shaukat Khanum*[43] *gives a perfect mental peace to doctors, whereas in government sector, a doctor becomes patient by dealing with 100 to 150 patients daily and sometimes even more than this."*

Dr. Wahid had connected every issue of government healthcare structure with overburdened OPD. The resignation of Dr. Fatima was also the result of overburdening of OPD of Samli Hospital, an unattractive pay package and refusal of her parents to stay in hospital for night duty. The given example of Shaukat Khanum Hospital in the context of facilities for doctors was a wrong comparison by Dr. Wahid because a government hospital cannot be compared with a charitable hospital. The discussion in chapter two has presented the motives of Neo-liberal Economists for developing a trust in private healthcare delivery. The comparison made by Dr. Wahid was in the context of an earlier discussion in chapter two and supported private healthcare structure.

Apart from policy measures discussed above, there is a dire need to empower and strengthen local government of Murree. Chairman Union Council Tret, during an

[43] Shaukat Khanum Memorial Cancer Hospital and Research Centre is a chain of research-oriented tertiary level oncology hospitals in Lahore and Peshawar in Pakistan. It was Pakistan's largest cancer hospital and its home to the largest radiation oncology center. The hospital was built and founded by Imran Khan in 1994, Pakistani cricketer-turned-politician, with the vision to make cancer treatment accessible to every citizen of Pakistan, regardless of his/her background.

informal discussion, had suggested that the government should either give funds for health to local governments or they should have power to audit the annual expenditures of hospitals. The idea of this gross level accountability was impressive, where not only local electables but also the state institutions were accountable for quality healthcare delivery.

6.10 Elimination of Power

It was essential to eliminate the concept of power in existing government healthcare structure of Murree. There were some basic reasons for the frivolous behavior of doctors at government healthcare centers. Dr. Wahid had presented five key elements for the elimination of power. First, for the elimination of power, it was required to introduce a proper referral system in government healthcare structure of Murree. Second, the service delivery providers such as doctors and supporting staff should be provided attractive pay package and good work environment. Third, the private practice (clinic) of government employees (doctors) should be banned. Fourth, the government hospitals should be fully equipped with modern diagnostic technologies and facilities. Fifth, there was a need to start regular refresher training for doctors and supportive staff during service so that the healthcare structure might update skills of doctors.

In reality, the elimination of power was not possible, but ideally, it could be reduced to a minimal level. The balance of power was also a good idea by giving education to poor segments of Murree, but in this context no mechanism had been evolved as yet. All existing elements of power were required to be addressed including social capital. Doctors' social capital was also an element of existing malpractices and be discouraged. The reduction in power was linked to boosting trust and limiting risk among patients in general and TB patients in particular. The cut in power would have enhanced trust among TB patients and the existing level of risk in healthcare could have been minimized.

6.11 Social Health Insurance

Dr. Saira was Chief Executive Officer (CEO) of Prime Minister National Health Program in Punjab. She had done her MBBS from King Edward Medical University Lahore and her Ph.D. in Health Economics from Oxford University, UK. During my

meeting with Secretary Health Punjab Najam Shah, I was directed to meet Dr. Saira to know about Social Health Insurance Program of Punjab. Dr. Saira was very accommodating and spared an hour and thirty minutes for the interview. Dr. Saira gave very valuable information about Prime Minister National Health Program.

Prime Minister National Health Program was inaugurated on December 30, 2015, and was launched from Islamabad. This interview was conducted in December 2016 and after one year of launching of the program in Islamabad, it was initiated only in one district each of Baluchistan Province, Gilgit Baltistan, and Azad Jammu & Kashmir. In Punjab province, this program was initiated in July 2016 and Dr. Saira was its first CEO. The program was launched as a pilot project in 4 out of 36 districts of Punjab. There were 6 UCs selected from each of the Districts Rahimyar Khan, Khanewal, Narowal, and Sargodha. The family was unit of enrollment. As discussed earlier in chapter one and four of this dissertation that after 18th constitutional amendment health had become provincial subject and 70 percent of the program was being financially contributed by Punjab Government and 30 percent by the federal government.

Before the launching of this program, there was no attraction for poor segments of the province to access Medicaid for specific diseases in government hospitals of Punjab. There were problems in selection of deserving families because the program was following poverty data of Benazir Income Support Program (BISP) through Proxy Means Testing (PMT) that was conducted in 2009. A formal sector was missing for better functioning of the program. Mentioning the first level problems for expansion of program, Dr. Saira said:

> *"We have problems at the policy level and financial sustainability is a barrier. Social health insurance schemes become successful ONLY IF we have a vibrant risk sharing or pooling which does not exist here. The total budget is being provided by the government and I think it would not work for long."*

Ideally, the concept of risk sharing or pooling was linked with affluent segments of the society who were supposed to share the risk with poor segments. But this program was limited to poor segments of the society and the total financial pool was so poor

that it did not have the capacity to share or combine the risk. So, it was looking forward to government funding and the salaries of the employees were also paid by government. Dr. Saira was of the view that this sort of health insurance for all poor population of Pakistan was very expensive and its implementation was just an illusion. Talking about the program, Dr. Saira said,

> *"We give social health insurance for indoor facilities. We give transportation charges so that the individual may reach the hospital, and we give medical cover there. The amount of Rs. 350 for transportation is not for visiting OPD. The patient gets admitted and this money is handed over at the time of discharge. Hospitalization is needed to very few people in extreme cases. In routine cases, they [patients] need OPD, now we are starting health insurance for OPD very soon and it is in progress."*

The selection criterion for beneficiaries of this program was ineffective and had left out a large number of real beneficiaries during the pilot phase. No poverty survey had been conducted by the program so far. Data for BISP was collected in 2009 and had become obsolete. Second, the program had taken into account very few diseases to be covered through financial aid. Most importantly the program had been initiated only in 24 UCs of 4 out of 36 districts of Punjab, and Murree was not included in the pilot phase of project. As Dr. Saira had said that program was being funded totally by Punjab and Federal Governments. So, its life had become questionable.

The respondents of this study were not aware of public or private health insurance schemes. During life histories, the question about the knowledge of health insurance was asked and the respondents said that they had heard about "*Beema* Policy" (Life Insurance) and this was for the first time they were listening to the name of health insurance. The respondents had a very little understanding about life insurance. They were of the view that in "*Beema* Policy" people were supposed to pay annual installment (premium) for Life Insurance and at the end of scheme, they were supposed to collect more money than they had paid. And if they died then their beneficiaries were paid a handsome amount. The respondents were not aware of the launching of Prime Minister National Health Program. The program had faced social stigmas as Dr. Saira explained:

"In the beginning, the name of this program was 'Prime Minister's Health Insurance Program' and people had perceived that they would have to pay the premium for this scheme. Later on, the program was renamed 'Prime Minister's National Health Program' and keeping in mind the issue of name and local perception, we renamed Health Insurance Card as 'پکلستان صحت کارڈ Pakistan Health Card' so that the concept of insurance and premium might get gelled in the minds of people. There are some social stigmas attached to this Pakistan Health Card. The cardholders had thought that they would insert their Card [Pakistan Health Card] in ATM and would get the money. Cardholders had perceived that by not using this card for one year, they would get the total amount of money at the end of the year."

The respondents claimed that insurance companies did fraud and did not reward the people. The people of Murree had considered all types of insurance programs as "*Haram*"[44] because of religious reasons. Prime Minister's National Health Program started a campaign in collaboration with local NGOs of selected districts to address the issues of Social Stigmas. The beneficiaries of the program were told about the perfect utilization of card. The program did not support TB patients. Talking about the extension of program and its effectiveness for reducing TB incidents, Dr. Saira clarified:

"This program has no role to reduce the incidents of TB and it does not provide cover to TB patients. But next phase of this program will be extended to OPD and TB will be covered only if the patient has complications because of TB. But it is too earlier to talk about considering TB under this program. The visits of TB patients to get medicines cannot be considered. However the complicated stage where hospitalization is required can be part of this program."

TB control through Prime Minister's National Health Program was only possible if the health program provided free hospital access. The existing program did not provide transportation cost to visit OPD. Dr. Saira was not sure if provision of

[44] *Haram* is an Arabic term meaning "forbidden". In Islamic jurisprudence, *haram* is used to refer to any act that is forbidden by Allah.

transportation cost to poor and destitute of the society was possible for visiting OPD in the revised program. She was very confident about the expansion of the program for addressing all sorts of diseases. Dr. Saira had said that the program was covering the cost of hospitalization for some specific diseases, but the expansion of program aimed to cover the cost of ordinary disease as well. Talking about the effect of revised program on TB incidents, Dr. Saira made it clear:

> *"Through adding OPD, the program will have a direct effect on TB patients. Let's say if we give easy access to OPD by providing transportation cost to beneficiaries of the program, the poor segments of the society will start visiting OPD of government hospital or affiliated private hospitals of the program. If a patient is poor and cannot visit a hospital in the daytime because of his engagement in daily work but can go to the OPD of a private hospital in the evening and knows that he will be paid for this transportation and he will not have to pay out of his own pocket, this change will be observed in his behavior as well and this behavior will bring him to the hospital at the start of cough or the early symptoms of TB."*

This was a hypothetical statement of Dr. Saira because an initial blueprint of revised program had been developed that did not cover transportation cost. Chapter four of this dissertation has discussed the issue of transportation cost for TB patients. Although Dr. Ameer was in favor of providing a minimum transportation cost to TB patients for visiting OPD, he was not sure about its source of funding and mechanism. On the other hand, Prime Minister's National Health Program was totally dependent on government funding, and its funding could have been suspended or reduced at any time. The program was in the pilot phase and had not covered total districts of Punjab. So, it was impossible for government to take care of large population. Chapter four has discussed the response to the financial commitment of government to overcome TB; likewise, Prime Minister's National Health Insurance Program was not being provided with required funds to run it smoothly.

Prime Minister's National Health Program could face political retribution issues after transfer of power to next elected government. BISP was initiated in 2008 with funding from international donor agencies to eliminate poverty from Pakistan and had been

continued during the government of PML-N; whereas Prime Minister National Health Program was a political point scoring of PML-N and could be in danger of suspension by the next government of any other political party of Pakistan.

6.12 Analysis

Generally the trust in a government healthcare center and trust in a doctor were two different dimensions, but ideally, both sorts of trusts were inter-linked. The trust in government healthcare centers of Murree had been discussed in chapter four and the patients and policymakers had considered non-availability of medicines as the core reason for low trust. The doctors were a compulsory part of government healthcare centers of Murree and their conduct was most important for developing the trust of patients. Although overburdening of OPD was a basic reason for all of the malpractices and transgression, yet the doctors lacked the element of patience during their duty in government healthcare centers of Murree. OPD was first level interaction of poor patients with government healthcare facility, but unfortunately they had very bitter experience when they got humiliated and discouraged irrespective of their age groups and gender.

There were multiple components affected by doctor-patient relationship and not identified one could be singled out. All of the components overlapped each other. A visible difference in doctor-patient relationship could be discerned in a government healthcare center of Murree that was pitiable and in a private clinic of a doctor or with quack that was by all means submissive. This difference was based on political economy of health which had created a wedge between affording patients as respectful and un-affording as a burden. This categorization of patients was on the basis of their economic status. At the grass roots, it was individual and a household economy that was a determining indicator of doctor-patient relationship.

Education plays a vital role and shows how economy is manipulated by the individuals in Pakistan. So, the doctors had trapped the patients through their lack of medical education and compelled them to visit their private hospitals. Mostly the doctors blame poor patients for being illiterate when they encounter them in public hospitals but the behavior of the same doctor reverses in private clinics, and they are more gentle and responsive. The variance of behavior of medical staff was because

they received extra financial benefit that could meet their needs in a comfortable manner. Moreover, print and electronic media also encouraged the private business in health sector. Beautiful buildings, well designed interior and clean environment of the private hospital projected in the media had promoted private healthcare that was manipulated by the political economy framework in Pakistan. All this had developed a social psychology of the society that private hospitals were better than public health centers. Educated segment of the society had projected private health centers and flow of rumors about the private health centers were also playing a crucial role in creating hurdles for the health of poor patients.

The cultural construction of reality had considered private clinic of a doctor or a quack as a *Dukan* (shop), where a shopkeeper (doctor) was more interested in the multiplication of his income through utilization of skill. The concept of private business (private clinics) had shaped the behavior of *Dukan Dars* (shopkeepers) among doctors to provide a quality *Darri* (care) to their customers (patients) for expanding the network of their business (private practice). A quack was more trustworthy than a doctor of government healthcare center of Murree. It was the symbol of trust in private healthcare delivery. Poor economic condition of TB patients was a barrier to their access to private doctors. Otherwise, they, too, had wished for quality healthcare.

Apart from overburdening of OPDs, the absence of formal training of doctors had an effect on doctor-patient communication on government healthcare centers of Murree. This was a very weak argument because an individual had dual personalities in two different spaces i.e. government hospital and private clinics. The patients during their visit to OPD of government hospital were government guests whereas a patient in a private clinic was a source of income. It was not possible to overturn this behavior of doctors on government hospitals, but a subtle difference of behavior was possible only through managing the workload of doctors.

There was need of healthcare reforms for addressing the issue of overburdened OPDs. Former governments had not addressed the need to expand healthcare structure and failed to address the ever-growing issues of healthcare and quality service delivery. Moreover, the barriers for working in remote areas and BHUs were not addressed through policy-making and legislation. Governments remained unsuccessful in filling

the vacant posts of doctors and dispensers on permanent basis. The idea of the attractive pay package for doctors was against the concept of equal distribution of resources among government employees of the same grade. Attractive pay packages would have brought more economic power among doctors of government healthcare centers. The idea to induct a few more doctors was more practical to deal with a core issue of overburdened OPD than offering attractive pay packages.

It was political social capital and political interference in the affairs of government healthcare centers of Murree that had opened the doors to types of irregularities and malpractices being committed by doctors and staff of government hospitals. This issue was not new and had not emerged overnight; rather it had sustained since long but had neither been addressed by administration of government hospitals of Murree nor had the policymakers in the headquarters ever thought about it.

A debate with Dr. Wahid on policy measures was very imaginary. There was a question to take initiative to introduce new implementable, rational and patients friendly policies for change in existing healthcare structure of Murree. The policymakers and legislators had least interest in addressing the long standing health issues of poor segments of the society. There were excuses for the availability of budget for healthcare and quality service delivery. The health agenda had never been a priority of political campaigns during elections which meant that health as one of the most pertinent social sector could not gain the trust of the governments nor momentum to get its feet firmly grounded.

Prime Minister's National Health Program was conceptualized in the larger interest of the population but it lacked substance and means to lift off the ground. It had failed to gain the credibility of the poor segments of the society and it hardly brought any tangible change line an increase in the number of patients in OPD. This program was ineffective because the government had not enough money to take care of 36 districts of Punjab. This program was just a political point scoring of PML-N to gain popularity among poor segments through media campaigns. The first and the most fundamental issue was the barrier to visit OPD that had not been addressed by the government. Although trust was a barrier to visit OPD of government healthcare centers of Murree, the element of poverty and unaffordability could not have been

underrated. Health for the poor was being badly affected because of this barrier and was on the decline and without any ray of improvement.

Chapter 7

ANALYZING SOCIAL CAPITAL THROUGH PUBLIC PARTICIPATION

The literature on social capital discusses various methods for its measurement through community and public participation. This chapter analyzes social capital by following the criterion of measurement and also answers very important questions of this study; that how far health in general and TB in particular was being negotiated in existing community spaces; role of community spaces for developing social capital and its utilization for seeking better healthcare among poor and marginalized segments of Murree; and nature of social exclusions and its impact on health of poor segment of society. This chapter is divided into four parts and has analyzed social capital both qualitatively and quantitatively. First part of this chapter explores types of existing community spaces for both men and women separately. The second part presents barriers to existing community spaces. The third part evaluates variables of social support and social connections. Part four has presented a level of social capital by analyzing social participation and variables of social capital.

7.1 Community Space

During this study, public forums for gathering of households in neighborhood, residential areas, city or other areas within public realm which had helped people for social interaction for the development of social capital were considered as community spaces. A community space is the pulse of community. The community spaces were generally divided into formal and informal ones. In this study, all community spaces either having formal registration or any formal body of members were considered to be formal community spaces. Whereas all community spaces either non-registered or not having any formal body of members were considered informal community spaces. The following discussion is about existing community spaces in the socio-cultural background of Murree. This discussion has been divided on the basis of gender and has taken liberty to dilate upon existing informal and formal community spaces for both men and women separately.

7.1.1 Informal Community Spaces for Men

Informal community spaces had existed without any formal creation by residents of Murree, governmental or NGOs. Ideally, every informal community space was an open forum to all members of a community or a group for participation whereas the affluent segments of Murree were commonly not a part of such community spaces because of their high social and economic status. Although informal community spaces were open to every individual, certain discriminations had been a barrier for equal access of residents on some of the community spaces. Last part of this chapter presents a detailed discussion on social participation and discusses the effects of exclusion on social capital for better healthcare. In this part of the chapter, I have dilated upon informal community spaces for men.

Informal community spaces for men, where men respondents of this study had or had not equal access to participate, existed in their surroundings. These community spaces were bonding, bridging and linking networks about which (Woolcock, 2001) has said that this connects individual, groups and authority. Such networks could have been developed by men as they were devoid of religious and moral obligations to access to mosques, shrines and tea stalls situated on the bus stops of connecting roads to main Murree Road, village shops, marriage ceremonies, funerals ceremonies, sittings of friends and workplace. These were common informal community spaces of every man respondent of the study.

7.1.2 Formal Community Spaces for Men

Formal community spaces are always created by a group of people having common interests or any formal body a union or an organization. The tool for measuring social capital was applied to know the existence of formal community spaces for civic participation. The literature on measuring social capital (Righi, 2013; Villalonga-Olives & Kawachi, 2014) has emphasized that the existence of higher number of formal community spaces and higher level of participation turns into elevated level of social capital.

The formal community spaces for men were very limited in number including mosque committees, charitable organizations and health committees. The health committee was the only formal community space for a man that was ideally to be created by

every LHW of Murree in their defined areas. Talking about the creation and functioning of health committee Shamshad – a LHS at RHC Phugwari – said,

> *"It is the responsibility of every LHW to create a health committee in her area. Every health committee comprises 8 members. The members of health committee are to be men. The committee has its monthly meetings. We engage men to discuss general health issues such as health and hygiene. The members of health committee are volunteers. They are not given any incentives. The members of committee have the responsibility to share health-related information with other men of their surroundings. The LHWs take meeting minutes of health committee and record in their register. In a monthly meeting [with LHWs], I check the register of every LHW and assign new discussion topics in upcoming meeting of health committee."*

Health committee was supposed to be an open forum for participation without any discrimination. As a matter of fact, this health committee was functional in the registers of LHWs and did not have any function on ground. Freeda had been working as LHW in RHC Phugwari since last sixteen years. Freeda was a in her mid-forties and had five children. Talking about the responsibilities of a LHW and functioning of health committee, Freeda said,

> *"Do not ask about the responsibilities of LHW. There is a long list of responsibilities and you cannot think about it. I have been assigned responsibilities of family planning, antenatal care, safe delivery, EPI, diarrhea, and much more. In short, we have the responsibility of mother and child from the pregnancy of mother until the end of vaccination age of child. In addition to this, we are asked to establish and participate in health committee. I have created a health committee and its members don't have any interest in it as they don't participate. Honestly, I do fill the register and meeting is held. I cannot force members of the committee to participate in meetings because they are not being paid."*

A similar response to the creation and functioning of health committee was documented during interviews with LHWs of BHUs Tret, Kali Mittee and Rawat.

Raja Khaild was in his mid-fifties and was elected Chairman of UC Ghora Gali in local body elections of 2015. Ihsan had helped me to get to Raja Khaild's brother Junaid who fixed my meeting with Chairman on third Saturday of October, 2016. His house was situated on main Murree road. I reached there at 02:00 P.M. to have an informal discussion. The house was adjacent to a big hall where dozens of chairs were placed for guests. There were almost half of a dozen visitors already in the hall. The building displayed the wealth of Raja Khaild. I was offered tea and then Raja Khaild took me to his private room where I had an informal discussion with him. I was interested to know about his information over healthcare issues of his UC. Here, I have shared some of excerpts of that informal discussion:

> *"An LHW visits my house and gives polio drops during polio eradication campaign, but I don't know the number of LHWs in my UC and I think it is not necessary to have information about this because I have many other things to do . . . I am not aware about health committee in the neighborhood of my household, because the LHW had never told us . . . After becoming Chairman, I have never been to BHU Ghora Gali but I have been told that it is working well . . . I don't know the number of TB patients in my UC . . . You are asking strange questions. I guess you are a media person and I don't have time for such silly questions. O friend, we have number of other things to do."*

This informal discussion with Raja Khalid convinced me that local political elite had very little or no interest in brining improvement in health of the people of Murree. After leaving his office, I went to Numbal bus stop to have tea with Ghafoor who was father of one of my women respondents. In response to my shared findings of informal discussion with Raja Khaild, he said that Raja Khalid used to be busy all the time in settling disputes of local people and he had no time for dealing with their health related issues. Ideally, the Chairman should have a close contact with representatives of health and education institutions of his areas and should have been actively involved to work for provision of better healthcare to his community.

The discussions with Raja Khalid and Ghafoor had helped me to understand the reasons for lack of interest of local political elite to deal with health related issues. First, these elected and privileged people of Murree had the capacity to pay

consultation fee to private medical doctors. Second, the people had voted on the basis of caste system and had never demanded solution of their health related issues. The people wanted their local political electable to help in legal issues at Police Stations. Third, the people had not considered their right to health their basic due to their ignorance and lack of knowledge and that is why, they had never made local political leaders accountable for this. Fourth, the elected Chairmen in Tehsil Murree were not aware of their responsibilities especially in the social sector.

During in-depth study through life histories, men respondents revealed that they were not aware of existence of any health committee in their respective villages. Last part of this chapter presents quantitative field data for measuring social capital and existence of formal community spaces for civic participation.

Formal community spaces of school and college were a good source for men to develop social capital in early age, but school dropout rate was high among poor people of Murree. The respondents of this study had low literacy rate. The parents preferred their boys to start earning in school going age. So, they missed the opportunity of education and failed to develop their social capital from schools and colleges. The exclusion from this community space had deprived them of developing skill of formal language to negotiate health at government healthcare center.

There were political community spaces of different local and national political parties. The political community spaces had restricted access to non-registered members for participation in meeting at local level. The respondents of this study had not participated in any of the political community space. Informal and formal community spaces for men were not many in numbers. The discussion, in chapter two, about membership of community spaces presents an argument that existence and participation in a large number of community spaces provides an opportunity to develop more social capital, but the field data has presented very few available community spaces for respondents.

7.1.3 Informal Community Spaces for Women

Informal community spaces for men and women were entirely different. The women used to participate in women specific social gatherings on the occasions of religious gatherings at household or in neighborhood, marriage and funeral ceremonies. The

women had not been freely interacting with men of their caste and clan and had not developed social capital by contacting with men in the village. Most common community spaces among women respondents of this study were religious gatherings, water springs, marriage, and funeral ceremonies. Besides this, the women used to interact with other women of their caste or village during their visit for paying condolence over human or animal loss in the neighborhood. The single woman had been restricted to such visits and to some extent to participate in funeral ceremonies.

Women had least freedom of mobility and were restricted to their homes generally. The married women comparatively had more freedom of mobility. Murree was a patriarchal society and the women did not have the liberty to sip tea at local tea stalls situated on a bus stop and to sit on small village shops for leisure purpose. The women mostly interacted with the women of their neighborhood.

LHW had claimed of visiting every household at least once in a month for the purpose of interacting with the women. During life histories, the women respondents had said that LHW was not frequently visiting them. The women respondents had very limited interaction with LHW of their areas and had been provided very limited health-related knowledge in the context of Maternal and Newborn Child Health (MNCH), but TB related knowledge and information had never been provided to them by LHWs.

7.1.4 Formal Community Spaces for Women

There was no formal community space for women respondents of Murree. LHWs were working under National Program for Family Planning and Primary Health Care primarily for the promotion of MNCH. Under this program, the role of LHW was to visit every household of her assigned area to interact with women of the houses. Ideally, there would have been a separate health committee for women. There women would have freedom of expression to negotiate health issues, but existing documented health committees had selected men for membership and women had no representation. If there had been functional health committees for women, they might have easy access to participate and have fruitful discussion on the social issues. Kalsoom was LHW at BHU Tret and had covered an area comprising hundred and sixty-seven households. Just like LHWs of selected government healthcare centers of Murree, Kalsoom had also created a non-functional but documented health committee

in her area. Talking about the creation of separate health committee for women, Kalsoom said:

> *"I go to every house at least once in a month and talk to women about health. I talk only to women during my visit. Women healthcare is addressed and officially I am not allowed to create a separate health committee for women. I do visit in the daytime and all of the men are not at home. I talk to men in the committee and the members are supposed to share results of the meeting with other men."*

Women healthcare was a sensitive topic and because of gender sensitivity, LHWs used to interact with women in-person or group of women of a household. Under an existing gap in policy guidelines of National Program for Family Planning and Primary Health Care, the LHWs had not created separate health committees for women. LHWs had never shared knowledge and information about causes and symptoms of TB during their so called meetings of health committees and during their visit to households of their respective areas. The register of LHW did not contain any column to document TB related information from her field area. LHWs of Murree denied having any training course about TB disease by any of health-related governmental department or any NGO. The bag of LHWs did not contain any brochure on TB related information for sharing.

Existing political community spaces of Murree had provided assess to registered women members for participation, but the women respondents of this study had belonged to poor families and had no formal membership of any local or national political party. The women respondents had said that they would not have participated in political community spaces even if there had existed any in their surroundings. This perspective of women respondents was based on their liberty to participate in the political sphere of life in a patriarchal society.

7.2 Barriers to have Access to Community Spaces

Different types of barriers had existed in community spaces that were tasked to develop social capital. There could have been a long list of barriers to have access to community spaces, but here I have discussed only existing barriers.

Economic capital was the mother of all types of capitals to participate in all of the formal and informal community spaces. It was out of the question for poor population of Murree to participate in formal political community spaces reason being that economic status of the respondents had become a barrier for them to frequently participate in informal community spaces. I have discussed the case of Zameer in chapter five where his economic preference was a barrier to participate in formal and informal community spaces of the village. During FGD, a respondent talked about his economic limitation for participation in informal community spaces and said:

> *"Either I can sit on the village shop and tea stalls or I can go for work to earn a wage. If I sit on shop [in the village], I won't be able to earn. Belly gets filled with food not with gossips."*

Then need for bread and butter that had given the notion of economic preference to poor segments of Murree had resulted in their low participation in community spaces. The men respondents had a very tough routine to earn their livings. It was observed that men respondents had never preferred to sit on village shops or tea stalls of bus stops to sip tea. During a normal routine, the men respondents preferred to get back home after work. They used to sit on tea stalls or village shops only in their leisure times in the evening. The shops of villages had not enough sitting space. So, there was not great rush of villagers. The married men respondents had always preferred to spend evenings with their families whereas the bachelors used to sit at village shops.

Mazloom Hussain was 51 years old and resident of Salgraan. Mazloom had a fruit stall on Chara Pani bus stop and had a very busy routine. It was a daily routine of Mazloom to wake up early in the morning and leave for fruit and vegetable market of Murree to purchase fresh fruits. By 10:00 A.M., he would arrange his fruit stall and spend his day in his business till sunset. Talking about his daily routine and community participation, Mazloom said:

> *"I have to reach Sabzi Mandi [fruit and vegetable market] by sunrise. I would not be able to find quality fresh fruits if I get late. Everyone in the village is sleeping when I leave home. I have to work till sunset and get back by nightfall. This has been my routine for last 15 years. Before that, I was doing labor and the routine was almost the same. I used to have*

Friday off from labor work, but now it is my own small business and I do not have any day off. In this type of life, it is not possible to spare time for gossip. I do not even go to marriage ceremonies because I will have to close my stall and I do not have enough sale to employee a young salesman. I give money to my wife and son to give to the family of bride and groom and to participate in marriage ceremonies . . . it is socially not good to skip the funeral prayers if there is a death in the village. In such a case, I close my stall partially, participate in funeral prayers and rush back to my business."

Every poor of Murree had a similar economic preference to that of Zameer's or Mazloom's to financially support the needs of their households as a priority. This had been a barrier for the have-nots of Murree who found it difficult to participate in the community spaces. Every respondent had only one constant currency of social capital in the form of membership of caste. This form of social capital had been supporting respondents in a number of ways that I have discussed in next chapter.

The social status of the respondents was based on their income, occupation, and caste. Lower social status of the respondents stopped them from participating in political community spaces. The residents of Murree used to invite local affluent political figures in their marriage ceremonies, but the respondent had never been invited to participate in marriage ceremonies of affluent people out of their caste. The purpose to invite these local political figures in marriage ceremonies was to establish and strengthen a social bond on reciprocal basis. The rich families with higher socio-economic status considered it a prestige to invite local political figures and people of the equal social status of other castes to participate in their marriages.

The marriage ceremonies were not open informal community spaces. On the occasion of marriage ceremonies, sending invitation was a norm. The affluent people invited all members of their caste on marriages but overlooked the out of caste poor segments. There used to be no predetermined sitting plan in marriage ceremonies. The participants had the choice to sit with their close social kith and kin. But it was observed that people of the low economic status of the same caste were accompanying people of equal economic status. Although they had the choice to sit at

the table of local political elite but there existed psychological boundary that had compelled the poor for accompanying the poor.

During this study, Ihsan's father's brother Fateh Muhammad died at the age of 82 years. There was announcement on the loudspeakers of mosques to let people know about the death and timings of funeral prayer. I had received a call from Tahir about the sad demise of Ihsan's uncle. I attended the funerals and death ceremonies. There were hundreds of people for participation in funeral prayer. It was a common custom in Murree that there used to be a huge gathering for funeral prayer on the death of an elder person. It was observed that on this occasion, some people were interacting after a long time. After funeral prayer, the dead body was taken to the graveyard and I spent some time to observe negotiation of the participants. The participants of funeral prayer had been talking to their near ones and exchanging words of goodwill. I was accompanying Tahir and almost after one hour of funeral prayer, I left for Bhara Kahu.

On the third day of death, there used to be a ceremony of *Kul Khawani*[45] and a religious cleric used to give a homily. *Kul Khawani* was also a big gathering and on this occasion, the participants stayed for more time than that of funeral prayer. There was an open announcement on the loudspeaker of mosques to participate in *Kul Khawani*. On the occasion of *Kul Khawani* of Fateh Muhammad, a ceremony was held in Ihsan's village and hundreds of participants were present. There was no pre-determined sitting plan, but the local political leaders were sitting in the front rows. Ihsan's relatives were also receiving and welcoming some notables with high socio-economic status. These guests were offered a reserved sitting space.

During the homily of *Kul Khawani*, the religious cleric in his sermon advised people to be good to relatives. It was a good message for social support and social cohesion. This community space was very influential not only for social connections and developing social capital but also for highlighting the importance of social support. As this was an informal community space, there was no feedback mechanism for cleric's sermon. It was a good source for refreshing memories of participants about

[45] It was a death ritual on third day of death. In this ritual there used to be a large gathering and a religious cleric was asked to make speech. This speech was always for the purpose of social control, with a message to do good to people around. At the end of the speech, there a special prayer was offered for the departed soul and finally food was served.

the importance of the social support of friends, relatives, and strangers through altruism, volunteering, and philanthropy.

After *Kul Khawani,* I had an informal discussion with Tahir on the importance of sermon of Masjid's (Mosque's) prayer leader for developing reciprocity, trust, patience and honesty among participants. Here I have presented excerpts of informal discussion with Tahir. Talking about the effectiveness of sermon, Tahir said:

> *"Although it was a very good sermon, yet this will no longer be effective . . . as humans, we just consider such sermons taken for granted. We think that we will live forever and not die. This is the reason that people do not apply such sermons to their self. It has effect for short duration of time. In reality, in the morning we listen to such advice and forget by the evening. We do not care for our neighbors whether they had one time meal or not . . . deaths do not occur daily and Kul Khwani is also not routine. So, people just want to correct themselves at the time of their own death."*

There was need of continuity of such sermons for bringing an observable behavioral change in the conduct of people towards their social bonds. Religious sermons were very important and were part and parcel of Friday prayers[46]. I have analyzed religious participation in last part of this chapter and have discussed the importance of religious community spaces for developing social capital, its utilization and spread of knowledge on health and general hygiene.

Other than funeral prayers and *Kul Khawani*, death ceremonies continued for seven weeks without fail every Thursday and again a ceremony on the fortieth day of death. Only close relatives of demised person were invited for participation in these ceremonies, for which proper invitations were sent. This informal cultural community space was an effective forum for bringing relatives close to each other to share their stories. It was a common custom in Murree that on the occasion of death, most of the times people used to forgive misconduct of each other which had been a cause of long-standing disputes. A strong cultural support system was observed during death rituals and ceremonies. There had existed a structure of kinship based relations in

[46] Friday Prayer is a congregational prayer that Muslims hold every Friday in the afternoon. Muslims pray ordinarily five times each day where it is not necessary to go to a mosque, but for offering Friday Prayers it is obligatory to go to a nearby mosque and offer prayers in a big congregation.

Murree and according to (J. Coleman, 1994), it was very supportive for the development of social capital between persons and among persons. Because of these structural relations, the people of villages marked arrangements during death rituals and all other ceremonies whereas I had not observed any great financial or social support, on caste based social connections to TB patients during their acute illness.

Offices of the local and national political parties were not much active to hold a gathering on daily basis. There used to be an occasional meeting of office bearers of political parties of Murree. Talking about holding of and participation in political meetings of political parties, Raja Khalid said:

> *"We do not observe regular meetings of our political party. Tehsil level leadership becomes active during elections because they have to do political campaigning. But after elections they become relaxed . . . and I must tell you that it is a very close meeting where only members with given designation participate. This is closed for poor people."*

The political leadership was of the view that people with low political status and financial deprivation were barrier for them to participate in political community spaces of their respective villages and Murree. Every village of Murree was part of a UC, where the elected Chairman of UC had his political office. I have discussed the interest of respondents in political spheres of life in chapter five, and here I am discussing participation in political community spaces. Every resident of a UC had a constitutional right to visit the office of Chairman to negotiate legal issues, and solution to his individual or communal issues. The respondents were not aware of their constitutional rights to sue their Chairman in case of rejection of their pleas and had never visited the political office of their Chairman for not only discussing health but other personal matters.

Although there used to be large a number of meetings of local and national political parties, a formal political membership to enable all people to participate was needed. A case study of Qaisar Aziz in chapter four has discussed his economic barriers to participate in political community spaces. None of the respondents of this study had the capacity to sacrifice his daily wage and to manage out of pocket travel cost to reach and participate in political community spaces.

Geography was a determining factor for mobility of people to participate in all types of community spaces. Earlier chapters have already discussed the issues of mobility due to geographic factor and available transportation facilities. Owing to the barrier of geography, the residents of villages preferred to do necessary travel. Javed was a 41-year-old man and resident of New Murree. Javed was a daily wage laborer and used to get back home by the sunset. There was no fixed workspace for Javed as he used to work on various construction sites of Murree. Talking about the issue of geography and mobility, he said:

> *"After spending a day doing labor, I get back home. On my way back, I stop for a few minutes at Khadim's tea stall where I occasionally take tea. If someone known to me is sitting then I join and talk for a while; and if my friends or someone from the village is not sitting at tea stall, I walk down to get back home. It is a walk of thirty minutes down the mountain and I do not go from home to bazar especially to meet someone."*

Javed's house was situated in village Tajwal and there was no road to connect the village with main road of New Murree. It was a walk of thirty minutes to his home through an unpaved path, which used to be slippery in rains and covered with snow. It was a very common practice among the residents of villages of Murree to bring kitchen stuff for dinner every evening on their way back home. The respondents could not afford to purchase monthly or weekly grocery. They had the responsibility to take daily grocery for dinner. This responsibility was also a barrier for the respondents to participate on informal community spaces in the evening.

The literature on theory of social capital, in the perspective of gender, talked about gender-based barrier to participate in community spaces. The women respondents were forbidden from participating in men's community spaces. This restriction was a barrier for women to develop their social capital equal to men. Social capital was a human capacity and would have developed through multiple ways. Social capital was the property of an individual and as well as of a group. According to (Villalonga-Olives & Kawachi, 2014) level of social capital is determined by power of individual social connections although (Rostila, 2011) has considered individual social capital (money, information, material resources, knowledge, etc.) as ordinary resources. But in reality, it is owned by an individual that is shared and transmitted and forms his/her

social capital. The women had been enjoying access to healthcare facilities through the currency of social capital of men of their households.

The women had limited chances to visit and participate in women's community spaces. It was a daily activity of most of the women respondents to visit nearby water spring to bring water for household use that took a few minutes and there was no fixed timing to bring water. The chances of interacting with other women during a visit to water spring were not very bright as there was no sitting arrangement at the water springs. A picture of three different types of water springs has been presented in chapter three to show the quality of drinking water. The interaction and discussion of women at the water springs had never lasted more than an hour as they were in a haste to fetch water. Earlier discussion in the context of socio-economic and political status as a barrier to participate in formal and informal community spaces was equally applicable to women respondents. Gender was also a barrier for women to participate in community spaces of men and had limited women participation in a number of community spaces.

7.3 Discussions on Community Spaces

The respondents had said that they had not been using community spaces on priority for sharing or getting health-related knowledge and information. Talking about usual discussions on community spaces, Ishaq was of the view:

> *"We talk about daily routine issues of village and Murree at village shops or tea stalls. For example, yesterday a wagon caught fire near Tret. We have been talking about the incident . . . marriage ceremonies are happy occasions and we do talk about our general things . . . on death occasion, it is not good to talk more. Generally, people recite the Holy Quran and whispering is most common which is ethically not considered good . . . we get to know about someone's disease in these places, but we do not talk much about health."*

The respondents of the study had very limited knowledge of healthcare in general and TB in particular. Formal and informal community spaces had no considerable impact on men for getting relevant health-related knowledge and information. Rather, community spaces had provided an opportunity to men to share personal experiences

of health with their friends and members of their castes. I found different pathways among TB patients to reach government TB centers of Murree and got to know that some patients were directed by their friends of informal community spaces to reach the private pharmacy. The friends had shared their personal experience of temperature and cough and had suggested medicines to some patients during early stage of TB symptoms. This finding has supported the argument that wrong information for curing the disease contributed to causing adverse effect on the health status of TB patients and to spread the disease.

The men had dual advantage to that of women for having access to local information channels because they participated in community spaces more frequently than women and also had access to mobile phones. The men were more updated about latest happenings in their villages, whereas the women had limited access to community spaces and very few had mobile phone in possession. In this way, the women were generally dependent either on their men or interaction with women for getting information about local happenings. Chapter three has presented quantitative data and has shown that 41 % of the selected households did not have the amenity of television and 74 % were without radio. In this way, almost half of the total number of women respondents used to hear about every happening in the village through their social interaction either with other women or through their men. Talking about general discussion on community spaces, Razia Bibi said:

> *"Mostly we talk about ordinary things of the village. We do share any happening in the village during interaction with other women. Like, last day, I went to get water and Mansab was also there to fetch water from spring. She told me that buffalo of Balkees had died this Sunday and was not even slaughtered. This is a big loss for Balkees and I will go for condolence. I will not go alone. I will talk to the wife of my husband's brother and will accompany a few other women. Mostly we visit in a group of two to three for condolence or greetings."*

This was a common norm in Murree to condole the loss of neighbors or members of the same caste. It was a compulsory norm in the village that both men and women used to visit the house of deceased person for condolence. The women used to go either with their men or with a group of women to participate in death and marriage

ceremonies. This walk in the village for condolence over human or animal loss or to participate in any ceremony provided an opportunity to women to have mutual discussion on domestic and other issues.

The subject of Mother and Child Health occupied regular mediation in women community spaces. The women used to share women health-related cultural practices and knowledge. Women of older generation were commonly sharing household remedies for the health of Mother and Child with women of younger generation. This information also used to circulate among women. During life history, Razia Bibi talked about her general discussion on women community spaces and said:

> *"Generally we talk about women health and health of our children. Suppose a woman is pregnant and in this case we talk about her health condition. I give advice to young women during their pregnancy, because I have gone through this process. If someone's child is sick and not getting well, we talk about it and recommend some household remedies . . . you can see that my house does not have a boundary wall and my daughter is on Charpai [cot] and covered with a blanket. Raheela came to me in the morning and asked about my daughter. I said that my daughter is sick and has little cough. Raheela proposed me to give Kahwah to my daughter. I had already given Kahwah. I told Raheela that Khadeeja [daughter of Raiza] have Bojh [phlegm] on the chest. Raheela suggested giving Bhaap [steam] to Khadeeja. I had not tried Bhaap yet, but I will give it to my daughter in the evening."*

Most commonly, the village houses of Murree did not have any boundary wall. This open household structure had been a source of social interaction with neighbors. This sort of social interaction had brought people close to each other for knowing health issues of neighbors. In the case of TB, this interaction had resulted in disconnecting social contact. Chapter eight has discussed social stigmas of TB and has presented a case study about the effects of TB on social contact.

Women respondents said that they used to discuss health in general and were not familiar with causes and symptoms of various diseases. It was reported that discussion on TB in women community spaces had been very limited. But the news of

someone's getting affected by TB used to travel through this channel of information in the whole village.

7.4 Variables of Social Support

The respondents had considered social capital as an essential indicator for seeking access to government healthcare centers of Murree. The literature on theory of social capital has argued that a higher level of social support had determined the valued currency of social capital. Social support could have been strengthened by its above mentioned variables but this was not.

According to (Bertrand & Mullainathan, 2001; Camerer & Fehr, 2003) the indicator of trust is highly valued in financial give and take method and (Glaeser et al., 2002) has considered trust as individual responsibility. It was observed that TB patients were mostly getting social support from their family and close kinship ties. The level of trust in terms of financial support was always higher among members of nuclear, joint and extending family respectively. Other than that the parents and siblings of women TB patients had higher level of trust that had helped patients in seeking social and financial support. Nazia was a 32 year old woman. She had four children. During illness, Nazia was not able to do basic household chores. Nazia's mother had sent her 21 year unmarried daughter Sadeem to stay with Nazia for a couple of weeks. Talking about the social issues during her stay for social support of her sister, Sadeem said:

> *"I came here to support my sister during her TB treatment. She is much better now and will get perfect in a few weeks. I am very sad to hear the comments of her in-laws. You know they do not take care of Nazia and they do not want me to stay here as well. Nazia's husband's brother Sameer is bachelor and her in-laws taunt her all the time and do back biting that I am staying here because Nazia is interested in marrying me with Sameer. Her in-laws are doing this because they want me to leave their house."*

Although trust was an essential element for social support yet once parents of woman are involved then she had to face barriers for getting social support. In the case of Sadeem, it was observed that a trusted relationship between care giver and patient as well as with other family members was also needed.

The indicators of trust to seek social support were discussed with respondents during life histories. Field data has supported argument presented in chapter two that social support could have been enhanced by strengthening relationship. Besides this, the older the relationship the higher the social support suggested a transparency in the history of social relation which was more sustainable for the social support. The respondents were asked to name one best friend among their fellow workers, but it was gratifying to note that no one of them had ever been on bad terms with their best friends. Poor TB patients had been deprived of getting social support from their neighbors and members of their caste because of the social stigmas attached to this infectious disease. Chapter eight has presented case studies on social support to respondents during sickness and after TB diagnosis.

Duration and transparency of social relationships were very important elements to seek or to provide social support. Ihsan was the son of brother of Adida's mother. This was a very strong kinship-based social relation in the culture of Murree. The strength of this kinship-based social relation had helped Abida to get social support from Ihsan during her TB treatment. Adida recalled:

> *"I was admitted to Samli Hospital and Ihsan had supported me very much. I did not go to hospital for getting [TB] medicine. My husband made a phone call to Ihsan every month and asked to bring [TB] medicine from the hospital. Ihsan brought TB medicine and I sent my son in the evening to his home to collect medicine. This had helped me a lot. I was saved to visit hospital every month."*

Most of the respondents had been deprived of social support for improvement of their health in general and TB in particular and access to government healthcare facilities of Murree. The respondents claimed they were in good terms with their friends, neighbors, and a member of their caste but it was TB related social stigma that had created barriers to social support for TB patients. This sort of social support provided by Ihsan was against the guidelines of DOTS and could have negative effects for the health of Abida as it was mandatory to do sputum smear microscopy test for three times during the process of TB treatment.

A reciprocal relationship was a very important variable for the development of social support. It was based on exchange of gifts and provision of social and financial support to the needy without much hassle. The respondents used to do gift exchange with their kinship based relatives. Exchange of gifts was very common in form of cash and kind on the occasions of death and marriage ceremonies as (Eglar, 1964; Eglar & Chowdhry, 2010) has described a Punjabi Village in Pakistan where a reciprocal cultural support system had existed, but in the case of TB, this cultural support system had played a very minor role for financial and social support to patients and families. There had existed an informal system of charity for the financial support to all types of patients. Nasreen was 42 years old and resident of Murree city. Nasreen was teaching in a government school for more than fifteen years. Talking about the culture of financial support, Nasreen said:

> *"We have a culture to help patients and their families in economic terms through 'Charity'. Suppose, someone in my neighborhood is ill and I visit to ask after [her/his] health, I will give some amount of money according to my financial capacity and so does everyone. We don't expect them [patients] to return us in our bad time. It is just a financial support . . . Yes, the types of illness does determine the amount of financial support . . . Like my Rs. 500 [less than $US5] has no worth for a costly disease for example cancer or cardiac surgery, but this might have a lot of worth for poor TB patient . . . Honestly, I can say that TB patients do not get as much financial support as compared patients with other diseases."*

A visible barrier for financial support to TB patients was linked with social stigmas of TB, as some patients said that their family members had not supported them during their acute sickness. Accordingly, the argument of limited social and financial support to TB patients was revalidated during an informal discussion with Dr. Ameer. It was the start of study and I was in the first phase of the research. I was sitting in Dr. Ameer's office to enjoy his offer for tea. We were discussing importance of family level social support of TB patients during the course of treatment. Meanwhile, a 70 year old man, Parwaz entered the office. Parwaz was a retired employee of the hospital and had been working for almost 35 years as a ward master. He used to visit

Samli Hospital to meet his colleagues. Parwaz took a chair and after a few minutes became a part of ongoing discussion. Parwaz said,

> *"During my service in this hospital, I have been taking care of last stage TB patients. Even the family members hated those TB patients. Some people used to come to hospital and just used to get rid of their patients. Such families refused to look back at their patients. In this situation, it was the staff of Samli Hospital that was giving all sorts of support to these patients."*

Dr. Ameer had also supported this response of Parwaz by saying that such sort of family behavior towards TB patients was occasionally in practice. Generally it was observed that every TB patient, who visited OPD or was admitted to Samli Hospital, was accompanied by someone from his/her family. So, such incidents of broken social support to TB patients would have been very rare in the entire history of Samli Hospital. Whereas, during second phase of the study, it was observed that family was a major source of social support to TB patients.

7.5 Variables for Developing Social Connections

Referring to measurement of social capital through individual ability to have access to powerful social connections, (Lin, 2002) had said that more social capital is developed through connections with people of high social status or prestige. The debate on social connections in the theory of social capital has emphasized the importance of formal or informal membership of an individual in caste, class, gender, race, ethno-lingual, political and religious groups. I have considered this formal or informal membership as a variable of social connections. The earlier discussion in literature review section of chapter two has presented an argument that higher number of formal or informal memberships of an individual had increased number of social links. Chapter three has discussed major castes of Murree and it was documented that caste-based social networks were a part of every individual and had bonding social capital. The earlier case study of Abida was also a caste-based bonding social connection. Variable of caste and kinship had been a part of every respondent irrespective of her/his socio-economic status. The caste-based social capital was not being used for the benefit of health at community level.

Class-based membership had been a barrier to develop social connections for poverty stricken segments of Murree to get equal participation in political community spaces. The selection of sitting space among participants of marriage and death ceremonies was an indicator to analyze social connections. This choice of sitting posed a hindrance for the poor of the society to interact with other members of the same caste. This was a type of exclusion in itself.

Gender was also a variable for the development of social connections. It was documented that the women of Murree had no freedom to develop their social connection with men in the society and men of the same caste. Although free mixing of men and women in the culture of Murree was a taboo and had restricted women to develop their social connection with men, but the discussion in chapter five about gender-based access to government healthcare facilities of Murree and case of Samli Hospital had demarcated a line of women's superiority on the basis of respect to women and their body and beauty. On one hand, gender identity had been a barrier for women to develop their social connections through participation in men's community spaces, but on the other, the women had the advantage to gain easy access to government healthcare facilities of Murree by developing their direct social connection with the staff. This social connection had developed because some young women with attractive physical features were, indeed, strong gender-based social capital.

7.6 Participation and Social Capital

Participation of individuals in community spaces had determined the level of social capital among individuals and groups and developed a network of relationships. Supporting network approach to measure social capital (Righi, 2013) said that a number of developed countries had used this approach. Theoretically the network turns into individual social capital and can be used for the benefit of group and vice versa. This section of the chapter gives an analysis of social capital through community participation.

7.6.1 Religious Participation

Mosque was a religious community space. According to teachings of Islam, it might have been an open forum to every individual Muslim irrespective of his caste, color,

creed, socio-economic, political and all other differences. But unfortunately mosques have been segregated on the basis of sects. The believers of various sects had preferred to visit mosques of their specific sects. Residents of Murree were free to visit mosques of their respective sects without any discrimination for religious practices. Prayer for five times a day was religious obligation for followers of all sects of Islam residing in Murree. Apart from this, there was a weekly Friday prayer. Mosque was the only open forum for equal participation for all respondents but there were not many instances when males from different sects had gathered in the mosque to develop community space. Another reason was that the administration had banned assembly of discussing social issues as the normal discourse could sometimes turn into heated debate and lead to scuffle.

Friday prayer was always witnessed as a larger gathering and every *Jama Masjid*[47] used to conduct Friday prayers. The religious cleric of every *Jama Masjid* used to give a sermon. The sermons usually addressed social evils and their control, brotherhood, frugality and abstaining from that which is forbidden for Muslims. A knowledgeable Imam (prayer leader) can effectively instill the message of soft image of Islam and its teachings. Sermons of Friday prayers occasionally addressed maintenance of purity and abstaining from corruption and mental perversion in the context of Islam. It had never addressed the issue of public health and hygiene.

Participation of respondents on religious community space was determined through religious attachment, religious practices, and a number of visits to the mosque by practising Muslims. Offering prayers five times a day might have helped the respondents to interact with their neighbors for developing gradual and viable social connection. The participation of people in Friday prayers helps them to listen to weekly sermon that could refresh the memories of respondents and teach them importance of purity and cleanliness of body and soul. The table below has presented the quantitative response of respondents to participate in religious community spaces.

[47] Jama Masjid refers to the main mosque of a town, city or village, and is usually the place of gathering for Eid prayers and Friday prayers. These are sometimes called Congregational mosques or Friday mosques.

Table 15. Religious Participation

Indicators	Very Much	A Lot	Little	Not At All	Total
Offering Daily Prayers in Mosque	4%	13%	19%	63%	100%
Offering Friday Prayers Regularly	38%	26%	20%	16%	100%
Financial Contribution in Mosque	9%	13%	62%	16%	100%
Voluntary Work for Mosque	0%	0%	12%	88%	100%

Source: Field Data

This table has quantitatively measured the level of social capital through religious participation. According to this table, a vast majority of respondents 63 % said that they were not offering daily prayers in mosque and 19 % of the respondents stated that they used to offer daily prayers in mosque occasionally, 13 % a lot and only 4 % of the respondent offered daily prayers preferably in a mosque. Overall this is very low participation in religious rituals. Responding to a statement about offering regular Friday prayers 38 % of the respondents revealed very much, 26 % a lot, 20 % a little and 16 % not at all. Financial contribution to mosque was average as 16 % disclosed that they were not financially contributing at all, 62 % said little, 13 % a lot and only 9 % said very much. The status of volunteer work for mosque was very low as 88 % of the respondents expressed that they were not doing any volunteer work of mosque at all. Rest of the 12 % opted for a little support. The response for very much and a lot was zero % each.

Overall, religious participation was very low and according to this quantitative data, it is very obvious that respondents had not developed their social capital for having low religious participation. A regular interaction could have been developed in social capital, but out of sight out of mind is a very famous proverb that aptly applies to this situation.

7.6.2 Political Participation

Political participation of respondents especially during the election was not limited to political gatherings, political rallies, corner meetings of local and national political

parties of Murree, political campaigns and frequency of contacting local political leaders, but included the voting behavior of the respondents too. These variables determined the level of political social capital of poor TB patients. The table below presents political participation of respondents through analysis of quantitative data.

Table 16. Political Participation

Indicators	Very Much	A Lot	Little	Not At All	Total
Participation in Political Gatherings	2%	8%	14%	76%	100%
Volunteering During Political Campaigns	1%	12%	5%	82%	100%
Contact with Chairman of Union Council	4%	2%	20%	73%	100%
Voting in Local and National Elections	55%	28%	12%	5%	100%

Source: Field Data

This table measures social capital through political participation of the respondents. Responding to a statement regarding participation in political gatherings, 76 % of the respondents said not at all, 14 % said little, 8 % said a lot and only 2 % of the respondents replied that they were participating in political gatherings very actively. Responding to a statement about volunteering work during political campaigns, an overwhelming majority of respondents 82 % responded not at all, where as 5 % said little, 12 % said a lot and only 1 % said that they were doing very much volunteer work during political campaigns. The table shows that only 4 % of the respondents were very much in contact with their Chairman of UC, whereas 2 % of the respondents disclosed a lot, 20 % said little and 73 % of the respondents answered that they were not in contact with Chairman of their UC at all. The voting behavior of respondents was favorable to them as compared to other indicators of political participation. There were 55 % respondents who were voting very much, 28 % a lot, 12 % little and only 5 % were not voting at all.

This table has clearly shown a very low level of social capital through quantifying political participation. The qualitative part of this study has also presented similar results. These results have revalidated earlier arguments presented in chapter four and five that economic preferences of poor TB patients were a barrier to participate in political life. It was a common custom among local political leaders not to support the

voters of their political opponents. In this context, chapter five has discussed political social support through the case study of Qaisar Aziz, where the distribution of social goods and services were not allowed for voters and supporters of political rivals.

7.6.3 Civic Participation and Social Capital

Civic participation mechanism is a vital variable for developing social capital. Earlier discussion in chapter five has given the importance of civic participation for enhancing social connections to develop social capital, but here social capital has been quantitatively measured through civic participation. Forms of civic participation discussed below were initially highlighted by (Putnam, 1993, 1995, 2000) to measure social capital among communities and nations.

Any formal association among poor segments of Murree had not existed. The respondents had not evolved any formal organization in their villages for finding solutions to their issues, and likewise, no village organization and formal or informal charitable organization in Murree had ever existed particularly to address health issues at local level. Apart from kinship-based social organization, any formal or informal social organization in residential areas of respondents had not taken roots. There was no labor organization and labor union in Murree, and notion of membership in work-based formal and informal organization was out of the question. No NGOs had made any intervention in the villages of Murree for developing a formal community space by creating a village or social or community based organization. There was no initiative on behalf of government also to invite some viable and active NGOs to develop community or social work organization for the protection of environment through participatory process. The table below has presented the score of civic participation.

Table 17. Formal Community Spaces

Indicators	Yes	No	Total
Formal Organization of Peer Group	0%	100%	100%
Local Charity Organizations	3%	97%	100%
Social/Community Organization by NGO	0%	100%	100%
Health Committees	1%	99%	100%
Mosque Committees	18%	82%	100%
Formal Organization for Women	0%	100%	100%

Source: Field Data

Above table shows the existence of formal and informal community spaces in the neighborhood of respondents. There was absence of any formal organization of peer groups as the response to this question was 100 % negative. A vast majority 97 % of the respondents stated that no local charitable organization existed and only 3 % of the respondents claimed of existence of a local charitable organization in their surroundings. There was no social/community organization by any NGO. An overwhelming majority of 99 % stated that there was no health committee in their surroundings and only 1 % accepted existence of health committee in neighborhood. A vast majority of respondents with 82 % said that the mosque of their neighborhood had no committee at all, whereas only 18 % agreed to have mosque committee. No formal organization for women ever existed.

According to presented quantitative data in above table, very few number of formal community spaces had existed. So, the respondents had very limited chance of participation because of barrier of availability. Other than formal, there existed a list of informal community spaces, discussed in the start of this chapter, where participation was very high as compared to participation in formal community spaces. The table below presents quantitative measurement of civic participation.

Table 18. Civic Participation on Community Spaces

Indicators	Very Much	A Lot	Little	Not At All	Total
Peer Group Interaction	12%	18%	31%	39%	100%
Participation in Charitable Organization	0%	3%	12%	85%	100%
Participation in Meetings of Health Committee	0%	0%	1%	99%	100%

Source: Field Data

The respondents were asked about their level of interaction with peer group and in response to this statement 39 % of the respondents said not at all, 31 % little interaction, 18 % a lot and only 12 % of the respondents had very high interaction with their peer group. Responding to a question regarding participation in local charitable organizations, a vast majority of the respondents 85 % said not at all, whereas 12 percent, 3 % and zero % said little, a lot and very much respectively. The

participation in meetings of existing health committees was very low as 99 % of the respondents denied having any participation in health committee.

The women when compared to men were equally deprived of civic participation. All of the above-discussed indicators of civic participation were applied to women respondents of this study and a response of zero participation of women in formal community spaces was documented. Besides this, there had not existed any formal association and organization for women. There was no way forward to address the gender-based issues of women in Murree. Because of the non-existence of gender-specific formal community based organization, civic participation of women was out of question. Women had been discussing issues of women health during their interaction with other women in their gender-specific informal community spaces.

7.6.4 Social Connections on Workplace

The workplace was a very significant platform for the development of social connections. Every year on the occasion of International Labor Day on 1st May, there used to be a public rally in Murree by Labor Department of Punjab Government in Murree. There were unions of government employees of Murree. None of the respondents of this study had any membership in existing unions. The response of the respondents to have expectations from their fellow workers was not so high, but had not expected any favor from fellow workers. Almost all of the earning respondents had said that they were feeling happy while working with their fellow workers at their workplace. Such respondents said that they were very comfortable to share their personal or domestic issues with very selected friends at their workplase. They claimed to have a bilateral turst among fellow workers.

7.6.5 Informal Social Connections

The informal social connection could have been developed through hanging out with friends, playing sports, and developing sense of altruism and philanthropy towards strangers. The respondents of this study said that they had never hung out with friends nor enjoyed dinner. The respondents used to have lunch and tea with their fellow workers at their workplaces. Talking about hangout and having dinner, a respondent said,

"I work at a small hotel and the owner gives me food for lunch and dinner. I take breakfast at my home. I have the same place of work and place of lunch and dinner. I cannot go somewhere to hang out because it costs. I do work seven days a week and for hangout, I will have to take leave."

Murree was a very costly city for hanging out and hoteling. The respondents had no financial capacity to afford outing with friends. On the occasions of Eid, the respondents used to visit their family friends and relatives in far-off villages and this was the only family hang out for them.

7.6.6 Altruism, Volunteering, and Philanthropy

Social capital was measured through finding the response of respondents about altruism, volunteering, and philanthropy. The respondents were asked about their response towards relatives, fellow workers, and strangers during their bad time. Social support – in terms of lending money, spending time, and trust in relatives, fellow workers, and strangers – in hard times was also asked. The table below presents the results of questions asked under the variable of altruism, volunteering, and philanthropy to measure social capital.

Table 19. Altruism and Volunteering

Indicators	Strongly Agree	Agree	Neither	Disagree	Strongly Disagree	Total
Help by Strangers in Need	2%	20%	11%	23%	44%	100%
Help by Fellow Workers in Need	3%	23%	3%	11%	60%	100%
Help by Relatives in Need	53%	33%	4%	8%	2%	100%
Helping Strangers in their bad time	3%	9%	8%	53%	28%	100%

Source: Field Data

This table presents quantitative measurement of altruism and volunteering among respondents. Responding to a statement regarding offer of help by strangers, 44% of the respondents strongly disagreed, 23 % disagreed, 11 % neither agreed nor disagreed, 20 % agreed and only 2 % strongly agreed. A vast majority of respondents 60 % strongly disagreed with the statement about offer of help by their fellow workers, 11 % disagreed, 3 % neither agreed nor disagreed, 23 % agreed and only 3

% strongly agreed. The respondents expected more help in hour of need from their relatives. A vast majority of respondents 53 % strongly agreed with the statement that they would be helped by their relatives in difficult times, whereas 33 % agreed, 4 % were in the middle, 8 % disagreed and only 2 % strongly disagreed. A considerable portion of respondents 28 % of the sample size disagreed with the statement regarding offer of help to strangers during their bad times, 53 % disagreed, 8 % were in the middle, 9 % agreed and only 3 % strongly agreed.

According to this table, the respondents had least trust in strangers and they were of the view that strangers had least trust in them. This shows very low level of social cohesion in general, whereas among families and kinship based relationships, the level of trust was visibly high and had resulted in strengthening social bonds.

7.6.7 Reciprocity, Honesty, and Trust

Reciprocity had helped to engage people in a relation of mutual dependence as (D. Kim & Kawachi, 2006; Villalonga-Olives & Kawachi, 2014) has said that cognitive social capital refers to people's perceptions of reciprocity within the group and the level of interpersonal trust. In this context, all of the relations of mutuality were based on mutual honesty and trust. The earlier discussion on reciprocity, honesty, and trust in chapter two has supported this argument that higher level of honesty and trust in strangers, neighbors, fellow workers, friends, relatives, and other social contacts was required to strengthen a reciprocal relationship. Reciprocity, honesty, and trust were quantitatively measured among respondents by asking questions of honesty and trust in their friends, neighbors, fellow workers and strangers. The table below shows the results:

Table 20. Trust and Reciprocity for Finding Social Support

Indicators	Strongly Agree	Agree	Neither	Disagree	Strongly Disagree	Total
Strong Trust upon Strangers	1%	8%	16%	33%	42%	100%
Strong Trust upon Relatives	61%	23%	6%	8%	2%	100%
Relatives Consider me Trustworthy	47%	22%	10%	13%	9%	100%
Exchange of Gifts among Relatives	83%	13%	0%	0%	4%	100%
Offering Volunteer Services to Relatives and Friends	38%	31%	14%	13%	4%	100%
Dealing Carefully with People Around	73%	23%	4%	0%	0%	100%

Source: Field Data

This table shows the response of respondents to questions regarding trust and reciprocity. The respondents had very low level of trust in strangers. Responding to a statement that they had strong trust in strangers majority 42 % and 33 % replied in strongly disagree and disagree respectively. A considerable portion of respondents neither agreed nor disagreed with this statement. Only 8 % of the respondents agreed and just 1 % strongly agreed with the statement regarding strong trust in strangers. A vast majority of 61 % of respondents strongly agreed with the statement of having strong trust in relatives and 23 % agreed with the statement, whereas only 2 % strongly disagreed. Majority of respondents with 47 % strongly agreed that their relatives considered them trustworthy, whereas 22 % agreed, 10 % neither agreed nor disagreed, 13 % disagreed and only 9 % strongly disagreed with the statement. Gift exchange among relatives was very common as 83 % of the respondents strongly agreed with the statement of gift exchange among relatives, whereas 13 % agreed and only 4 % strongly disagreed with the statement. The response of volunteer services for friends and relatives was very supportive as 38 % of the respondents strongly agreed with the statement, 31 % agreed, 14 % were in the middle, 13 % disagreed and only 4 % strongly disagreed. Finally an over-whelming majority of respondents 73 % strongly agreed with the statement for being careful to deal with people around, 23 % agreed and only 4 % neither agreed nor disagreed.

The data of this table has depicted the trust of people in strangers, relatives, trend of gift exchange, their volunteer services and care for dealing with people around. The data has shown that selected households had generally good terms with their relatives and neighbors as they had developed a mutual trust and reciprocal volunteer relationship. According to the preliminary work by (Putnam, 2000) strong trust in strangers and careful dealing with people around was the symbol of high social capital. According to (Villalonga-Olives & Kawachi, 2014) the expected outcomes of trust could have provided financial credit through group member, whereas in this milieu, it was observed that respondents had strong trust in their *Bradari* (clan) members but they were not getting their financial support. In this context, above table has supported the observation of field work that kinship based social connections were giving more social support, whereas the level of social capital in the context of trust in strangers was very low.

7.7 Analysis

Above discussion on social capital and public participation has helped to understand a social system within which people seek various favors and expectations. Although social capital had been a major resource for accessing government healthcare structure of Murree, it is important to study and understand the roots of its development. It was quite evident that economic capital was a barrier to develop social capital within the existing cultural trends of Murree. The poor and marginalized segments of Murree did not have equal access to informal community spaces because of low social status. Besides this, the preferences of people to sit in a cultural event were also being determined by their socio-economic status. So, the culture of Murree had remained under the influence of socio-economic value of individuals and was barrier in giving freedom to people to freely participate. On the basis of equality, informal community spaces were the only treasure for financially feeble segment of Murree to develop their social capital but owing to certain forms of discrimination, they remained dispossessed and their approach could never make any headway.

Although LHWs were not a part of TB control program, they had remained accountable for not working under given job description. In spite of being a part of their job, the LHWs did not establish health committees. In this case, it can be said that failure of proper monitoring was a source for moral corruption of LHWs who

failed in establishing health committees at local level. Overburdening of LHWs was the core reason for this moral corruption that had not been addressed by the policy makers.

It has been discussed earlier in chapter four and six that TB control program of Pakistan had not evolved any mechanism for active TB case finding. Talking about the options for accelerating reductions in TB (Zelner et al., 2018) has suggested that existing tools to reduce TB may include active case finding. The existing healthcare structure of Murree had the bottom up healthcare structure, where every LHW working at grass roots could have been a very effective tool for active TB case finding. It was the fault of policy makers and program personnel for not developing collaboration between TB control program and National Program for Family Planning to jointly overcome problems related to the health of poor. This lack of farsightedness had resulted in spread of TB in Murree due to non-existent TB case finding mechanism. The patients had been following various pathways to finally reach a TB center for diagnosis and by then, they might have transmitted the disease to a number of people.

Chapter four has presented an analysis of national level political commitment to overcome TB, whereas local political leadership did not take any measures to ensure better healthcare at grass roots. The affectees of government healthcare structure of Murree were neither aware of their right to health nor the local leaders were working for the protection of their basic rights. Similarly, in the context of social capital, the local political elite were very reluctant to offer political support to voters and supporters of their political rivals.

Deprivation of poor segments of Murree on multiple levels had turned into low level of social capital. On one hand, they were excluded from a number of existing formal and informal community spaces and on the other, the political economy had created a barrier to develop social capital through formal education. Generally, education helps in developing human resource and social skills among individuals and groups that turn into more earning opportunities and also develops social capital. Low literacy rate among respondents was one of the factors for low social capital.

The women had not participated in religious, social, political and cultural community spaces because of their gender identity. Although gender based mobility of women had resulted in low level of social capital of women, the gender based social roles and responsibilities assigned to women had been a source of women to prevent them from external threats to life. Simply, the women are living a life of housewife on the cost of their individual social capital.

The local support system of Murree was a system of network within which the people were connected with each other on the basis of kinship and caste system. Under this local support system, there had existed abundant level of social cohesion and as a custom, people used to help each other on special occasions such as birth of a child, marriage and death. TB patients were getting social and financial support only on household level, but at macro level, the element of social support of TB patients was almost missing.

Social capital was being utilized in Murree for easy access to healthcare system that was not the right approach as it had developed various forms of disparities and had supported the culture of social anxiety. This utilization of social capital had favored a limited number of individuals, whereas a larger part of population in Murree had been its victim as the earlier discussion of chapter four and five has supported this argument. There had existed a vibrant social structure in Murree that had assisted social capital through strong social ties and social participation. The channelization of community spaces was most appropriate mechanism for sharing of health related knowledge and information that was missing in the culture of Murree. Besides providing health related knowledge and information in community spaces, the people were supposed to be informed about their right of health and concept of equality in government healthcare facility centers of Murree. This would have helped in bridging gap between poor segments of Murree and government healthcare structure; and could also have developed the values of democracy.

Social support was the most important component for TB patients and families, but poverty had been a barrier for all sorts of social support to TB patients and families. Initially, the poor segments of Murree, major victim of TB, had low level of social participation that had resulted in least social support and low level of social capital. On the other hand, social stigmas of TB had been a barrier to seeking/offering social

support to TB patients and families because it had resulted in interrupting the contacts with kinship based social relations.

The overall debate of this chapter on measuring social capital through community participation has helped to analyze a linkage of economic disparities with social capital. The poor segments of Murree had low level of education, least participation in religious and political gatherings and minimal civic participation that was a basic reason for low social capital and social support.

Chapter 8

UNDERSTANDING HEALTH-PREFERENCES, BARRIERS AND RESOURCES

A study conducted on defining and targeting health care access barriers by (Carrillo et al., 2011) documented impacts of social and economic determinants of health status and the existence of racial and ethnic health care access disparities. This study claims that financial, cognitive and structural barriers determine health outcomes disparities. This chapter presents a local understanding of general health of people of Murree and sickness they have been encountering. It further helps to understand health seeking and health preferential behavior of respondents. The discussion in this chapter begins with pathways for TB treatment which is among the least health pursuing behavior of respondents. The discussion on social stigmas of TB describes its deep-rooted standing in local culture of Murree and presents a comparison of 35 years of its history through a case study. TB diagnosis had brought patients on crossing of social intersection; and because of social stigmas, it had resulted in traumatized transition for TB patients and households. This chapter also talks about patients' perception about the power of medicines and its dispensation as a barrier to TB treatment. Lastly, the role of care providers has been discussed in this chapter. It also outlines the role of TB control program to observe DOTS as an important intervention in context of Murree's health centers.

8.1 Pathways for TB Treatment

Chapter four has discussed in detail the overall healthcare structure of Murree, where LHWs were considered the backbone of existing healthcare structure. The claim of PTP authorities for having actively engaged LHWs to find active TB cases was rejected through the response of LHWs and existing on-ground realities.

Ideally, the LHWs should have discussed health in detail at the household level; and should have identified TB suspects by identifying TB symptoms and should have referred directly to nearby government TB center of Murree. But this had never happened because LHWs had not been mandated for finding TB suspects in their job descriptions. As a result, the TB patients had to refer to TB centers after adopting different pathways to finally reach government TB centers of Murree for treatment.

In every case of TB, the respondents had started from experimenting household remedies and later switching to either self-prescription of allopathic medicines or accessing a quack. There were documented stories about change of quack or visiting a medical practitioner. The earlier discussion in chapter four and six about trust in government healthcare structure of Murree and doctors working there has supported the argument that lack of trust in government healthcare structure and weak doctor-patient relationship had been a barrier that delayed TB diagnosis among TB patients of Murree. The patients would abstain from going to health facilities as they felt disgraced by doctor's shameless attitude. According to a study conducted by (Daker-White et al., 2015) a face to face communication between a doctor and patient was needed for the care of an individual patient. It was not common on government hospitals of Murree.

Describing diagnostic and treatment delay among TB patients in Pakistan (Bassili et al., 2008) says that the private sector was the first choice for more than two thirds of patients. The main determinants of delay were socio-demographic, economic, stigma, time to reach the health facility, seeking care at non-specialized individuals, and visiting more than 1 health care encounter before diagnosis.

TB patients, most of them poor, had preferred their pathways for various reasons and financial constraint was the leading one which had forced them to desist from seeking health advice. The literature on social stigmas of TB and pathways discussed in chapter two supports the argument that social stigmas of TB, along with all other factors including political economy, poverty, geography, environment and illiteracy, had played a part in shaping health behavior among people and defining pathways to reach a TB diagnosis center.

8.2 Defining Health and Sickness

Health can be defined in hundreds of ways and a number of definitions of health can be presented through existing literature, but here I have confined to a local narrative. The selected TB patients considered interrupted breathing as a journey to death. A healthy breathing was considered as a sign of perfect health. During second FGD, a respondent, talking about a relationship between breathing and life, said:

"A healthy breathing is real life. I had a healthy breathing before my sickness and I used to work without any break. I got sick and gradually my uninterrupted breathing became a victim of TB and during extreme sickness, the poor breathing had put me on bed and became a barrier to work. Financial constraints started because of poor and interrupted breathing."

There was a direct relationship between breathing and financial prosperity. A constricted breathing raised doubts of TB symptoms of an individual and if turned positive, meant financial burden on the poor family. The pitiable sections of population of Murree were mostly engaged in daily wage labor. Feeble and interrupted breathing that led a person to be diagnosed as TB patient clearly meant that he could not do hard physical labor. Only healthy breathing was a symbol of healthy and wealthy life. In this context talking about "Care and Disregard" (Biehl, 2012) argues that at times, member of a family assume caregiving burdens at great personal cost, and at times, they "disregard" loved ones seen as unproductive and burdensome.

Matloob was a 47-year-old man. I have presented case study of his first visit to Samli Hospital in chapter four. Matloob was a laborer on daily wages. I visited Matloob on a hot sunny morning to conduct a session of his life history. Matloob's house was situated far off the road. We were sitting in the shade of a black Mulberry tree that was planted in courtyard of his house. Before the start of the formal conversation, I rolled the ball and said that it was a good luck to have fresh air as the cities had become overpopulated and victim of air pollution. This argument helped me to start the discussion of the day and we started talking about fresh air and good health. Matloob asked me to pause for a while. He went inside and brought his hammer and started introducing his relation to this tool. As he siad,

"This hammer has 16 kg weight. This hammer has belonged to me for last 20 years. Before TB diagnosis I used to break big and solid stones with this hammer. This had been my way of life during last 20 years and the company of this hammer was my bread and butter. I was doing hard work and it needed strong breath and stamina. I have never smoked in my life

and due to the fresh air of the village, I had healthy breathing because we are protected from all types of pollutions of cities."

This was a fact that every hard work needed a healthy and strong breath and stamina. Men respondents of this study had considered themselves stronger than their women. This perception of men's strength was based on masculine power and body immunity against various diseases. Talking about breathing and health, Matloob said:

"I was very strong before getting TB and had never bothered about ordinary diseases such as temperature, cough, flu, and cold. For the first time in my 47 years of life, cough had seized my breathing and had put me on Charipai [cot]. A little cough and sometimes little lengthy cough used to be part of life in winters and during change of weather [season]. I used to grab cough syrup from any medical store. This time at the start of sickness, I took this cough for granted and had not anticipated its outcomes. Gradually my capacity to work with this hammer decreased. I continued labor during initial days of sickness. One morning, there was blood in saliva [sputum] and I felt my legs powerless to carry my weight. On that day, I was on Charpai [cot] and I considered myself ill."

According to Matloob, he got ill on the day he was on the bed. The loss of capacity to walk was the sign of sickness. The respondents of this study had considered themselves healthy till they walked around freely and considered temperature, cough, cold, flue, chest pain and headache as ordinary usual diseases. The respondents had not considered mental illness in the category of diseases. The women respondents had a little different narrative about health and sickness as they were of the view that disturbing health condition was the symbol of sickness. The women respondents confided that they used to start household remedies at the onset of unusual health condition. Responding to health and sickness, Razia Bibi said:

"I feel the start of sickness through ordinary health changes. For example, my son is sneezing or gets cough, I will give him Kahwah. And I do the same to myself. The men of our house usually do not tell us about their sickness. Suppose I have observed the disturbing health of my husband and I ask about his health, mostly he would not accept that he is sick. My

husband says that he is all right and I am not to be worried about him. In this case, I cannot do anything. I think we should take care of sickness in the start."

The women were very sensitive about the health of their children and on identifying minor illness used to start giving homemade herbal remedies. However, the same women found it difficult to convince their adult members of house to consult the doctor or proposing locally made medicine in the case of their illness. Although there was lack of sharing of health issues at the household level, yet with mature attitude health could have been fixed when initially symptoms of diseases appeared. 'A stitch in time saves nine' is a very common proverb, but did not work among suspect TB households. 'Health is wealth' seemed to be an alien proverb for members of household of any age and the respondents never took it serious.

8.3 Health Behavior and Health Preferences

Existing healthcare behavior and healthcare preferences of respondents had developed over period of time and were influenced by a number of factors. Discussion on data presented in earlier chapters has highlighted various determinants of health that had a history of nurturing of health behavior of respondents. For example, major concerns of government healthcare structure had a historical profile that compelled respondents to gradually lose trust in it. Similarly, existing healthcare behavior and healthcare preferences of respondents were the result of various determinants and to an extent financial background of households.

Khalid Mehmood was a young of 23. He was resident of Phugwari and he was responsible to take care of his widowed mother, a wife, and a daughter. Khalid was a skilled carpenter and dexterous in his trade. Khalid had borrowed Rs. 300 thousand from his father-in-law who was also Khalid's father's brother. Khalid spent this money to get a work visa for Sharjah, United Arab Emirates (UAE). Before departure for Sharjah, Khalid used to work as a daily wage carpenter on the local shop of Phugwari Bazar. In January 2015, Khalid departed for Sharjah and started working with a Pakistani furniture company. Khalid said:

"My two elder brothers were working in Dubai and led a very prosperous life. My brothers had shifted their families to Bhara Kahu. I was the

poorest among my siblings. I borrowed 3 Lac from my in-laws to bring a healthy change in my living condition."

Khalid's brothers did not offer financial or moral support to him for travel to Sharjah. Khalid's father-in-law had lent money to Khalid because Khalid's prosperity was linked to his daughter's. Khalid's motivation for bringing prosperity in his family continued for six months and he had been sending remittances to his family to pay back debt in small installments. Khalid's journey to prosperity was gradually halted by continuous cough and ultimately stopped at the point when he realized there was blood in sputum. Khalid said:

"I was having cough and temperature. I did not take it seriously. There had been cough for two-three weeks. During this period, I used to purchase Hydryllin [cough syrup] from a nearby medical store. Healthcare was very costly in Sharjah and I was interested to save money rather than paying for health care. A Pakistani man was working on medical store [pharmacy] and he used to help me by giving Hydryllin syrup and other tablets without a prescription. One day, I saw blood in saliva [sputum] and I got tensed. I concealed it for a few days. During this period of sickness, my fellow workers had suggested to me to consult a doctor, but I ignored their advice. On the third or fourth day of first blood in saliva [sputum], I discussed it with Bilal [a fellow worker], who suggested to me to share this health issue with the manager of the company.

Next morning, I went to Imran Sahib [company manager] and shared the whole story. Imran Sahib asked me about temperature, fatigue, and sweating. He knew about the symptoms of TB and told me that I might have TB. It was very hard for me to absorb his words. I was thinking that Imran Sahib would suggest to me to visit a doctor but next moment he advised me to leave for Pakistan. This was again troublesome. I was in debt head to toe and was worried to return my debt. Imran Sahib said that visiting a doctor in Sharjah for diagnosis of TB was not favorable. There was a health policy and the immigration authorities had the power to

deport me and to ban my entry into Sharjah because there was no entry for TB patients."

Khalid had stayed in Sharjah for almost 7 months and had not returned his due debt to his father-in-law. In August 2015, Khalid returned to Pakistan. Imran *Sahib* had advised Khalid to get to a hospital on arriving in Pakistan for TB diagnosis and to start anti-TB treatment on priority basis. After arrival in Pakistan, Khalid had not visited hospital for TB diagnosis for almost one and half month. Talking about the reason for not visiting hospital Khalid said,

"During my absence few deaths in the village took place and I had to visit the aggrieved families. My father had died and my brothers were also in Dubai. I was in the village so morally I had to go. And honestly, I had spent a lot of time with my friends."

Khalid was advised to visit the hospital and this health seeking behavior was unexpected as Khalid valued his social responsibly and the company of his friends rather than visiting hospital for TB diagnosis. Before visiting Samli Hospital, he had been purchasing cough syrups and different tablets through self-prescription from medical stores of Phugwari bazar. Khalid's friends had observed his cough, realized Khalid's weight loss, and also asked about the reason for his early return. Khalid did his best to hold his health secret and not to share the story of his serious sickness. It was the fear of social stigma of TB and gossip mongers that had compelled Khalid to concoct fake stories of his early return.

Prioritizing work over taking treatment and rest was commonly observed among TB patients in Murree. Analyzing patient adherence to TB treatment through a systematic review of qualitative research (Munro et al., 2007) stated that TB patients of developing countries, including Pakistan, prioritized work over taking rest during their TB treatment.

RHC Phugwari was in Khalid's neighborhood and easily accessible. Khalid was not aware of the availability of TB treatment facility at RHC. He had least trust in government healthcare centers of Murree. So, considering Ali Hospital Bhara Kahu a better health facility, he consulted a doctor over there who suggested Khalid to visit Samli Hospital.

Khalid went to Samli Hospital and was diagnosed with TB. Khalid started his anti-TB treatment in the middle of September 2015. He had completed his four-month TB treatment and it was to be the end of his sixth months' stay in Pakistan. Khalid had to go to Sharjah once in six months as per the travel terms and conditions of Sharjah otherwise visa was to be canceled. Khalid used his social capital to collect anti-TB medicine for his sixth month in advance. Khalid's efforts were successful and he flew to Sharjah along with anti-TB medicine, but airport authorities at Sharjah trashed his anti-TB medicine. Khalid started working in his company and after three months, he started coughing again.

It was Khalid's lethargic health-seeking behavior that had put his health at risk and forced him to return to Pakistan. During the first visit to Pakistan, Khalid wasted around one and half month before visiting Samli Hospital. During his second visit, he repeated his previous conduct and did not visit Samli Hospital for first twenty days. Talking about ongoing TB treatment and future plans, Khalid said:

> *"Right now, it is my third month of TB treatment. This time, I went to Dr. Qaisar on his private clinic and shared the story of my treatment. I did not tell him about getting TB medicine in advance but shared the other part of the story. This time, Dr. Qaisar has suggested to me to complete TB treatment for five months and after that, I can fly to Sharjah. I will have to go back to Sharjah because during these two visits to Pakistan, I have not been working here. My debt has risen to 5 Lakh [Rs. 500,000]."*

Khalid had planned to depart for Sharjah before due completion of TB treatment for the second time. Although it was because of his financial preferences to his health, yet on the other hand, it was a non-professional behavior and moral corruption of government healthcare providers who had supported Khalid's negligence to overlook the importance of health. During the first treatment process, it was social capital that had provided institutional support and had resulted in creating a complex situation completion of anti-TB treatment. It was not failure of government healthcare structure or PTP but a minimal level of health preference by Khalid.

In most of the cases, the barriers to visit government healthcare centers of Murree by respondents were financial depletion of families and factors like uneven topography

of area, dilapidated road infrastructure and unfavorable environment. It was almost impossible for families of respondents tormented by negligible resources to seek a beneficial health seeking/preferential behavior. Geographical and environmental factors also shaped a compromising health behavior. The poor road infrastructure and lack of transport facility had forced the respondents to make delay in their visit to government healthcare centers. The patients had waited for getting better through their household remedies and visiting quacks, but after getting TB at its highest stage, they had to visit government TB center.

This non-professional behavior of government health providers had stirred the negligence of Khalid to compromise his health. Relapse of TB and weak financial position was the root cause of his sluggish health behavior. During second FGD, Bushra said:

> *"I was in bad health because of cough and temperature. After a month of treatment from Dr. Basheer [a quack], I came to Samli Hospital for TB diagnosis. I knew that TB treatment would continue 9 months. I came here with an intention to have TB diagnosis. It was November last year [2015] and I was diagnosed with TB. It was onset of winters. I thought I would not be able to visit Samli Hospital every month during snow. I went home without getting TB treatment. My health was worst within two months. I had lost a lot of weight by then and I had to be admitted to Hospital in January [2016] this year."*

During the first visit, this woman patient was not sensitized by the staff of Samli Hospital about TB disease. There wasn't any mechanism for establishing a network between laboratory and TB dispensary to share information of TB patients and this was a serious gap. This respondent was diagnosed with TB in the report of the laboratory, but she had not deliberate accessed to TB dispensary. So, the dispensary had not interacted with the patient. The patient's record had existed in the record of the laboratory but not in the record of TB dispensary register. During two months, before her second visit, neither TB dispensary asked about the status of the patient's previous visit to laboratory nor the latter contacted this patient. Most importantly, other than the disappointing management of Samli Hospital, it was the failure of existing TB control program especially at the district and tehsil level that did not

ensure timely supply of anti-TB treatment to poor and illiterate patients of Murree due to which she had made her own decision and preferred to start TB treatment at the end of snowfall season.

The field data considers bad cold and constant cough as the first symptom of TB. Giving a summary of recommendations and suggestions for finding TB suspects (S. K. Field et al., 2018) said that patients with cough should be screened for TB diagnosis. This can be a workable solution to active TB case finding for which (Zelner et al., 2018) said that along with all other tools this could be a very supportive mechanism for reducing TB burden. This can be a practical step only if active TB case finding mechanism is introduced which had not existed in Murree at any level.

8.4 Social Stigmas of TB

Zareeda was a 52 years old woman. She was resident of village Samli Baramaal, which was situated on the other side of the mountain and the only way to Samli Hospital was through IMDC and change of wagon or coaster from Satra Meel for reaching Samli Hospital. Zareeda's husband had passed away and she was living with her 29-year-old married son who had a wife, two daughters and two sons.

Zareeda was not a new victim of TB. This was for the second time that she was diagnosed with TB. Previously Zareeda was diagnosed with TB 35 years before at the age of 17. Zareeda had a very sharp memory and remembered the first instance when TB got her confined to bed. Talking about the time of her first TB incident, Zareeda said:

> *"I remember, I was young and had similar sort of health conditions that I had this time. I had cough a number of times and had temperature off and on. My father was alive then and was very loving to me. I had been sick for a month and had used all household remedies. Doctors were not so commonly available at that time. I remember there was a local Hakeem [Homeopath Physician] who had given me medicines but those remained ineffective. My father took me to Samli Hospital. These days transportation is very conveniently available but in past, it was very difficult to travel. This new road [IMDC] had not existed and we had to suffer a lot to get to Samli Hospital. I was admitted to Hospital for one month. I remember that*

an old lady had told me – during my first stay in Samli – that TB affects just once in life and never gets back. And this was the reason that this time I had never thought about TB during my sickness and had ignored it completely.

The doctors were far better in past because they were welcoming, soft and used to satisfy every patient. The hospital facilities were much better. In the past, the doctors were good human beings and used to care every poor and wealthy patient alike. But now the doctors have turned into butchers. The behavior of doctors has become very rude. Last time, the doctors told my father not to share food and water with me. My father used to take food with me and had never set me aside. Our relative had stopped visiting our home for a few months. In past, the girls used to get married at early age, but due to TB, my marriage was delayed for around two years. At that time, TB treatment took long time to cure and I was very sick of taking TB medicine regularly for more than a year. "

The social stigma of TB had not changed even after an interval of 35 years. Zareeda had mentioned some social stigmas of TB that she had faced during her TB treatment 35 years ago. After the gap of three and half decades, Zareeda was again being alienated in society because of social stigmas of TB. The spread of TB by sharing utensils was a most common social stigma among the residents of Murree and had resulted in isolation of TB patients at household and society levels. Talking about one of the causes of spread of TB through sharing utensils with TB patient, Qaisar Aziz said,

"Everybody says that TB gets spread because of sharing of utensils with TB patient. I have a taxi car and I have to spend the whole day on taxi stand. Before my TB diagnosis, I was not aware of this fact that TB can spread from sharing food items and utensils. My friend told me that cracked teacups on tea stalls are the cause of the spread of TB. He said that cracks in utensils are the safe havens for TB germs, where the germs can stay for a very long time duration. Germs do not go away even after washing very cleanly. The owners of tea stalls on our taxi stand do not take care of cleaning their teapots. My friend had made me realize about

this cause of the spread of TB. All of the taxi drivers had put pressure on the owners of tea stalls to bring new teapots and throw the cracked cups and they had to do it."

Every TB patient had heard about the spread of TB by sharing utensils and sharing of food with TB patients. It was assumed that the chances for the spread of TB disease could have increased manifold by taking a meal or sipping tea in cracked utensils. Social stigmas of TB had alienated TB patients both at micro and macro level. Usually, TB patients were supported from their affinal kin at the micro level for fighting against TB. Sometimes TB patients had faced a discriminated behavior from their family members only in case of large and extended families. Whereas in nuclear families, TB patients were given more care. In this case, the social stigma of TB about its spread through sharing of utensils was taken for granted. The patients had said that they lacked courage to set aside their close kin and had considered the disease of TB from divine power Allah (God).

Sameena Bibi was a young woman of 21 and resident of Kali Mitte. Sameena had one younger sister and two elder married brothers. Sameena was in the fifth month of her TB treatment. Sameena said that she was engaged before her TB diagnosis. Sameena was diagnosed with TB from Samli Hospital and this news resulted in the breakup of her engagement. Sameena said that her breakup had affected her psychologically. There was social stigma about TB among respondents that TB was a genetically transmittable disease. Zareed's marriage was delayed 35 years earlier in a case mentioned before and now Sameena's engagement too was severed due to this social stigma. Azhar Abbasi explained in the following words how social stigma of TB affected marital life:

"I asked a janitorial employee of Samli Hospital about my marital life during TB treatment and he asked me to keep a distance for first two months, whereas there was no issue after the given duration. I did not go close to my wife for first two months of TB treatment but after that, I went to my wife for the physical urge. Other women of the village had prohibited my wife not to do sex during TB treatment. This was due to the fear of the spread of TB. Although it had been two months since the start of TB treatment but my wife had refused to sleep with me. I tried to convince

her but she got stuck to the point and finally agreed for safe sex. Next night I used a condom for the satisfaction of my wife. This was for the first time during my marital life when I used a condom. In reality, I do not know the fact about the spread of TB during physical activity. The way people have shared with me and my wife, we are copying it."

Marital life was a very sensitive issue and the respondents had never discussed it publicly. Azhar also hesitated to discuss spread of TB through physical activity with doctors or TB facilitator of Samli Hospital. Azhar said that he had discussed this issue with a janitorial of Samli Hospital. He was of the view that TB was a genetically transmittable disease and had the chance of transmission of TB from one person to another. He had also told Azhar that TB could have been transmitted to the newborn as well. Referring to sources of information about genetic transfer of TB, a woman respondent said:

"Before the diagnosis of TB, the women around me said that TB could get spread through marital relation. Unfortunately, I was diagnosed with TB and I had to be admitted to Samli Hospital. I was very shy to ask a doctor about the truth behind this information. But I gathered enough courage and consulted Aya [ward woman] of women's ward of Samli Hospital. Aya told me that TB gets spread through physical interaction . . . On getting discharged from Samli Hospital, I returned home and my husband visited me. My husband wanted to have physical activity with me I just warned him, but he said that it was from Allah [God] and he wanted to have it."

All types of social stigmas of TB had not emerged overnight, rather had a historical past. Social stigma of TB as discussed above had not only disturbed the life of married couples but had also affected the life of unmarried TB patients. It had more devastating effect on the life of single women TB patients as compared to single men TB patients. Tariq (Laboratory Technician and TB Facilitator at THQ) had no knowledge about the genetic transfer of TB disease and was influenced by social stigmas. During interview, Tariq had narrated a story of the father of a woman TB patient and said,

"Not all but some of the TB patients ask about the effects of TB to their marital life during TB treatment and I always tell such patients to keep a distance from their partners. I think there should be the distance for almost two to three months because in this time duration the TB germs die with the use of anti-TB drugs. Actually, it is our duty to tell every patient about such things, but married life is a very personal issue. So, I do not communicate to everyone but tell only to those patients who discuss it with me.

For example, last month a woman was diagnosed with TB. She belonged to Sair Bagla. She was accompanying her father. They collected TB medicine and walked off the front door of hospital's building. The father of the girl came to me and said that some people from his village were employees of this hospital. The man said that on his way back one of the men – employed in THQ – had met him on the entrance of the hospital's building and had asked about the reason for visiting THQ. The man had said to the other man that he had come there for malaria test of her daughter. The man was very humble and had presented his plea before me not to share the news of TB to his daughter with anybody. The man had said that it was the issue of future of his daughter's marriage. In this way, people conceal their TB infections"

During number of informal discussions with LHWs, TB dispensary staff of Samli Hospital and TB facilitators of RHC and THQ hospital question about the biological/genetic transmission of TB disease was raised. Unfortunately, none of them had true knowledge about this social stigma. Basically, this social stigma had already existed among respondents and society but the staff of government healthcare centers and TB centers of Murree had further aggravated it by never mentioning before the patients. Lack of knowledge among TB facilitators about the causes of the spread of TB in society had always boosted earlier existing social stigmas.

There was a social perception that extensive use of sugar could turn into diabetes, whereas extensive use of salt could have turned into TB. This was a very different perception about the causes of TB. Some of the respondents had considered harsh weather condition of Murree as a strong reason for the cause of their TB. Sadia was a

43-year-old woman. Saida was in the 3rd month of her TB treatment. During a session on her life history, Sadia narrated the cause of her TB and said:

> *"TB had never been in my family or in the family of my husband. I do not know the causes of my TB. There is no TB patient in my neighborhood. After thinking a lot about the cause of my TB, all the time I get to the same conclusion. My TB is for sure because of cold. I remember it was a very cold evening of early December 2015. I had heated water to take bath. The sun was about to set. After taking bath, I had not dried my hair fully and I had to grab some clothes from the courtyard. I felt cold there and then and my chest was affected. I started general treatment, but I believe that the cold was the real cause of TB."*

Along with all other stigmas of TB, cold was one of the prime reasons. Nisar was of the view that Murree was highly cold during winters and every case of TB had always started from pneumonia. Nisar said that the sickness had always started from cold and later on cough and temperature joined in and the end result was TB.

A study conducted in rural Maharashtra, India by (Atre et al., 2011) has presented similar social stigmas about hiding TB to protect self-esteem, isolation of person with TB and his/her belongings due to fear of spread of disease, genetic transmission of TB, adverse impact on marriage and intense social suffering. The literature on stigma, presented in chapter two, has strongly supported this argument that all sorts of stigmas result in delay of TB diagnosis and treatment.

During life history sessions, the respondents were asked about their family history of TB, and most of the household were found being TB affected in past. There were two types of social perceptions about family history of TB and in both cases, the social perception had supported the social stigma of TB being a genetically transmittable disease. In the first case, the respondents having a family history of TB had assumed that they were affected by TB because it had been in their family. In the second case, the respondents not having any TB case in their family history were amazed at being TB patients. Such respondents had said that it was not acceptable for them to embrace the news of their TB diagnosis being positive because their family had no TB history. This social perception highlights the strength of existing social stigma of TB as a

genetically transmittable disease. This social stigma had been a barrier to accept the fact that TB was an airborne disease.

Chapter four has discussed a case study of TB to Azhar Abbasi's father almost twenty years before and has presented Azhar's experience as an attendant in Samli Hosptial, and the earlier case study of TB to Zareeda 35 years ago has presented the existence of social stigmas of TB in past and present. The social stigmas of TB had remained the same even after 35 years. Over a period of time sources of information such as electronic and print media had evolved, the government and health department of Punjab could not succeed fully in wipeing out long-standing social stigmas of TB. During these 35 years, the channels for providing knowledge and information about cause and symptoms had developed manifold, but Zareeda had become a victim of TB for the second time that had refreshed her memories about social alienation. Social stigmas had been deep-rooted and had affected the inclusion of TB patients and families.

8.5 Symptoms of TB

The literature on TB symptoms has presented five key symptoms of TB namely; (1) a cough with thick, cloudy and sometimes blood mucus from lungs (sputum) for two or more than two weeks; (2) fever, chills, and night sweats; (3) fatigue and weakness; (4) loss of appetite and unexplained weight loss; and (5) shortness of breath and chest pain. These symptoms of TB were translated into Urdu (National Language of Pakistan) and were published on charts and pasted on the walls of every government hospital of Tehsil Murree. The respondents were diagnosed with TB after going through a long time sickness, but they had no knowledge and information about the symptoms of TB.

Responding to question about knowledge and information about symptoms of TB, almost all of the respondents had said that they were not aware of it. Whereas responding to the question about health changes and feeling before TB diagnosis, the respondents had somehow shared the symptoms of TB. In a number of cases, the TB survivors were part of TB patient's household but had not identified with TB symptoms at the start of sickness. It was very strange to document that in some of the cases, the TB patients had completed TB treatment and did not know the symptoms of

TB. A respondent from general population sample of this study had responded to question about symptoms of TB and said:

> *"I do not know much about TB because fortunately, nobody has been a TB patient in my family. I have never come across TB related information but I can just say that I have heard about TB from my friends. TB patients are always weak and they do not have a flesh on bones. Patients are very low in weight and have deficiency of blood*

Fazil was 21 year old and he was part of my general population sample. Fazil sold coconut on Murree road and I asked him to spare time for interview. I waited for Fazil to finish selling his product and then we could talk. About the symptoms of TB, Fazil said:

> *"TB is a very dangerous disease. My uncle and his son had TB. My mother told me that nails turn white and this is the symptom of TB."*

This local understanding about symptoms of TB among the general population presents a bleak picture of level of local knowledge and information about TB disease. Talking about health changes before TB diagnosis, Sadia Bibi said:

> *"I got flu and then started having temperature. At the start, there was Meetha Bukhar [Sweet Temperature] but soon after cough, temperature and sweating started. I took it for granted. I started feeling fatigued after a few days of cough and unusual temperature. My breathing was disturbed during this time, but I had to bring water from the tap. My breathing was also creating trouble and it was very difficult for me to carry water through staircase. Although I was taking medicine from Dr. Jamal [a quack] yet it had given me temporary support to overcome cough, temperature, and fatigue. I did not know the symptoms of TB. If it had come to my mind at the start, I would have preferred to visit Samli Hospital at the start of sickness; and might have been saved from sixty injections and a month-long hospitalization."*

All of the respondents had faced similar health changes during the time of their sickness, but were unable to identify these health changes as the symptoms of TB. An

analysis of documented health changes during sickness follows herewith. It was quite understandable that due to economic and social deprivations, the respondents had no awareness and knowledge of TB as a fatal disease and its symptoms. The respondents confided that they had never cared to look at the TB charts and posters pasted on the walls of government healthcare centers of Murree. Talking about the blame upon patients (Frosch & Elwyn, 2014) has said that health system leaders and front line clinicians blame patients for not having health literacy and has suggested that they should accept that part of the responsibility rests upon them as they do not talk to patients in a simple language.

During the first phase of this study, I had casual informal discussions with TB patients in waiting area of Samli Hospital. During those informal discussions, I had asked patients to randomly read pasted charts and posters on the walls of OPD but majority of the selected patients and their attendants failed to read out information on those charts and posters. There were some charts containing information about the fee for various laboratory tests and x-ray. The respondents could not read the English and Urdu script of those charts clearly suggesting that illiteracy prevented the poor and marginalized segments of Murree from reading such pasted charts and posters.

8.6 Factors for the Spread of TB

Historically, TB had been a disease of poor and marginalized segments of society and they lacked TB related knowledge at all. The importance of information on determinants of TB and causes and symptoms was a far cry for the poor people. The creation of Samli Hospital in Murree had its limitations and it could not cope with the rising number of patients with passage of time.

The spread of TB in Murree was due to factors other than mentioned above. Poor economic status of the majority of respondents was the mother of all factors for the spread of TB and had overtaken all other existing factors. The respondents never had enough money to spend on healthcare, and they preferred household remedies rather than visiting a government healthcare center of Murree. Only after the sickness had worsened did they seek medical help from Samli Hospital. Owing to existing gaps in government healthcare structure of Murree, the respondents had preferred to visit nearby quacks for healthcare or used self-prescribed medicines. It was more

convenient for the men to take their sick family members to quacks or general practitioner in the evening as they remained busy with work in the morning and could not afford to lose day's wages. The earlier debate in chapter six has supported the argument that quacks were easily accessible to respondents as compared to staff in government healthcare center of Murree.

Geography and environment were strong factors for the spread of TB in Murree. I have presented a debate in chapter three and six on these two factors in the context of barriers to have access to government healthcare facilities of Murree on a macro level and reasons for the spread of TB on micro (household) level. On one hand, geography and environment structures had more impact on the mobility of poor segment of Murree and on the other hand, these factors had forced the respondents to compromise health seeking behavior as they easily found pretext to avoid visiting Samli Hospital or other health facilities.

The debate about the overall infrastructure of Murree and infrastructure of TB households has supported the argument that poor quality of road infrastructure of Murree and poor household conditions were very strong reasons for the prevalence and ever-increasing burden of TB among poor and marginalized segments of Murree. The debate on poor living conditions among TB households in chapter three has also supported the row that in the context of germs theory the abysmal living conditions had resulted in grave healthcare in general and TB in particular. This argument is supported by earlier study conducted in New Zealand (Park & Littleton, 2008) which stats that healthy living and working conditions can reduce the TB notification rate.

Talking about factors for effecting relapse of TB in Rawalpindi (Khurrum et al., 2009) said that city residence and poor living conditions are associated with increase chances of relapse and increased mortality in TB patients after successful therapy. The study considered overcrowding, poverty and illiteracy among main risk factors for TB in a Pakistani city. During my study it was also obverted that household contacts were very close to risk of getting TB. According to (WHO, 2018) in Pakistan up to 15.3% of TB patients contacts have been found to be suffering from TB. According to (Saqib et al., 2011) sixty four percent patients of the study group had a contact suffering from TB.

In the list of determinants of TB, social capital also plays an important part for the spread of TB. Although the literature on social capital – in the context of public health – is a very valuable tool for providing easy access to health facilities, it has also been a barrier to equality for the right of healthcare to individuals. The other role of social capital for becoming a factor for the spread of TB was observed through its utilization for spreading health-related knowledge in general and TB related knowledge and information in particular. Community spaces were very effective means of spreading health-related information but were being used for this purpose neither by government, health department, and NTP/PTP nor by the respondents.

TB had been considered a communicable disease and the social stigmas of TB had developed a specific perception about TB patients and households that had alienated TB patients and households from society at all levels. During life histories, the patients had admitted that they had fear of being diagnosed with TB and for which they had opted not to visit Samli Hospital. On one hand, the Samli Hospital was well trusted and reputed among respondents for curing TB, on the other hand, a few respondents had avoided visiting Samli Hospital because of the fear of being diagnosed with TB.

Gulfraz was 28 years old and the only earning hand his family that comprised of his widowed mother and three younger sisters. Gulfraz was in the third month of his TB treatment from Samli Hospital. Talking about the reason for his delay in TB diagnosis Gulfraz said,

> *"I had been sick for two weeks and it did not occur to me that I was going to become a TB case. My friends observed my cough and had suggested to me to visit Samli Hospital. Their suggestion was right but I was shocked since I had not imagined I would be diagnosed with TB. I kept on thinking at length and then I decided to continue the routine medicine. I was very confident of being cured of cough and temperature. During next two weeks of sickness, I had been thinking that we were already poor and people in the village had not liked us. In this situation, if neighbors came to know that I was a TB patient, they would keep distance from me and my household. This thought had been a barrier for my visit to Samli Hospital for almost a month."*

For the first time, I met Gulfraz in Samli Hospital during the first phase of the study. Gulfraz had visited TB dispensary to collect TB medicine for second month. Gulfraz was resident of village Sair Gharbi. This village comprised around a hundred and fifty households. There were two small shops in the village. There was an unpaved pathway to Gulfraz's village from the main road of New Murree. The bus stop was named after the village. The bus stop of the village had a few shops and some of the tourists visiting Patriata used to stop for a short while to have snacks and drinks. Sohail was a very close friend of Gulfraz and had a snack and cold drink shop on Sair Gharbi bus stop.

During life history sessions, Gulfraz had shared with me that he had placed his TB medicine in the shop of Sohail who was very punctual to open his shop at sunrise and close at sunset. This shop was at a 20 minute walking distance from Gulfraz's home. Gulfraz was a daily wage waiter at a hotel of Patriata. Gulfraz used to take his daily TB medicine on leaving for his work in the morning and after returning home in the evening. Gulfraz said that he did not want to reveal about his TB ailment due to the social stigmas of TB and for this he sought Sohail's support. Social stigmas had developed a sense of insecurity to Gulfraz and it had affected the social life of vast majority of respondents. Gulfraz had said that since the start of his TB treatment, he was not confident of interaction with people around him and even his mother noticed his indifferent behavior and he had kept on making stories to deceive his mother and sisters.

8.7 TB and Life Transition

All of the respondents agreed that their social life was much better before getting diagnosed with TB. Once people in the vicinity of their homes came to know about their TB, they had changed their attitude. According to respondents, their families were at good terms with neighbors, relatives and friends. But when the news broke out of their illness with TB, social relations became sour. In this part of the chapter, I have presented stories of life transition after TB diagnosis.

Earlier debate on social stigmas of TB has supported the argument that TB had resulted in life transition for TB patients and their families. Although TB had affected the financial life of patients at individual and household levels, its effects on the social

life of TB patients and their households cannot be underestimated. TB was thought to have brought disgrace to the families and their relations. The depressed life of TB patients was on the verge of transition. This transition was not confined to four walls of the house but persisted in all walks of life.

Tanveer was a 38-year-old man and he had completed his TB treatment a month before his first life history session. For the first time, I met Tanveer in Samli Hosptial and he had visited TB dispensary to ensure that he had completed TB treatment and was not in need of further medicine. Tanveer was resident of Masyari. Tanveer's family included his wife, three sons, and a daughter. Tanveer and his two married brothers were sharing the same courtyard but three families had separate kitchens. The women of these families used to fetch water in a group from an unprotected water spring. Tanveer, a daily wage employee, was able to get a contract of the newly constructed house sometimes. Generally Tanveer was earning handsome amount to feed his family in a much better way. Talking about his life before illness and transition, Tanveer said,

> *"I was happy and had a better life before my illness. I had a good reciprocal relationship especially with my two brothers and to some extent with neighbors. I am the elder most of 7 siblings. My brothers had great trust in me. Whenever I was in need of cash, I always asked my brothers, who always supported me. But this was all before my sickness."*

Selected TB patients for in-depth part of this study had claimed that they had been enjoying a very happy and prosperous life before getting sick. The men were financially contributing in household income and were respected. They had trustworthy relationship with their friends, neighbor, and clan members.

Tanveer got sick and he too like all other TB patients started with household remedies, visited quack and finally landed at Samli Hospital where he was diagnosed with TB. Tanveer's TB had demarked a line in his social relations with his brothers, clan members, and neighbors. In gathering life histories, it was documented that immediate families of TB patients were very supportive. Financial contributors after their TB diagnosis were supportive more during treatment than that of financial

dependents among small units of family. Talking about transition of social relations after TB diagnosis, Tanveer said:

> *"My wife was much concerned about my sickness prior to TB diagnosis. My wife had been giving Kahwah to me and had been taking great care. After my TB diagnosis, it was my wife who had supported me most. I had lost weight and I had been admitted to Samli Hospital for two weeks. During that time, I could not earn any money. I had a few contracts of big houses and the owners had paid me upfront. I had to pay back to owners and I did not have money. I had not worked for a month. After one month, I started working again, but in the start, I hired daily wage tilers to finish my previous commitments. This kept going on for two months and after that, I started my independent work.*
>
> *I still remember the time before my TB diagnosis, when my daughter was hospitalized and my brothers had supported me financially. After my TB diagnosis, my brothers' attitude suddenly became indifferent. I had never been able to save enough from my earnings for bad times because almost all money was consumed. I requested both my brothers for lending me some money so that I could feed my family but my brothers made excuses. My wife's brothers and my friend Jamal funded me for my illness. During illness and till the third month of TB treatment I had to face money constraints. In total, I was in debt of Rs. 25,000 and I had to return the loan to my wife's brother."*

Social and financial support to TB patients had no direct connection with spread of TB because for both supports, there could have been ways and means to avoid physical contact with TB patients and a distance could have been maintained. The transition of the social life of TB patients and break up of social support had close connection with the long-term financial burden on TB patients because in their illness, the earnings stopped and they had to run their homes on borrowed money. TB was a long-term disease and the general population had a perception that TB patients were not physically strong enough to earn enough to support their families during their course of treatment. At times, the close kith and kin of TB patients refrained from financially supporting them.

Religious, social and political participation was very limited among the TB patients before their illness. The earlier debate in chapter seven has supported the argument that TB patients had a low level of social capital because they were not regular participants in community spaces before getting sick neither did they visit mosques regularly. Before the illness, they had been interacting with their peers only and it was a reciprocal relation.

Personal and household cleanliness was taken for granted among TB households. Before illness, the TB households had a low standard of cleanliness. TB households were overcrowded. During winters, the women used to cook dinner and breakfast in the sleeping room. Within given living conditions, TB had fueled the existing level of cleanliness. Talking about the use of mask and methods to protect the spread of TB at household level, Asad said,

> *"The staff of Hospital did not give me mask. I was not told about the mechanisms to stop the spread of TB. I was just told to cover my mouth at the time of cough or sneezing . . . I cannot afford to purchase mask out of my pocket. It is the fifth month of TB treatment. At the very start of TB treatment, I have been placing cloth on my mouth in coughing and sneezing but I think I had continued for just fifteen days."*

It was observed that Samli Hospital was given enough supply of masks for distribution among patients. Ideally, the dispensers should have distributed these masks to TB patients but neither the masks were given to TB patients and nor the staff sensitized TB patients about the preventive care to be taken against spread of TB. In most cases, TB patients were found spitting, coughing and sneezing without any fear of the spread of TB in their households and workplace. This was the result of complete absence of awareness on hygiene and physiology. Asad's wife Tahmeena was a housewife and had never been to school. Tahmeena had never observed cleanliness with an aim to stop the spread of TB in Asad's TB treatment. Talking about cleanliness at household level during the course of treatment, Tahmeena said:

> *"Last few days of illness before the TB diagnosis and first month of TB treatment were very critical. During this time, my husband Asad used to spit all around. I was sick of this before his TB diagnosis. After diagnosis*

of TB, I had to take care of my husband because he is the only earning hand for my kids. I wished he might not spit but he used to do it in the room even during dinner time."

Tahmeena had no knowledge of the cause and symptoms of TB and she was ignorant about the sources of spread of TB. This was the case among all of the TB households. The spread of TB was taken for granted by TB patients and their household members. I have discussed in first part of this chapter the causes and symptoms of TB and due to lack of knowledge and understanding about the causes of the spread of TB. The patients were very reluctant to cover their mouth in coughing and sneezing.

Diet patterns were very simple among TB households before the illness. Protein was not a regular part of the diet of TB households. Most consumed items were vegetables, pulses, and wheat. The innutritious diet pattern for years among TB households was the reason for poor health of the people and weak immunity among TB patients. Talking about the diet pattern before illness, Azhar Abbasi said:

"What to mention about a poor man, even big landlords cannot afford fruits these days. We cook vegetables and pulses, and chicken once a month. Mutton and beef are out of reach. At Eid ul-Adha[48] *we take a good amount of mutton and beef because the meat is sent to my household as charity."*

The TB patients were required to have quality food and some nutritious items in large quantity. But due to weak purchasing power, the diet pattern of TB patients before and after their TB diagnosis had remained the same. Chapter five has discussed a case study of Riffat in the context of inequalities that supported this argument of inequality due to poor income among poor segments of Murree. TB badly affected the life of patients and their households financially. After TB diagnosis the men patients are confined to bed and cannot go to work for many weeks. With no regular income, the households and the patients could hardly manage quality diet. The dispensary staff of Samli Hospital had always advised TB patients:

[48] A Muslim festival marking the culmination of the annual pilgrimage to Mecca and commemorating the sacrifice of Abraham.

"Take good diet and you can eat anything except cold, fried and sour diet. You should take milk, egg, meat, soup, and liver. You can take all of the fruits. But do not take soda drink."

Talking about diet pattern and economic limitations, Tanveer said,

"The doctors [dispensary staffs of Samli Hospital] had very conveniently advised me to take milk, eggs, chicken, fish, liver, and soup. I am doing good now and next would be last month of TB treatment and I am earning sufficient now and cannot afford all advised items for diet pattern. How was that possible in my TB treatment when I was not able to earn? Now just imagine, I was sick and my brothers had not supported me financially and I had to borrow money from my wife's brother and Jamal. I can never think of a lavish lifestyle within my limited income."

TB and poverty were interchangeable social stigmas and TB had its home in poor households. TB had gifted more financial troubles to its victims. TB diagnosis had resulted in breaking of trust of people in TB patients and their households. Talking about the response of relatives, Tahmeena said:

"After the diagnosis of TB to my husband, the wives of my husband's brothers had skipped me in fetching water. Before TB diagnosis to Tanveer, I used to accompany Zareena and Kausar for fetching water. I was in good terms with them, but since Tanveer got TB, both of them go to get water bypassing me. They have forbidden their kids to play with my children. It means they hate us because we have TB in our home."

This was an extreme case among TB households but generally, the people used to interact with each other and used to avoid sharing a meal or taking a meal in shared utensils. The utensils of TB houses were not shared and used by other households. This conduct of people had alienated TB patients. In most of the cases, TB households were alienated because the relatives and neighbors had preferred not to visit such households.

8.8 Caregivers

Chapter four has discussed that all of the TB centers of Murree were not ensuring the implementation of one of the most important components of DOTS by not registering a caretaker of registered TB patients. The caregivers had a very important role for social and psychological support of patients in long-term diseases. TB was a long-term disease and its treatment was for 6 months and a caregiver was very important for moral and psychological support of TB patients as well as following up with the patient to check his regular collection of medicines from the health facility and also its intake.

The TB patients were missing a caregiver in their course of TB treatment. Although the families of TB patients had supported them both socially and financially yet the social stigmas of TB and behavior of people around them had alienated TB households in general and TB patients in particular from mainstream life. All of the TB centers of Murree were not having a clinical psychologist for the moral support of TB patients. There was a psychologist in the MDR-TB center of Samli Hospital, but his doors were only open to MDR-TB patients. Talking about the psychological effects of TB, Asad Mahmood said:

> *"What should I say now? All of the bad time is gone now. Firstly, TB is not considered good in our society and once you get TB, people constantly taunt you and not let you live. Becoming a TB patient is a curse. On one hand I had financial issues and on the other hand, people were teasing me. On the sidelines of this, the hospital staff also misbehaves. It is definitely bad in its real terms. At the start, I was not interacting with people just to avoid their cross-cutting taunts. This mocking makes you crazy."*

This long-term social and financial pressure had affected TB patients psychologically and they might have become a victim of personality disorder. This was a serious drawback of NTP/PTP to overcome psychological issues of TB patients. It was needed to tap and encourage TB patients to take regular medicine.

8.9 Power of Medicine

Respondents had developed a local perception of the power of different medicines. The size of tablets determined its power. The bigger the size, the higher was the power of a tablet. Second to the size of tablets was color of tablets to determine its power. The colored tablets were considered more powerful than plain (non-colored) tablets. The red tablets were considered highly powerful as compared to tablets of all other colors.

In the category of medicines, a capsule was considered more powerful than a tablet. The capsule was the replacement of tablet. If the tablets were ineffective to cure a sickness, capsule was its replacement. There was no category of power among various colors of the capsule. On top of this local perception about the power of medicine was an injection. The respondents had more faith in the power of injection than the power of a capsule. A colored injection was considered more powerful than a plain (non-colored) injection. Again a red color had very strong impression among respondent because of its power.

There had existed a criterion to measure the power of medicines. After taking medicine if the color of urine turned yellow, it meant the medicine was powerful. The darker the urine, the more was the power of medicine even if it was tablet, capsule or injection. The sweating after taking medicine was also the symbol of the power of medicine. The existing understanding or impression about the power of medicine had affected the behavior of TB patients in taking TB medicine. The cultural construction about the power of medicine was a barrier to take regular TB medicine. The literature review part of chapter two has supported this argument that patients had either quit or thought of quitting TB medicine during the course of TB treatment because of its power.

Nafeesa was a 21-year woman. She was getting religious education from a Madrassa of Murree. Nafeesa's father, Ayoub was a driver of Suzuki Carry Van. Nafeesa's village was far down from Bansara Galli and it used to be blocked during snow time in Murree. Nafeesa was in a madrassa and she got sick. Nafeesa's teachers had not taken notice of her sickness. After a month of sickness, Ayoub took Nafeesa back to his home for treatment.

Initially, Ayoub took his daughter to Dr. Salam at Jheeka Gali (on the private clinic) and also started home remedies to cure Nafeesa's continuous cough and temperature. After reaching home, it took Nafeesa almost a month to get to THQ hospital for TB diagnosis after passing through different pathways. Talking about the power of medicine, reasons for quitting TB medicine and its outcome, Nafeesa said:

> *"Almost after a month of sickness, my father took me to Civil Hospital [THQ] for treatment of cough and temperature. But I was diagnosed with TB. It was unexpected and we had not thought about it. The man in laboratory got me registered and gave me TB medicine. I was told to take regular medicine. I started taking medicine and I guess for first 15 or 20 days, I had been taking regular medicine and after that, I started skipping a dose of medicine.*
>
> *The tablet of red color was very powerful. It was very large in size and I had to break that tablet into two pieces and even then it was very difficult to swallow. Besides this, the taste of the tablet was very bitter. I had to take that tablet almost 30 minutes before breakfast and after taking breakfast I could feel the taste of medicine till noon. It was a very powerful tablet and the urine used to get dark yellow. I could feel tiredness and minor temperature. But I was getting better. I had not told my father about skipping a dose of TB medicine.*
>
> *After one month of registration, my father took me again to civil hospital and they gave us medicine for next month. The man in the laboratory asked my father to bring me along on every visit for getting medicine for a total duration of treatment. My father was astonished because during this visit the man had done no medical procedure to me. He just took my card, made some entry, gave medicine and we were all set. It was very difficult to visit Civil Hospital from my village and even if I got to the main road, the transportation was such a big issue. The relative of the owner of my father's van was an employee in Civil Hospital and he helped my father to get TB medicine without my presence. I took medicine from the Civil Hospital and for next two months, my father himself brought medicine.*

Till the end of the fourth month of TB treatment, I had been taking medicine with a gap of two to three days and sometimes for four days. In the start, I could feel much better health than the time of TB diagnosis. I had over sighted the fact to take regular TB medicine. I used to drop the remaining tablets in the maze filed at the end of every week. At the end of the fourth month of TB treatment, I was again on bed. Cough had caught me again and this interrupted medication had started giving blood in saliva [sputum].

Civil Hospital was very close to my bus stop [Bansara Gali] and my father used to go to drop school kids to Murree on his van and it was very convenient for him to get my medicine. Finally, my father took me to Civil Hospital and consulted a doctor. The doctor asked my father to take me to Rawalpindi for treatment. He was of the view that I had another type of TB [MDR-TB] but my father knew that Samli was a TB specific hospital and I was taken to Samli Hospital.

In Samli Hospital, we gave sputum sample and had my X-ray. It took a lot of time and it was around 02:00 P.M. when I was told that I had TB on critical stage. I was admitted to hospital and I was given injections in the morning and evening. After ten days of hospitalization, I was supposed to be discharged and I was told to carry on injections in morning and evening for next twenty days along with routine tablets. There is no health facility available in my village. My father used to get free in the evening. There is no transport facility in the village to reach Bansara Gali stop. The only nearby doctor [quack] is available in the Bazar of Bansara Gali. My father had decided for my hospitalization till the end of injections.

I did not have knowledge of the impact of making this mistake of taking irregular medicine. During the time of my hospitalization in women ward of Samli Hospital, I was told by a woman that I had to start TB treatment from zero because of my own fault. If I had not broken the cycle of TB treatment, I would have been good by now."

During life history session, Nafeesa had revealed that I was the second person whom she had told the truth after her misery. She had not disclosed this story to her father just because of his anger. Nafeesa had been taking regular medicine since she had visited Samli Hospital. In Nafeesa's case, a failure of the third component of DOTS can be observed. The TB facilitator of THQ had not ensured a caretaker for giving TB medicine to Nafeesa under direct and regular observation. This mistake was also repeated by staff of Samli Hospital. On the other side, none of the household members had taken the responsibility of an active caregiver. Although Nafeesa's mother and sisters had been taking great care of her yet she did not ensure a regular TB medicine intake.

There were documented some side effects of TB medicine among respondents. Ideally, the staff of government TB centers of Murree should have shared the possible side effects of TB treatment with every new TB case and encouraged patients to start TB treatment. The TB patients were not aware of their constitutional right to information and it was responsibility of service providers to advise them about the strict intake of doses and allied information. However, the staff of government TB centers of Murree failed to perform their duty in providing information about its possible side effects. Talking about the side effects of TB medicines, Ihsan said:

> *"There are some side effects of TB medicine. For example, Ethambutol is an anti-TB medicine and its use can have side effects. Eyesight problems are the side effect of Ethambutol. The patients can sometimes lose their vision, but it is not very common. Generally, we receive complaint about blurred vision, color blindness, and poor vision. Color blindness is not much recorded. People do come with complaints and we do not tell them the real reason for health changes because the patients can quit TB treatment."*

The literature has provided a long list of effects of anti-TB drugs, but the TB facilitators of Samli Hospital knew very few of those including loss of appetite, vomiting, stomach pain, irregular temperature, and headache. The TB facilitators of THQ hospital and RHC did not know the side effects of the anti-TB medicine. Talking about health condition during the first month of TB treatment, Shaukat said:

"I started TB medicine and it was very difficult to bear the power of medicine. The big red tablet was difficult to swallow. During the first month of TB medication, I used to get temperature very often. The color of urine used to be dark yellow. I felt dizziness and it was again a difficult time. I could feel as if I was not getting better. I spent two weeks in this condition and then I went to Doctor Ajmal [a quack]. He gave me medicine of temperature and an injection. I was better for a few days but the situation continued for a couple of weeks more.

I went to Samli Hospital to collect TB medicines for second month. On that visit, I did discuss the issue of unusual temperature with staff. They told me that it was because of use of TB medicine and I will get better in a few days. They had said that it was for a very few weeks and I remember that gradually this issue of temperature and fatigue was no more with me."

These were short-term side effects of TB medicine and it was commonly documented among all of the respondents. The respondents said that they had remained worried about their health issues after the start of TB treatment because TB facilitators had not shared with them the information about expected side effects of anti-TB medicine. Most of the respondents had copied the conduct of Shaukat and had visited their nearby private healthcare provider to get treatment of unusual temperature. TB facilitators of THQ hospital and RHC were entirely ignorant as they had no knowledge of side effects of TB medicines, whereas the situation in Samli Hospital was a little favorable. One of the staff of TB dispensary had done dispenser class certificate and had shared the information about side effects of anti-TB medicines with other staffs. Generally it was against the concept of bio-ethics.

8.10 Analysis

Health preferences and existing barriers for better health were not based on a single factor. Various factors had developed compromising health behavior among TB patients and all of these were overlapping each other. It was important to understand the nexus of these factors that had developed existing health preferential behavior among poor TB patients.

The most condemnable factors for poor health among marginalized and poor TB patients of Murree were local and national political economy that was a combination of politics and economics. Without a stable political system supported by elected representatives who had responsibility to help the people of their constituencies the issues continued to be present. This was due to a careless attitude and lack of understanding of the problems of the local people by their elected representatives that had created an adverse situation. Similarly, the economy of any area is subject to its control over the market factors. The production factor was missing and the only local industry that produced income was tourism. But this somewhat attractive and income generating activity was confined to Murree, Patriata or Nathiagali. For the majority of the populaces, the life was a continuous hardship and struggle due to management of resources at hand. It was more of a malfunctioning political economy of the hill station and adjoining areas that compelled residents of Murree with no choice but having access to various means of healthcare through pathways. National and provincial governments had considered LHW programme a backbone of government healthcare structure. But it had not been engaged in its full entirety for the betterment of healthcare of people particularly those infected with TB in Tehsil Murree. The health policies should have revised the role of LHW and provided facilities to LHWs to interact and communicate health-related knowledge and information on TB at grass roots.

Both NTP and PTP with their national and provincial mandates were conspicuous with their absence to develop mechanism to find active TB cases and TB suspects at household levels because the TB control programs were not having any community workers. An infrastructure of healthcare and LHWs were very active community health providers who could have worked much better for decreasing the burden of TB in Murree. The engagement of LHWs for finding TB suspects was not in practice as it was not a part of their work and this was the fault of TB control program for not engaging their services for their program.

The LHWs were the workforce of National Program for Family Planning and Primary Health Care and were working under Primary and Secondary Care Health Department of Punjab. Since the year of its creation in 2010, PTP had never interacted with other existing healthcare programs for developing a nexus to work on a joint venture of

executing good health practices for people. The engagement of LHWs for controlling TB would have been a very inexpensive source to overcome a longstanding issue of TB in Murree and Pakistan. So, I consider it a failure of policymakers of TB control program at national and provincial levels.

An unchanged cycle of poverty among residents had directly led to existing health seeking behavior among respondents as the people had to think many times before adopting a strategy to overcome a catastrophe like TB and its repercussions though with meager resources and this was not an easy task. Although, I have considered economic limitations as the mother of health-seeking behavior and health preferential behavior of poor TB patients of Murree, but all other contributors of these behaviors equally affected the health of the people.

This situation had a deep link with local and national political economy and policymaking. Existence of poor road infrastructure for residents of villages of Murree was a symbol of least interest of people's representatives and policy makers. There had been no government transport facility with assigned routes and timings for the residents of Murree since long and the private transport facility did not satisfy the needs of respondents. In a broad spectrum, an exhausting walk for reaching private transport facility, long hour of wait for the bus, a long travel, overburdened OPD, and cold weather of Murree had resulted in compromising health seeking behavior of respondents.

Every government healthcare center of Murree was providing free health care at OPD but the real issue was access. The patients had to pay travel cost from their pockets for reaching government healthcare facility of Murree. The respondents were not interested in compromising their one day wage to visit the hospital. Even though the respondents would have spared themselves for visiting government healthcare facility, the road infrastructure was a barrier and there was no rapid transport facility.

The case of Zareeda has raised a serious question as far as success of TB control in Pakistan is concerned. Presented history of TB and TB program in Pakistan bespeaks of near failure of governments to ensure political commitment to overcome the issue of TB since the creation of Pakistan. The comparison of social stigmas of TB through the case study of Zareeda has raised a question mark on the progress of NTP that

remained inactive to provide TB related knowledge and information to residents of Murree during last 35 years. NTP and PTP had not channelized social community spaces and neither used LHW programme to give TB related awareness to residents of Murree. Health Department of Punjab and NTP had failed to provide state of the art healthcare facilities to residents of Murree. The spread of TB related stigmas from hosptials staff had neither been addressed by NTP/PTP nor by Health Department of Punjab.

The patients' failure to read charts and posters, pasted on the walls of Samli Hospital, was again a serious failure of political economy through which basic education was not provided to a larger segment of Murree. Owing to poverty, the respondents could not divert their resources towards education of their children. But for the purpose of giving health-related knowledge and information, neither education was required nor was it required to be rich. On an average, 400 patients were visiting OPD of Samli Hospital every day. These patients were also accompanied by their attendants. So, on one hand, a vast majority of these patients was deprived of health related knowledge and on the other hand, neither Government of Punjab nor PTP was interacting with visitors through video and audio messages for providing health-related knowledge and information in general and TB in particular. The space of hospital could have been used for sensitizing visitors to OPD about health and hygiene for bringing a massive change.

A micro level fault of the functioning of TB control program was observed because the laboratory and TB dispensary of Samli Hospital were not interlinked with each other. The case of Bushra had identified this structural flaw due to which the patient dropout had existed before the start of TB treatment. Ideally, laboratory and TB dispensary should have been connected and laboratory reports of every new TB diagnosed patients should have been collected from dispensary to avoid dropout before the start of TB treatment.

TB patients and their families had to face a lot of problems for getting injection. The only source at grass roots for providing free service to inject TB patients was LHW. The LHWs were not aware of TB treatment through injections. It was a serious question about the responsibilities of LHW. Why would LHW visit a TB patient for giving injection in morning and evening without any incentive? This was because of

inadequate health policies and poor management to utilize an existing healthcare structure within which LHW was the foundation stone at a micro level.

Chapter 9

CONCLUSION

This research was, indeed, to study the different barriers and resources available to the public at large for negotiating TB in Tehsil Murree. Historically, TB has been the biggest killer of human kind and being a developing nation, Pakistan remained critically affected by this epidemic. The annual deaths globally due to TB run into millions. Over period of time, a number of policies were developed and implemented to reduce the burden of TB under the guidelines of WHO. Since its creation in April 1948, WHO has been making all out efforts to make the world TB free, through policy guidelines which have sometimes come under criticism. In recent years, WHO has claimed DOTS as a successful program to overcome the burden of TB globally.

Pakistan has been victim of TB since its birth. The historical development of TB control programs and political economy of 1980's and 1990's had an overall impact on existing healthcare structure of Murree where BHUs were its foundations. Weak foundations and inability to provide equipment and human resource overburdened OPD at tertiary and secondary care health facilities in Murree.

During the last couple of decades, the population in Murree has swelled creating social and environmental problem and budgetary issues whereas the healthcare structure has remained almost static. This was the result of political economy of health where successive governments refrained from increasing the health sector budget thus making it comparatively marginalized. The conditional loans of 1980's and 1990's for the national health programme such as FP, PHC and Polio compelled Pakistan to reduce budget for social sector. This was a barrier to develop healthcare structure in Murree. It did not have the capacity to cater to the needs of its residents. Besides this, it was facing shortage of skilled human resource, modern diagnostic facilities and all types of medicines. It was due to weak tangible and intangible facilities from the district and provincial governments.

TB patients linked their health with shortness in breathing. A healthy breathing was the symbol of healthy life. But the journey from healthy to poor breathing had initiated from whooping cough or intermittent temperature that was taken for granted because of no knowledge of TB symptoms and careless health prioritizing behavior.

Among the list of indicators to shape health seeking/preferential behavior of poor and marginalized segments of Murree, the economic indicator was on the top. Although all other indicators for health cannot be ignored yet for shaping a particular health seeking behavior of the poor, economy of selected household was a leading factor for the poor segments. On micro level, the men were cared more because of their economic contribution to household income so that the partner and children continue to enjoy. Under this criterion, the women's health was generally taken for granted. The women were doubly marginalized on macro and micro level because of their gender.

Second to health seeking behavior the trust in government healthcare facilities and doctors was a major barrier to have access to a nearby government health facility for minor health issues. There were a number of factors for becoming a barrier to develop the trust of people in government healthcare facilities of Murree and unavailability of free general medicines was on top. Private clinics of quacks and government doctors had offered more care to public than a government hospital of Murree. This political economy of health depicted a very caring and positive picture of private healthcare and provided choices of public and private healthcare to all segments of Murree. The private healthcare had no considerable role to overcome TB as the component of PPM of PTP to engage private health sector to find TB cases had not been implemented in Murree. Because of specific health seeking behavior, the patients had initially started from household remedies at the start of TB symptoms. Because of poverty, low health seeking behavior and low level of trust in government healthcare facilities, they had used different pathways before finally reaching TB clinic.

The OPDs of government hospitals in Murree were overburdened and that was one of the barriers to develop a trustworthy doctor-patient relationship. The doctors were working under pressure of overburdened OPDs and were not observing OPD protocols for medical examination of patients. Owing to this, the patients were not satisfied with the conduct of doctors in government hospitals. In such a situation, people were using their social capital to have access to a doctor in an overburdened OPD for their satisfactory medical examination. It has put more fuel to destroy the element of trust. Because of utilization of social capital, the equal distribution of social goods and services was highjacked by the affluent segments of society and the

poor and marginalized segments had become victim of this situation. In short, the currency of social capital was the best source to access a doctor by directly overtaking an overburdened OPD of a government healthcare facility, but meanwhile social capital was a barrier for poor and marginalized segment of Murree who had either low or no currency of social capital for their better healthcare.

Although the affluent class of society might have both the currencies of social and financial capital to get to a doctor in government hospital by conveniently bypassing a long queue of patients, yet this high value of both of the capitals becomes useless if they come across missing facilities. So, the only worth of utilization of social capital is to access available facilities only. The availability of modern diagnostic facilities depends upon preferences of political economy for health sector through which genexpert machines were not available on THQ, RHC and BHUs of Murree. Social capital failed to produce modern diagnostic machine of genexpert for TB test to screen out MDR-TB and XDR-TB patients.

Social capital has never been a fixed entity. So, it was very difficult to measure the level of social capital. The determinants of social capital were overlapping. Poor and marginalized segments of society had low level of social capital. The people had unequal opportunities for the development of social capital. The women were doubly marginalized to develop their social capital and were sharing the currencies of both social and financial capitals of men of their families.

The aspects of neighborhood had included physical features, environment, availability of resources and social factors. Although the literature on social capital has emphasized the importance of neighborhood for seeking favors and having access to healthcare facilities, yet it was not a yard stick to improve health. Neighborhood had a direct connection with the settlements of people. The people more close to healthcare facilities and people having facilities with quality road infrastructure and transportation had ideally more easy access to reach a government hospital, but the people deprived of these facilities and living in polluted and unhygienic environment were more vulnerable to carrying and transmitting TB. These factors limit the mobility of people and keep them marginalized. The social factors talk about the availability of community spaces for developing social capital, but the role of poverty

and fewer number of community spaces had been a barrier for poor segments of Murree to develop social capital for seeking better healthcare.

Social support was a very essential component for every TB patient. Social support was based on trusted and reciprocal relations. Generally, TB patients were not getting social support because of social stigmas of TB that remained the same during last 35 years. Close relatives had offered unconditional social support to their TB patients. Apart from this, the TB patients had faced barriers to gain financial support from all of their relatives because they had least trust in revival of financial betterment of TB patients and families.

Pakistan is a recipient country of WHO funds that had been following DOTS guidelines to overcome long standing issue of TB. Five key components of DOTS were not being implemented in Murree because an immature healthcare structure of Murree had not enough capacity to transparently execute the given strategy. First, Pakistan had not been financially and politically contributing. Second, the lack of trained human resource in Murree was a barrier for case detection through sputum smear microscopy. Third, the TB facilitators in Murree were not registering care takers of TB patients to ensure supervision for standardized TB treatment. Fourth, the effective supply of anti-TB drugs was very poor and a mechanism for supply of anti-TB drugs for TB centers of Murree was missing. And finally, there had not existed any effective monitoring/evaluation and impact measurement mechanism. It was not the fault of DOTS rather it was because of inefficient healthcare structure of Murree that did not have the capacity to ensure the implementation of DOTS. This can be one of the reasons for Pakistan to jump from 6th to 5th high burdened country in 2014.

Political distribution of social goods and services was based on offered and gained political loyalties at local level. This was the reason for lack of trust in government institutions that had been politicized due to the existing culture of social support or social capital to get access to equality based institutions. Owing to least political participation, the poor and marginalized TB patients had no access to those spheres where distribution of social goods and services was on a political basis. This distribution was based on political bonding where the constitutional right of access to resources was being ruined.

Poverty was the reason of social exclusion from a number of social and community spaces. This was not only a barrier to develop social capital but also a barrier to get health related knowledge and information. The respondents did not have knowledge about right to health and this was the reason they had considered themselves submissive to healthcare providers. This submissiveness was an addition to existing knowledge and economy based power that was also one of the barriers to develop trust in doctor-patient relation.

The existing practices in government healthcare centers of Murree for providing healthcare through social capital was against the norms of democracy and citizenship. There was no government policy that existed to promote social capital for access to healthcare, but this sort of facilitation in public sector had raised stress and anxieties among anxiously lined up marginalized groups. The literature has emphasized the vital role of community spaces for developing social capital and considered this a best source for social interaction. Health in general and TB in particular was almost not being negotiated on community spaces for men. The women community spaces were better in this case as women health was highly negotiated and TB was not a usual concern. The community spaces had contributed in spreading social stigmas of TB. Although community spaces have a vital importance to develop social capital yet their usage for sharing knowledge and information about causes and symptoms of different diseases in general and TB in particular can bring a highly considerable change in health seeking behavior and push people to reach a nearby government healthcare facility on initial stage of any disease.

One of the dark sides of community spaces was that these had been spreading wrong information about cause and symptoms of various diseases. Owing to this, the patients had been following wrong pathways for an undiagnosed disease. The delay due to the contribution of community spaces had given similar results of carrying and spreading TB. This could have overcome only though providing health related knowledge and information through public outreach campaigns.

Active TB case finding mechanism could have been the best strategy to reduce the burden of TB from Murree. The TB suspects had been living in the community and a delayed TB diagnosis had continued in carrying and spread of TB. The LHWs were working on gross roots and could have contributed in sending TB suspects to a nearby

TB center for diagnosis on initial stage of TB symptoms. But just like overburdened OPDs, the LHWs were also overloaded due to extra responsibilities. There was a need to slightly reduce the burden of LHWs and to update them regarding knowledge of causes and symptoms of TB. LHWs were required to visit every household of their respective areas at least once a month. This gross root approach to find an active TB case could have been cost effective and successful to root out TB from Murree and Pakistan.

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Annexure I

Interview Guide for MS

1. What is the infrastructure of this hospital?
2. What sort of facilities does this Hospital provide to outdoor and admitted patients?
3. How far this hospital is contributing to overcome TB disease in Tehsil Murree?
4. How the effectiveness of National TB Control Program (NTP) can further be improved?
5. How do you see the trust of patients in NTP/services of this hospital?
6. How can trust of patients be further improved in NTP/services of this hospital?
7. How does this hospital give awareness to the visitors regarding the causes and symptoms of TB?
8. Is the current staff working in hospital sufficient to provide best possible services to TB patients?
9. What are the management and other issues that you face to provide absolute services to patients?
10. What is the way forward to overcome these issues?
11. How do you see the role of basic health related knowledge for betterment of health?
12. How do you see the concept of power, trust and risk in doctor-patient relation?
13. Does your hospital/government infrastructure have enough facilities/capabilities to satisfy TB patients for health delivery?
14. What sort of monitoring and evaluation mechanism do you apply for measuring the performance of your staff?
15. Why do new doctors not serve in this hospital?
16. How far is the current total budget of this hospital is sufficient to serve the TB patients?

Annexure II

Interview Guide for In-charge OPD

1. How many patients visit OPD daily?
2. Is this OPD overburdened by TB patients?
3. What is the strength of staff in OPD?
4. Is current staff working in OPD sufficient to provide best possible services to TB patients?
5. What facilities are available for outdoor TB patients?
6. How do these facilities fulfil the need with reference to the number of patients?
7. How far are you satisfied with the functioning of OPD?
8. How can the functioning of OPD be further improved?
9. How can trust of patients be further enhanced in this OPD?
10. How far is this OPD successful to provide awareness about TB to general patients in OPD?
11. What mechanism does this hospital hold to give awareness to patients about TB in OPD?
12. To what level are the general (TB effective) patients aware about the cause and symptoms of TB?
13. What sort of favors do you offer to patients who approach you by using their social capital?
14. How do the favors provided on the basis of social capital affect the concept of equality for all?
15. How do the people with low or without having social capital suffer for seeking their (right of) health?
16. What sorts of barriers do exist among patients who fail to respond fully to treatment?
17. At what stage of TB disease do patients visit hospital usually?
18. What sort of follow up mechanism do you have for patients?
19. How far is this mechanism being practised by you?
20. How do you deal with the drop out cases?
21. How do you deal with the failed cases?
22. What are the management and other issues that you face to provide absolute services to patients?
23. What are the reasons for patients to become defaulters?
24. How far are the directives of NTP being followed in OPD?

Annexure III

Interview Guide for TB Facilitators

1. What is NTP and how does it work in your OPD?
2. How far do you follow the directives of NTP?
3. How can the effectiveness of this program be improved by improving its functioning?
4. How do you see the trust of patients in this program?
5. How can trust of patients be further improved in this program?
6. How do you give awareness to the patients to sensitize them about the disease?
7. How do you brief the patients in OPD with reference to spread of disease and their responsibilities?
8. How far do you favor on the basis of social capital?
9. What sort of favors do you offer to patients who approach you by using their social capital?
10. What sorts of barriers do exist among patients who fail to respond fully to treatment?
11. At what stage of TB disease do patients visit hospital usually?
12. To what level are the patients aware about the cause and symptoms of TB?
13. What are the services that you provide to patients other than medicine?
14. What sort of follow up mechanism do you have for patients?
15. How far is this mechanism being practised by you?
16. Is there required extra staff available for the betterment of NTP in OPD?
17. How do you deal with the drop out cases?
18. How do you deal with the failed cases?
19. How do you maintain stock of medicine?
20. What are the management and other issues that you face to provide absolute services to patients?
21. Does your hospital/government infrastructure have enough facilities/capabilities to satisfy TB patients for having health?
22. What are the reasons for patients to become defaulters?

Annexure IV

Interview Guide for NTP/PTP Programme Personnel

1. What mechanism does NTP hold to give awareness to society about TB?
2. How does the NTP sensitize TB patients with reference to their health?
3. How do economic limitations determine patients' access to resources?
4. What mechanisms have been evolved by you to address this most important issue?
5. What measures have your program taken to eliminate the concept of power in doctor-patient relation?
6. What mechanism has been taken by your program to strengthen doctor-patient relation?
7. What sorts of sources are more adequate to you for spread of health especially TB related knowledge and information?
8. How do you see the role of healthcare reforms for betterment of NTP?
9. What sorts of healthcare system reforms are required to bring about the betterment in NTP?
10. What sorts of healthcare system reform with reference to TB have been brought in last few years?
11. How do you see the role of evaluation for the betterment of NTP?
12. What evaluation mechanism is being implemented by you to closely observe the functioning of NTP?
13. How far private health providers can become helpful to achieve the targets of NTP by providing TB treatment?
14. What sorts of risks do you see for engaging private health providers to overcome the disease of TB?

Annexure V

Interview Guide for Policy Makers

1. How do economic limitations determine patients' access to resources?
2. What mechanisms have been evolved by the government to address this most important issue?
3. How do you see the role of basic health related knowledge for betterment of health?
4. What measures are being taken by the government to provide basic health related knowledge and information to general population?
5. How do you see the concept of power, trust and risk in doctor-patient relation?
6. How can the concept of power be eliminated in doctor-patient relation?
7. How can the concept of trust in doctor-patient relation be further strengthened?
8. How can the risk factors associated on the basis of power and trust in Doctor-Patient relation can be minimized?
9. What measures have been taken by the government to eliminate the concept of power in doctor-patient relation?
10. What mechanisms have been taken by the government to strengthen doctor-patient relation?
11. What sorts of sources are more adequate for spreading health related knowledge and information?
12. How do you see the importance of health insurance for public health in Pakistan?
13. What sorts of developments have been made by the government for introducing the concept of health insurance in Pakistan so far?
14. What hurdles do occur for developing the mechanism of health insurance?
15. How are socio-economic, cultural and strong religious factors the major hindrances for implementing the policy of health insurance?
16. How do you see the role of healthcare reforms for betterment of public health?
17. What sorts of healthcare system reforms are required to bring about the betterment of public health?
18. What sorts of healthcare system reform have been brought by the government in last few years?
19. How do you see the role of evaluation for the betterment of healthcare system?
20. What evaluation mechanism is being implemented by the government to closely observe the existing healthcare system?

Annexure VI

Multidimensional Poverty Assessment Tool

Cover Sheet – Household Questionnaire

Hospital Name: _____
Survey Date 1: __ __ /__ __/__ __ __ __
Start Time: _____
End Time:_____
Consent:

My name is Majid Hussain and I am a PhD research scholar. I am conducting a research on "Negotiating Tuberculosis in Pakistan: Social Capital Analysis of Barriers and Resources" and I am at the first stage of this research. I am conducting a survey to measure the poverty by analyzing living standards and health information. The collected information will be used to write my Ph.D thesis and will help the government in policy making. I would like to ask you some questions about your household. The questions usually take about 20 to 25 minutes. All of the answers you give will remain confidential and will not be shared with anyone. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If you don't want to answer any question, just let me know and I will move to the next question or you can stop the interview at any time.

Do you have any questions?

May I begin interview now?

_____

Date:_____

(Signature of Respondent if literate)

Section No. 01 General information (Number of Dependents on a Kitchen)

Q No	MPI Indicator	Member 1	Member 2	Member 3	Member 4	Member 5	Member 6
1	Name						
2	Age						
3	Gender						
4	Marital Status						
5	Education						
6	Occupation						
7	Income						

Section No. 2 Information Regarding Living Standard

Q No	MPI Indicators	
8	House Flooring	Main material for the dwelling Floor 1. Earth/sand 2. Chips 3. Cement tiles 4. Cement, sand and Crush 5. Carpet 6. Marble

9	Sanitation	What kind of toilet facility do members of your household usually use? 1. Flush to piped sewer system 2. Flush to pit (latrine) 3. Hanging toilet/hanging latrine 4. Pit latrine with slab 5. Bucket 6. No facilities go to bush or field 7. Any other (Specify)_____
10	Sanitation: Sharing Facility	Do you share this toilet facility with other households? 1. Yes 2. No
11	Primary Source of Light	What is the primary source of light your home uses when it is dark? 1. Electricity from a grid [legal or illegal connection] 2. Electricity from Generator, 3. Electricity from solar cells or small, local, hydroelectric dam, 4. Liquid fuel [petrol, kerosene, etc.], 5. Gas Fuel [methane from tank, biogas, etc.], 6. Candle or battery-powered source 7. Wood, sawdust, grass, or other natural material, 8. Coal or charcoal, 9. Other (specify)
12	Primary fuel source for cooking	What is the primary fuel source your household uses for cooking? 1. Electricity from a grid [legal or illegal connection] 2. Electricity from Generator, 3. Electricity from solar cells or small, local, hydroelectric dam, 4. Liquid fuel [petrol, kerosene, etc.], 5. Gas Fuel [methane from tank, biogas, etc.], 6. Wood, sawdust, grass, or other natural material, 7. Coal or charcoal, 8. Other (specify) _____
13	Primary Source of fuel for heat	What is the primary fuel source your household uses for heat? 1. Electricity from a grid [legal or illegal connection] 2. Liquid fuel [petrol, kerosene, etc.], 3. Gas Fuel [methane from tank, biogas, etc.], 4. Wood, sawdust, grass, or other natural material, 5. Coal or charcoal, 6. Other (specify) _____

14	Primary Source of Drinking Water	What is the main source of drinking water for the household members? 1. Piped water into home 2. Piped water facility near the home 3. Spring water facility at home through pipe 4. Borehole at home 5. Protected Spring 6. Unprotected Spring 7. Rainwater 8. Tanker-truck 9. Bottled Water 10. Any other (Specify) _____
15	Primary Source of Non-Drinking Water	What is the main source of water used by your household for other purposes such as cooking and hand washing? 1. Piped water into home 2. Piped water facility near the home 3. Spring water facility at home through pipe 4. Borehole at home 5. Protected Spring 6. Unprotected Spring 7. Rainwater 8. Tanker-truck 9. Bottled Water 10. Any other (Specify) _____
16	Primary Source of Water: Distance to Water Source	How long does it take to get to the water source, get water and come back? 1. Water facility is available at home (In any way) 2. Time in Minutes
17	Assets	Does your household have? 1. Electricity Yes No 2. Radio Yes No 3. Refrigerator Yes No 4. Television Yes No 5. Mobile Telephone Yes No 6. Motorbike/ Scooter Yes No 7. Car Yes No

Section No. 3 Health Care Facilities and Access

18. Is there any government health facility center located in your village to diagnose simple illness, or treat simple injuries, and prescribe basic medicines?

1. No 2. Yes

18.1 How long does it take (in minutes/hours) for members of your household to reach the nearest government health center which can diagnosis simple illness, or treat simple injuries, and prescribe basic medicines?

1. Time Duration on foot _____2. Time Duration on vehicle _____

19 What is the preference of members of your household to visit any government health care center which can diagnose and treat complicated or serious illnesses or injuries (can perform surgery)?

Specify _____

19.1. How long does it take on public transport (in minutes/hours) for members of your household to reach this government health center which can diagnose and treat complicated or serious illnesses or injuries (can perform surgery)?

Time Duration in minutes _____

20. Can your household afford Private health facility for non-serious illness or injury (if you chose to)?

1. No 2. Yes, if money is borrowed 3. Yes, with much difficulty

4. Yes, with some difficulty 5. Yes

21. Can your household afford Private health facility for serious illness or injury?

1. No 2. Yes, if money is borrowed 3. Yes, with much difficulty

4. Yes, with some difficulty 5. Yes

Access to healthcare (Gender)

22. For the majority of the households in your village/area, do you think there is a better chance for a woman or a man to receive healthcare in given government health facility center when needed?

1. Men 2. Women 3. About the Same 4. Do not know

23. Do you think the given government health facility center that you visit in your village/area (within two hours distance from your home) are usually able to provide women with adequate healthcare when they seek it?

1. Yes 2. No 3. Rarely 4. Sometimes 5. Always

Section No. 4 Access to School

24. Is there any child in your household of school going age (5-14)?

1. No 2. Yes

24.1 How long does it take, in minutes, from your home to reach nearest government school?

1. Time Duration on foot _____ 2. Time Duration on Vehicle_____

25. Can your household afford your children's school fees and school supplies?

1. No 2. Yes with difficulty 3. Usually 4. Yes easily 96. Not applicable

Section 05 Financial Services

26. If your household wanted to borrow money for healthcare from a bank or other financial service provider (not including friends or relatives) would it be easy to borrow money?

1. No 2. Probably not 3. Probably Yes 4. Yes, Definitely 5. Do not know

27. Is your household currently in debt?

1. Yes 2. Yes, a little 3. No. 4. Do not know

28. If you need debt for health to whom would you prefer to ask for help?

1. Relatives 2. Friends 3. Village Fund
4. Private money lender in the village 5. Government/Private Bank
6. Any other (Specify) _____

Annexure VII

Social Capital Measurement Tool

Cover Sheet – Individual Questionnaire

Hospital Name: _____
Survey Date 1: __ __ /__ __/__ __ __ __
Start Time: _____
End Time:_____
Consent:

My name is Majid Hussain and I am a PhD research scholar. I am conducting a research on "Negotiating Tuberculosis in Pakistan: Social Capital Analysis of Barriers and Resources" and I am at the first stage of this research. I am conducting a survey to measure social capital. The collected information will be used to write my Ph.D thesis. I would like to ask you some questions about your social and community participation. The questions usually take about 25 to 30 minutes. All the answers you give will remain confidential and will not be shared with anyone. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If you don't want to answer any question, just let me know and I will move on to the next question or you can stop the interview at any time.
Do you have any questions?
May I begin interview now?

_____

Date:_____

(Signature of Respondent if literate)

Measuring Social Capital

Portion No. 01. Political Participation

1. Are you part of any political party?
   a) Yes b) No
   If yes then move for Q. No. 02 and if then No Jump to Q. No. 6

2. Do you have formal membership of that political party?
   a) Yes b) No
3. Do you have any designation in local cabinet of that Political Party?
   a) Yes b) No
4. Do you regularly take part in meetings of that political party?
   a) Yes b) No
5. Do you financially contribute to your political party?
   a) Yes b) No
6. Do you participate in political gatherings?
   a) Very much b) a lot c) little d) Not at all
7. How often do you contact Chairman of your Union Council?
   a) Very much b) a lot c) little d) not at all
8. Do you work as volunteer during political campaigns?
   a) Yes b) No
9. Did you cast your vote in last general elections of 2013?
   a) Yes b) No
10. Did you cast your vote in last local bodies elections of 2015?

a) Yes b) No

Portion No. 02 Civic Participation

11. Is there any formal organization of your peer group in your area?
    a) Yes b) No
    If yes then move to Q. No. 12 and if No then jump to Q. No. 15
12. Do you have any membership in this formal organization?
    a) Yes b) No
13. Do you have any portfolio in this formal organization?
    a) Yes b) No
14. How far do you participate in meetings of this formal organization?
    a) Very much b) a lot c) little d) not at all
15. Does there exist any charitable organization in your area?
    a) Yes b) No
    If yes then move to Q. No. 16 and if No then jump to Q. No. 19
16. Do you have any membership in this charitable organization?
    a) Yes b) No
17. Do you have any portfolio in this charitable organization?
    a) Yes b) No
18. How far do you participate in meetings of this charitable organization?
    a) Very much b) a lot c) little d) not at all
19. Is there any formal/informal social or community organization in your neighborhood created by Government or NGO?
    a) Yes b) No
    If yes then move to Q. No. 20 and if No the jump to Q. No. 23
20. Do you have any membership in this social or community organization?
    a) Yes b) No
21. Do you have any portfolio in this social or community organization?
    a) Yes b) No
22. How far do you participate in meetings of this social or community organization?
    a) Very much b) a lot c) little d) not at all
23. Is there any environment based organization in your area?
    a) Yes b) No
    If yes then move to Q. No. 24 and if No the jump to Q. No. 27
24. Do you have any membership in this environmental based organization?
    a) Yes b) No
25. Do you have any portfolio in this environmental based organization?
    a) Yes b) No
26. How far do you participate in meetings of this environmental based organization?
    a) Very much b) a lot c) little d) not at all
27. Is there any Health Committee in your neighborhood?
    a) Yes b) No
    If yes then move to Q. No. 28 and if No the jump to Q. No. 31
28. Do you have any membership in health committee?
    a) Yes b) No
29. Do you have any portfolio in Health Committee?

a) Yes b) No

30. How far do you participate in the meeting of Health Committee?
    a) Very much b) a lot c) little d) not at all
31. Is there any formal organization for women in your area?
    a) Yes b) No
    If yes then move to Q. No. 32 and if No the jump to Q. No. 35
32. Do you or women of your household have any membership in this formal organization for women?
    a) Yes b) No
33. Do you or women of your household have any portfolio in this formal organization for women?
    a) Yes b) No
34. How far do you or women of your household participate in meetings of this formal organization for women?
    a) Very much b) a lot c) little d) not at all
35. How far do you participate in community affairs?
    a) Very much b) a lot c) little d) not at all

Portion No. 03 Religious Participation (For Men)

36. Does the mosque of your neighborhood have Mosque Committee?
    a) Yes b) No
    If yes then move to Q. No. 37 and if No then jump to Q. No. 40
37. Do you have any membership in this Mosque Committee?
    a) Yes b) No
38. Do you have any portfolio in this Mosque Committee?
    a) Yes b) No
39. How far do you participate in meetings of this Mosque Committee?
    a) Very much b) a lot c) little c) not at all
40. Do you offer daily prayers in Mosque?
    a) Very much b) a lot c) little c) not at all
41. How far do you offer Juma Prayer regularly?
    a) Very much b) a lot c) little c) not at all
42. How far do you financially contribute to mosque?
    a) Very much b) a lot c) little c) not at all
43. How far do you prefer to offer prayers in the mosque of your own sect?
    a) Very much b) a lot c) little c) not at all
44. What is walking distance of mosque from your household?
    a) Less than 5 minutes b) 5-10 Minutes c) 11-15 Minutes d) More than 15 Minute
45. What is walking distance of mosque from your workplace?
    a) Less than 5 minutes b) 5-10 Minutes c) 11-15 Minutes d) More than 15 Minute
46. How far do you voluntarily work to look after mosque?
    a) Very much b) a lot c) little c) not at all

Portion No. 04 Connections in the Workplace (for Men)

47. Does there exist any worker/labor union of your workplace?
    a) Yes b) No

If yes then move to Q. No. 48 and if No then jump to Q. No. 51

48. Do you have any membership in this worker/labor union?
    a) Yes b) No
49. Do you have any portfolio in worker/labor union?
    a) Yes b) No
50. How far do you participate in meetings of this worker/labor union?
    a) Very much b) a lot c) little c) not at all
51. I feel happy at really being part of a group of people I work with.
    a) Strongly Agree b) Agree c) Neither d) Disagree e) strongly disagree
52. I feel more comfortable to discuss my personal issues with my fellow workers?
    a) Strongly Agree b) Agree c) Neither d) Disagree e) strongly disagree

Portion No. 05 Altruism, Volunteering, and Philanthropy

53. Strangers always help me when I am in need.
    a) Strongly Agree b) Agree c) Neither d) Disagree e) strongly disagree
54. My fellow workers help me in my bad time without any reason.
    a) Strongly Agree b) Agree c) Neither d) Disagree e) strongly disagree
55. My relatives help me in my bad time.
    a) Strongly Agree b) Agree c) Neither d) Disagree e) strongly disagree
56. I always offer my help to strangers in their bad time?
    a) Strongly Agree b) Agree c) Neither d) Disagree e) strongly disagree
57. My relatives lend me money whenever I am in need.
    a) Strongly Agree b) Agree c) Neither d) Disagree e) strongly disagree
58. I always give financial help to people around me.
    a) Strongly Agree b) Agree c) Neither d) Disagree e) strongly disagree
59. Local political leader will give me financial and moral support if I visit them.
    a) Strongly Agree b) Agree c) Neither d) Disagree e) strongly disagree

Portion No. 06 Reciprocity, Honesty, and Trust

60. I have been donating blood to strangers.
    a) Strongly Agree b) Agree c) Neither d) Disagree e) strongly disagree
61. I have strong trust in strangers.
    a) Strongly Agree b) Agree c) Neither d) Disagree e) strongly disagree
62. I have trust in my relatives.
    a) Strongly Agree b) Agree c) Neither d) Disagree e) strongly disagree
63. My Relatives have trust in me.
    a) Strongly Agree b) Agree c) Neither d) Disagree e) strongly disagree

64. I frequently present gifts to my friends.
    a) Strongly Agree b) Agree c) Neither d) Disagree e) strongly disagree
65. I frequently present gifts to my relatives?
    a) Strongly Agree b) Agree c) Neither d) Disagree e) strongly disagree
66. My friends frequently give me gift in return.
    a) Strongly Agree b) Agree c) Neither d) Disagree e) strongly disagree
67. My relatives frequently give me gift in return.
    a) Strongly Agree b) Agree c) Neither d) Disagree e) strongly disagree
68. I always offer my volunteer services to my friends and relatives.
    a) Strongly Agree b) Agree c) Neither d) Disagree e) strongly disagree
69. People had always trusted me when I was stranger to them.
    a) Strongly Agree b) Agree c) Neither d) Disagree e) strongly disagree
70. I expect honesty from my relatives.
    a) Strongly Agree b) Agree c) Neither d) Disagree e) strongly disagree
71. I expect honesty from strangers.
    a) Strongly Agree b) Agree c) Neither d) Disagree e) strongly disagree
72. I think that people consider me honest and have trust in me.
    a) Strongly Agree b) Agree c) Neither d) Disagree e) strongly disagree
73. I think that you should be careful to have dealing with people around.
    a) Strongly Agree b) Agree c) Neither d) Disagree e) strongly disagree
74. I have trust in my fellow workers.
    a) Strongly Agree b) Agree c) Neither d) Disagree e) strongly disagree

75. My fellow workers have trust in me.
    a) Strongly Agree b) Agree c) Neither d) Disagree e) strongly disagree