# Socio-cultural Construction of Child and Mother Malnutrition:

An Ethnographic Study of Malnutrition in District Rajanpur

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**2021**

# Socio-cultural Construction of Child and Mother Malnutrition:

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I, Farooq Ahmed hereby declare that my Ph.D thesis entitled "Socio-cultural Construction of Child and Mother Malnutrition: An Ethnographic Study of Malnutrition in District Rajanpur" is my own and has not been previously submitted to anywhere else in Pakistan/world by me before taking from Quaid-i-Azam University Islamabad.

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## ACKNOWLEDGMENT

First and foremost, I am grateful to all participants and families who shared their stories and case histories with me. It was a great honor for me to participate in their daily lives, observe and interview them. Next, I am very thankful to my research supervisor, Dr. Inam Ullah Leghari, Assistant Professor at the Department of Anthropology, Quaid-e-Azam University Islamabad, for his supervision to complete this task. I pay my gratitude to Dr. Aneela Sultana, the In-charge Department of Anthropology, for her collaboration. Likewise, other faculty members, particularly Dr. Waheed Choudary, Dr. Anwar Mohyuddin, and Dr. Saadia Abid who taught me fully deserve to be acknowledged here for their time. This dissertation would not have been possible without the generous assistance of all mentioned above.

I really deeply feel indebted to Dr. Anita Chary (M.D, P.h.D.), currently an emergency physician and chief resident at the Harvard Affiliated Emergency Medicine Residency and Critical Medical Anthropologist from Washington University Saint Louis, for providing her precious time in reviewing this dissertation chapter to chapter and giving me invaluable input and writing guidelines. My deepest gratitude to Dr. Darryl Holman, Associate Professor in the Department of Anthropology at the University of Washington (UW) who advised and provided me an immense help to explore biocultural perspective and experience different research techniques and resources during my stay in the United States, supported by the Higher Education Commission (HEC), Pakistan. I also feel to mention Dr. James Pfeiffer, Professor in the Department of Global Health at the University of Washington, who taught me the course of “Anthropology and International Health” that helped to construct critical perspectives on global health and political economy. Also, I am grateful to the help and collaboration of Nutritional Anthropologist and Associate Professor, Dr. Sera Lewise Young, at the Department of Anthropology and Global Health of Northwestern University (NW) with whom I have been collaborating in water insecurity research.

Dr. Siddique Balouch (CEO) Health Department Rajanpur deserves gratitude as he granted approval and proved helpful in the data collection process at various government hospitals and stabilization Center in the district. Along with this, I admit the contribution of Dr. Jam Khalil, District Coordinator IRMNCH & Nutrition Program, Lady Health Workers, and staff of Community Management of Acute Malnutrition (CMAM) programs. I particularly appreciate the time and cooperation of

Ms. Shazia Talib and Ms. Najma. They were appointed in the nutrition Stabilization Centre (SC) of CMAM Programme at District Head Quarter (DHQ) Rajanpur. My other key informants Mr. Zia Ur Rehman Amjad, Mrs. Mussart Perveen, Ms.Samina, and Mr. Qasim Gorchani, are among those main contributors who mostly facilitated me in data collection. I discussed my research deeply with my PhD class fellows (Dr. Subaita Zubair, Dr. Majid Hussain, Sufi Hussain) and friends (Dr. Abdur Rasheed Baig, Faisal Gorchani, Mazhar Jat, Sohail Qureshi, Jam Bilal and Muhammad Shahid, Altaf Qaisrani) who often took greater interest in my work and commented critically on various parts of the study. I owe enormous thanks to all of them for their time and invaluable inputs. Also, I thank other departmernt fellows (likeTabassum Rehmani, Tania Shah, and Sajjad Haidar) for their coordination and moral support.

Last but not least, I acknowledge and appreciate the sincere and tremendous support of my entire family, particularly of my wife in the lengthy process of data collection, analysis, and thesis writing. I am short of words to thank my daughter Sukayna Batool, and my son Hussain who sacrificed their precious childhood and supported me throughout my work not only in Rajanpur and Islamabad but also in Seattle, Washington. I sincerely acknowledge their contribution and their time sacrifice because this task was of course impossible to be accomplished without their kind help. During the writing phase, I promised them time and again that the dissertation was going to be ended, which always proved a mirage. I wish to dedicate this dissertation to my mother and late father who supported me throughout my life and made me capable of doing this work.

## ABBREVIATIONS

| | |
|---|---|
| BCC | Behavior Change Communication |
| BHU | Basic Health Unit |
| BISP | Benazir Income Support Program |
| CLTS | Community-Led Total Sanitation |
| CMAM | Community Management of Acute Malnutrition |
| CPR | Contraceptive Prevalence Rate |
| DC | District Coordinator |
| DHQ | District Headquarter Hospital |
| EPI | Expanded Programme on Immunization |
| FAO | Food and Agriculture Organization |
| FGD | Focus Group Discussion |
| FIAS | Food Insecurity Access Scale |
| GDP | Gross Domestic Product |
| GFC | Global Food Crises |
| HAZ | Height for Age Z score |
| IBM | International Business Machines Corporation |
| IFIs | International Financial Institutions |
| IGBM | Interagency Group of Breastfeeding Monitoring |
| IYCF | Infant and Young Child Feeding |
| IMF | International Monetary Fund |
| IMS | Insufficient Milk Syndrome |
| INGO | International Non-Governmental Organizations |
| IRMNCH | Integrated Maternal Neonatal Child Health |
| IUD | Intra-Uterine Device |
| MAF | Million Acre Feet |
| MAM | Moderate Acute Malnutrition |
| MICS | Multiple Indicator Cluster Survey |
| MSNC | Multisector Nutrition Center |
| LAMA | Left Against Medical Advice |
| LHW | Lady Health Worker |
| LHV | Lady Health Visitor |
| LHS | Lady Health Supervisor |
| MAF | Million Acre Feet |

| | |
|---|---|
| MI | Micronutrient Initiative |
| MNC | Multi-National Corporation |
| MNCH | Maternal, Neonatal, and Child Health |
| MNHSRC | Ministry of National Health Services Regulation and Coordination |
| MUAC | Mid Upper Arm Circumference |
| NGO | Non-Governmental Organization |
| NADRA | National Database and Registration Authority |
| NNS | National Nutritional Survey |
| ORS | Oral Rehydration Salts |
| PCRWR | Pakistan Council of Research in Water Resources |
| PDHS | Pakistan Demographic and Health Survey |
| PFA | Punjab Food Authority |
| PPP | Pakistan People's Party |
| PSC | Poverty Score Card [Survey] |
| RHC | Rural Health Center |
| RUTF | Ready to Use Therapeutic Food |
| SAM | Severe Acute Malnutrition |
| SC | Stabilization Center |
| SN&NS | School Health & Nutrition Supervisor |
| SDG | Sustainable Development Goal |
| SUN | Scaling-UP-Nutrition |
| SPSS | Statistical Package for Social Sciences |
| Sq. Km | Square Kilometers |
| TBA | Traditional Birth Attendant |
| UC | Union Council |
| UN | United Nations |
| UNICEF | United Nation Children Fund |
| WASH | Water Sanitation Hygiene |
| WAZ | Weight for Age Z score |
| WB | World Bank |
| WFP | World Food Program |
| WHO | World Health Organization |

## ABSTRACT

Based on fifteen months of ethnographic fieldwork, this ethnography deconstructs parental knowledge, beliefs, and experiences about inadequate household access to potential resources crucial for health and nutrition in one of the Southern and most deprived districts of Pakistani Punjab. Drawing upon UNICEF's framework, cultural capital, and structural vulnerabilities, the research discovers how the households' experiences about care, water, and food insecurity at the micro-level are influenced or shaped by structural causes. Poor mothers are exposed to multiple unfreedoms, social injustices, and gender inequities trickled down at the local level. The research finds that the quality and quantity of water particularly in the western areas of the district are insecure and most of the houses lack proper sanitation facilities, therefore, defecation is practiced openly that causes infections and both acute and chronic forms of malnutrition. The study also reveals that poor households usually experience a limited variety of food that causes micronutrient deficiencies due to poverty, inflation, and low income. Maternal care during pregnancy and delivery is also undermined owing to intrahousehold politics, illiteracy, and high fertility.

The immediacy, exclusivity, frequency, and duration of breastfeeding are constrained owing to social, cultural, and political factors. Poor, illiterate, and rural mothers‘ access to nutrition-related programs is restricted due to a lack of social capital and structural inequities. The deprioritization of nutrition programs by the health department, remote distances, traveling difficulties, gender inequities, stigmatization, and rude attitude of health and nutrition staff are the significant causes behind low socio-cultural coverage of Community Management of Acute Malnutrition (CMAM therapeutic program. Neoliberalism and development interventions to solve the problem of hunger, and malnutrition are less aligned with cultural realities so remain less successful in achieving results. The alternative responses to illness and diseases are consequently spiritual and magical. Spending lives within the disadvantaged community, poor often deprioritize health and nutrition and adopt inadequate care, feeding, reproductive, and treatment strategies in order to survive, however, such strategies are often risky and substandard. The study suggests that development practice must be guided by local cultural insights and social construction to solve the riddle of malnutrition in Pakistan.

# 1. INTRODUCTION

To combat malnutrition, biomedicine increasingly recommends, advocates, and promotes Behavior Change Communication (BCC) strategies for "WASH[1]," "IYCF[2]," "contraception," "vaccination," "micronutrients, and therapeutic foods," as it is solely a behavioral issue. The biomedical approach mainly focuses on the individual's cognition and therefore stigmatizes locals' behaviors, cultures, and traditions for not adopting their recommended solutions. International Financial Institutions (IFIs) and donors also support these ideologies, however, such recommendations often fail to bring the desired results and achieve development goals and targets in low and middle-income countries.

To tackle malnutrition, focusing only on cultural factors is not adequate. Recognizing it as only a structural problem is also not enough. Nutritional status is rather a "cumulative outcome" of multiple resources, therefore, malnutrition can best be understood as a "syndemic" issue (Bennett, 2009; 2017; Bulled, Singer & Dillingham, 2014; Singer, Bulled, Ostrach & Mendenhall, 2017; Scrimshaw & John, 1997; Workman & Ureksoy, 2017). Besides the outcome, it is a means to success and achievement. Malnutrition, as an acute, integrated, and intergenerational problem, not only deprives optimal physical growth and cognitive development but also causes lower economic productivity, devalued identity construction, and stigma (Black et al., 2008; Grantham-Mcgregor et al., 2007; Victora et al., 2008; 2016). Malnutrition is not an infection and epidemic, however, it may lead to multiple complications, including infections, diseases, disabilities, illnesses, and sufferings, more often with irreversible consequences (Bhutta, 2013; Scrimshaw, 1998; UNICEF, 2015).

Malnutrition is a result of unequal access to a variety of essential and vital resources. Access to potential resources, markets, and development programs is determined by social, economic, and cultural capital. Groups belonging to low castes, class, capital, often remote, rural, ethnically inferior ultimate are deprived. The primary purpose of this research is to highlight that development programs not only failed in combating

[1] WASH stands for Water Sanitation and Hygiene
[2] IYCF stands for Infant and Young Child Feeding Practices including exclusive breastfeeding (WHO, 2003a)

malnutrition in Pakistan, but also ignored and perpetuated social structures of inequality, particularly, socio-economic, gender, and ethnic (Kwiatkowski, 1998). The present study deconstructs knowledge, beliefs, and practices regarding the underlying determinants of maternal child malnutrition. It argues that socio-cultural construction and subjectivity at the local-level are shaped and influenced by the macro power structures and political economy.

After 2010, the world's most extensive program for social protection in Pakistan, Benazir Income Support Program (BISP), was proposed, launched, and supported by the World Bank. But it remained less successful to uplift poor women's status, ensure food security, and alleviate hunger and malnutrition because it ignored socio-cultural dynamics of power. Along with this, a temporary biomedical solution, "a therapeutic program CMAM," was set up to deal with Severe Acute Malnutrition (SAM) in flood-affected and poverty-stricken districts of South-Punjab. In this context, I attempt to explore and examine poor mothers' interactions while accessing these Nutrition-Specific and Nutrition-Sensitive programs. However, such interventions do not consider perpetual and persistent processes of power and exploitation, and often ignore the complex and unequal social relations because the development and biomedical approaches often tend to cure the "individual body" instead of treating the "social body," and does not "view humans and the experience of illness and suffering from an integrated perspective" (Scheper-Hughes & Lock, 1987, p. 10).

In Globalization: The Crucial Phase, Spooner (2015, p. 17) maintained that "the most crucial component of our relationship with our global habitat on a daily basis is our choice of food and how we produce, process, and prepare it." The programs and policies, such as the Green Revolution[3], and Structural Adjustments that have planned and managed the lives of people in developing countries highlight the profound impact of neoliberal

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[3] The term "Green Revolution" coined by the U.S. Agency for International Development is criticized as it has brought several negative implications such as water scarcity and pesticides in South-Asia and other parts of the world (Shiva, 1991). Cropping intensities of agricultural land have been increasing since at least the Green Revolution of the 1960s and 1970s, ranging from 150 to 200 percent today. In an agricultural economy with two growing seasons (a summer/kharif and winter/rabi season), cultivating crops on 100 percent of the arable land twice a year would translate into an actual cropping intensity of 200 percent (Mustafa, Gioli, Karner, and Khan, 2017).

hegemony and globalization (Escobar, 1995; Ferguson, 1990; Spooner, 2015). Ferguson (1990) argued development programs and projects in the deprived world are justified, and more often, the consequences of the failed projects increased bureaucratic state power, poverty, and incapacity, which in turn, authorize technical solutions and rationality of foreign development experts, often oblivious of the historical and political realities of the local cultures.

This dissertation narrates the vignettes of malnourished mothers and children seeking treatment from the therapeutic program in the district Rajanpur of Punjab province in Pakistan. The core of these narratives is the theme of "care and feeding." This ethnographic study explores and interprets the conundrum of malnutrition by capturing qualitative accounts, experiences, behaviors, and perceptions. Taking epistemological considerations from cultural, interpretive, and critical frameworks, more than one analytic model, the present study considers macro-level structural causes to shape experiences and beliefs at the micro-level. It finds how experiences hinder low-income and impoverished individuals and households from accessing adequate resources. This ethnography narrates personal stories and circumstances of poor mothers, especially domestic female servants facing food insecurity, time poverty, fertility, and illiteracy. It also explains how poor often face structural inequities and social exclusion owing to a lack of social and cultural capital.

Additionally, it examines how intrahousehold politics and practice of early marriage deny female agency and constructs exploitative ideologies regarding gender, feeding, and reproduction as ethical and moral barometers. It also investigates barriers to health and therapeutic coverage, and why the government lacks interest in the implementation of the Nutrition-Specific program, and how poor are generally secluded. In this dissertation, I will illuminate what social and cultural environments malnourished mothers and children live in, and what sub-optimal beliefs and practices they construct that influence maternal child care, and IYCF practices. While examining the perceptions, causes, and treatment strategies in relationship with culture, politics, religion, and economy, this research analyzes, interprets, and deconstructs the locals' socio-cultural construction and subjectivity.

Every sixth person in Pakistan lives under poverty (World Bank [WB], 2015). World Health Organization (2008) states that the Social Determinants of Health are

conditions in which people live, grow, age and die, which in turn, are shaped by political, social, and economic forces. The 'inability to command commodities' (Sen, 2013, p. 154) and inaccessibility to better healthcare are strongly associated with disease and poverty. Poor conditions of Water Sanitation Hygiene (WASH) and Infant Young Child Feeding (IYCF) often lead to malnutrition, almost irreversible if occurred at a critical age (Rajkumar, Geuklar, & Tilahun, 2011).

Globally, every year half of the childhood mortality results from malnutrition; one-third of these deaths are caused by Severe Acute Malnutrition (SAM) alone (Demissie & Worku, 2013; UNICEF, 2009). Worldwide, Sub-Saharan Africa and South-Asia have the highest rates of underweight and stunting (UNICEF, WHO, and WB, 2012; Müller & Krawinkel, 2005; Stevens et al., 2012; Thow et al., 2017). Almost 78% of wasted children live in the three South-Asian countries only: Bangladesh, India, and Pakistan (Gross & Webb, 2006). However, child malnutrition in Pakistan is higher than in other South-Asian countries, (Bhutta et al., 2004; Bhutta, Hafeez, & Rizvi, 2013; Bhutta, Ghazdar & Hadad, 2013). Hirani (2012) found that in Pakistan, maternal malnutrition, iron deficiency, anemia, and micronutrient deficiencies were quite prevalent among women of childbearing age. She stated that when these malnourished and anemic mothers experienced repeated pregnancies, a vicious cycle of malnutrition starts from generation to generation. The poor nutritional status of mothers serves as a substantial contributing factor towards childhood malnutrition (American Academy of Pediatrics, 1997; Bhutta et al., 2004).

Pakistan Demographic and Health Survey (2013) showed that mortality among the most deprived section was high. Undernutrition among Under-Five children, is higher in the poorest and rural areas, in comparison with the wealthiest quintiles and urban regions (Black, Victoria, & Walker, 2013). In Pakistan, higher malnutrition rates prevail in Baluchistan, Rural Sindh, and South-Punjab's districts, especially D.G. Khan and Rajanpur (MICS, 2014). Multiple Indicator Cluster Survey [MICS][4] (2018) showed that one-third of children in the Punjab province were stunted, while one-fifth were underweight, and nearly 10% were wasted. Raju & D'Souza (2017) reported that stunting rates vary from 18% to

[4] MICS stands for Multiple Indicator Cluster Survey, which is conducted by the Government of Punjab and other three provincial governments.

51%, wasting rates from 11% to 23%, and underweight rates from 19% to 49% across 36 districts of Punjab province.

Malnutrition has not just been limited to food insecurity. Water is a prerequisite for a healthy environment. This research has also incorporated an innovative concept "water insecurity" as in Southern districts water availability and equity is a serious issue. Good water governance has been discussed as a critical determinant of household water security (Gerlak et al., 2018; Miller, Vonk, Staddon & Young 2020; Porcher & Saussier, 2019; Sultana & Lotus, 2020; Wutich & Brewis, 2014). Analysis of household water insecurity experiences is crucial to assess the risk of adverse outcomes linked with household water insecurity, target scarce resources and measure the impact of interventions and policies on household water insecurity among women and children in the first 1,000 days. Household water insecurity, as it influences hygiene, sanitation, domestic needs, feeding practices, care, education attainment, and economic opportunities and overall social development, becomes the central determinant of generating poor maternal and child nutritional status. Water insecurity was shown to impact maternal and child health across four pathways in the Kenyan context: physical and psycho-social health, nutrition, and economic wellbeing (Collins et al., 2019).

Besides healthcare, adequate access to Water Sanitation and Hygiene (WASH) is crucial. Household water insecurity not only reduces care capabilities necessarily required for optimal infant young child feeding (Schuster et al., 2019) but it co-occurs with food security (Brewis et al., 2019; Stevenson et al., 2012; Workman & Ureksoy, 2017; Wutich & Brewis 2014). As it forms a syndemic relationship (Bulled, Singer & Dillingham, 2014; Singer, Bulled, Ostrach & Mendenhall, 2017) it causes inadequate nutritional, physical, developmental, and mental health outcomes (Boateng et al., 2018; Collins et al., 2019; Krumdieck et al., 2016; Workman & Ureksoy, 2017; Wutich, 2009; Wutich & Brewis, 2014; Wutich & Ragsdale, 2008), especially hypertension (Brewis et al., 2019), depression, and anxiety in the poor communities (Brewis et al., 2019). I anticipate that these experiences will be similarly observed in Pakistan.

Although good nutritional status is required throughout human life, the most critical ages are considered infancy, pregnancy, and lactation for a child and mother. The first 1000 days, known as the window of opportunity, has recently been observed and taken up as the

most critical stage of child growth. Black et al. (2013) estimated that the main reason behind half of global child mortality in the year 2011 was inadequate or inappropriate feeding. The UNICEF (2009) and World Health Organization (2003a) compulsorily recommend Breastfeeding babies for "two complete years" without the starter of any other food and even water in the first "five to six months." After six months, the baby needs some extra and other "complementary diverse foods" along with continued breastfeeding for at least two years (Rollins et al., 2016; World Health Organization, 2003a). The mother's diet must be adequate, rich, and diverse enough to optimally breastfeed her baby meanwhile (Webb-Girard et al., 2012). Optimal IYCF practices do not only determine physical growth and cognitive development in childhood but also later adulthood health outcomes (Bhutta, 2013; Black et al., 2008; Victoria et al., 2016).

The "immediacy," "exclusivity," "frequency," and "duration" of breastfeeding behaviors depend upon the complex socio-cultural circumstances of mothers. It will be unjustified if researchers study IYCF without the broader social, cultural, environmental, economic, and political context. Late and low in quantity breastmilk is initiated owing to small cultural capital, especially after a cesarean or performing "rituals of pre-lacteal;" and animal or infant's formula powdered milk of multinationals is the alternatively recommended by the majority of health professionals. Novice, illiterate, fertile, and working mothers have low options except adopting multiple sub-standard practices. These practices impact optimal IYCF practices, often due to extra and overwork burden, low income, on the suggestions, and the advice of close neighbors, relatives, grandmothers, or even the biomedical community.

At the global level, 38% of infants are exclusively breastfed. Almost 0.8% of million infants die due to suboptimal breastfeeding each year (World Health Organization, 2014). Unfortunately, a mere 10% of mothers in Punjab timely initiated breastfeeding within one hour time after birth, and just 17 % of mothers exclusively breastfeed (MICS, 2014). According to the latest MICS (2018), in Punjab, 42% of infants experienced exclusive breastfeeding, while 61% of babies under one year of age continued breastfeeding. The mothers in Pakistan (40%) and Punjab (28%) initiated breastfeeding

within less than one hour of child's birth, and only 10 % of mothers breastfed exclusively for up to 4 months (Multi-sector Nutrition Centre [MSNC][5], 2018).

The majority of literature that uses the public health lens criticizes cultural beliefs and practices. As far as the anthropological point of view is concerned, it critically evaluates the biomedical perspective. The folk epistemology and locals' beliefs might be meaningful when it is analyzed and understood in totality, within their own culture, as cultural relativists do, because "all their beliefs hang together" (Evans-Pritchard, 1937, p. 194). How can anthropologists interpret "apparently irrational" cultural beliefs, literal or symbolic? Their and our perspectives are not able to be judged by the same standards or having no common standard of measurement. According to Good, (1993, p. 23), "belief" is mostly cultural, and knowledge is scientific. He argued that in myths, "all discourse is pragmatically located in social relationships, and all assertions about illness experience are located in linguistic practices and most typically embedded in narratives about life and suffering." Biomedicine claim is based on generalizations. It considers all ethnomedical, non-empirical, folk, and non-Western medical systems as merely "belief."

After the 18th constitutional amendment[6] (2010) in the country, powers of federal ministries were devolved to several departments at the provincial level (Bhutta & Haffez, 2015; Nishter et al., 2013). Nutrition-specific and nutrition-sensitive interventions by the provincial governments are constrained by structural inequalities and lack of social and cultural capital. Lack of research on maternal-child malnutrition at the district level suggests construing regional inequalities based on economic and geographical discrimination (Di-Cesare et al., 2015; Stevens et al., 2012; Bhutta, Hafeez & Rizvi, 2013; Stevens et al., 2008). In this context, chronic deprivation has more severe repercussions on

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[5] The Multi-Sectoral Nutrition Centre was established after joining the Scaling Up Nutrition (SUN) movement, a recent initiative by Punjab's Planning and Development (P&D) department.

[6] The idea was to decentralize powers at lower levels from federal ministries to local-levels; however, it could not be a step toward equality as powers shifted from one center to another center (province). The regional inequalities increased within the districts in the Punjab. The powers came under the dominant Northern Punjab. The Southern districts of Punjab Province face a huge ethnic discrimination. Therefore, the idea of devolution was in itself discriminatory, especially in the context of Punjab. The structural inequalities were sharpened owing to these legislative measures. To understand the highest malnutrition rates in deprived regions and districts of South-Punjab, the theoretical framework of structural violence (Farmer, 2004; 2009), used in this study, is very relevant, which will be discussed in coming chapters. In addition, other structural inequities play their part in exploitation.

mother and children's nutrition than sheer acute emergencies as a result of disasters such as floods, (Hossain, Talat & Boyd, 2013; Di-Cesare et al., 2015). However, childhood stunting is the result of a vicious cycle of intergenerational consequences.

There are different nutritional outcomes between mothers and children living in the "deprived Southern" and other parts of Punjab. For example, the latest National Nutritional Survey (2018) indicates the highest prevalence of stunting, underweight, and wasting in South-Punjab's districts. Although a few previous studies have already reported nutritional knowledge in Southern Punjab, they offer inadequate elucidations for this. The currently available researches lack a rich examination of what socio-cultural determinants influence infant and young feeding practices that result in suboptimal nutritional status of children from households with low-income working mothers, especially domestic household servants in Rajanpur.

Most of the studies conducted in Pakistan were quantitative. They provided merely statistical associations of one variable with another, and rarely one finds critical, descriptive, qualitative and ethnographic studies analyzing the perceptions, beliefs, experiences, and practices associated with maternal and child malnutrition with an interdisciplinary approach. (Asim & Nawaz, 2018; Nazlee, Bilal, Latif & Bluck, 2011; Premani, Kurji, & Mithani, 2011; Zakar, Zakar, Zaheer & Fischer, 2018). Against this background, the present ethnography aims to trace the missing factors including interpretive methodology, critical or political-economic context gap, structural inequalities, water insecurity, gender factor, maternal child diet, cultural beliefs and behaviors of feeding and reproduction, gender inequity, and infancy stage of children's growth. Malnutrition, therefore, needs to be explored through qualitative personal accounts and narratives.

## 1.1. Research Problem and Objectives

Despite nutrition-specific and nutrition-sensitive interventions, there is the highest level of maternal-child malnutrition in the Rajanpur district. It demands a more in-depth analysis of the complicated relationship of basic macro causes (programs, policies, poverty, inequalities, and neoliberalism) and underlying micro causes of malnutrition (household access to resources: water, food, care, treatment). What social and cultural context and

configuration do mothers and children face at the household level, and what insecurity experiences, beliefs, and behaviors do they construct? At the societal level, cultural experiences cannot be detached from the syndemic theory and marginalization, therefore, the political economy should be contextualized as the broad context of the study. To understand malnutrition as a syndemic issue, this study navigates the household's accessibility to adequate resources and critically deconstructs knowledge, beliefs, practices, and insecurity experiences along with the political economy. The specific objectives of this study are as follows:

- To measure the water insecurity and its effects at the household level and discover how women experiences of water insecurity influence maternal-child health, care and feeding
- To illuminate poor mothers' food insecurity experiences, dietary perceptions, and practices while contextualizing history and political economy at larger-level
- To understand the negative influence of time poverty, socio-cultural rationales of high maternal fertility, and intra-household politics that cause low maternal care as well as gender inequities at the local context
- To deconstruct the knowledge, beliefs, and practices regarding child care and IYCF practices among the poor parents in the households facing severe child malnutrition
- To navigate and analyze the socio-cultural barriers, structural inequalities and lack of social and cultural capital, rural poor and illiterate mothers often face while interacting with Nutrition-Specific therapeutic program particularly and Nutrition-Specific program generally
- To explore and interpret the locals and illiterate poor mothers' common responses to diseases, illness, and malnutrition and discuss other ethnomedical practices and health-seeking behaviors as alternative survival strategies

## 1.2. Pakistan: The land of dependency and inequity

Pakistan, the world's sixth most population-dense country (220 million), is located in South-Asia, adjacent to India on the East, China, on the North, Afghanistan, and Iran on the west. It emerged on the world's map in 1947, when British colonial rule in the Indian subcontinent was abolished, resulting in the world's largest migration. It has a colonial history of dependence (Alvi, 1989; Aziz, 2009; Khan, 2009; Saif, 2010) where human development always remained an unaccomplished dream (Amjad & Burke, 2015; Gazdar & Mohmand, 2007; Mumtaz et al., 2014). Nearly four wars, 1948, 1965, 1971, 1999, have been fought so far because of the post-colonial "Kashmir dispute" between Pakistan and India (Bhatti, 2007) that caused a decline in economic growth (Aziz, 2009).

The canal colonies were a colonial program to control water resources during colonial times. As land reforms have always been rejected it is still a powerful tool in postcolonial periods to get social, economic, and cultural control. The Green Revolution in postcolonial times mainly suited to that ruling elite class who was already being benefited in colonialism. The production of crops for profit and agriculture policies suitable for landlords multiplied food insecurity in the country. The labor rights and poor females plight can best be understood in this context, therefore, gender equity is not to be analyzed in isolation. General Ayub Khan, a military dictator, brought the Green Revolution in the sixties. Since its formation, land, and agricultural reforms efforts in the country were always resisted by the powerful ruling elites and landlords (Talbot, 1990). The efforts to implement land reforms and carry out nationalization by Zulfiqar Ali Bhutto could not succeed, which ended up with his hanging in a ruthless military coup in 1979 (Aziz, 2009; Jalal, 1995). Bhutto, a so-called pro-socialist leader, tried to introduce land and industrial reforms but was hanged by the next military general, Zia-ul-Haq, who reversed and liberalized his nationalization.

During 1979, the war in neighboring Afghanistan brought a flood of refugees, which further deepened ethnic and religious affinities and fostered religious extremism and hampered the positive investment of human capital. Trade, technology, and industry were consequently deprived because there was no democratic rule in the country for a long duration. Instead, foreign aid remained the core of national politics (Saif, 2010). After the 9/11 attacks, Pakistan suffered heavy losses in the war against terror. Throughout history,

Pakistan faced short-sighted post-colonial policies that proved fatal (Chuadhry & Chuadhry, 2012).

After Washington Consensus, like other post-colonial developing nations, Pakistan minimized the state's role in economic affairs, rejected welfare responsibility, and entangled with structural adjustment (Abbasi, 1999; Bhutta, 2001; Gera, 2004; Khan, Aftab, & SDPI, 1995; Todaro & Smith, 2006). Private property, free markets, and trade did not ensure human well-being. Instead, these negatively influenced the state's services delivery, benefited the elite only, widened social inequalities, and ultimately decreased health, well-being, and nutrition of millions through limiting their access to resources (Bhutta, 2001; Harvey, 2005; Thomson, Kentikelenis & Stubbs, 2017). Private companies found multiple opportunities in creating inflation on food and daily use items, therefore, inferior terms of trade demand fair globalization instead of free trade in these conditions.

Mothers and children in their "most critical periods" need a wide variety of social determinants. Unfortunately, in developing countries like Pakistan, states are unable to provide their public with many of the quality services because of low trade, a fragile economy, and corrupt politics. Consequently, several groups, territories or even a wider part of the whole population (as Southern parts) are marginalized and enforced to live under insecure and risky living conditions of life because of their inability to command the commodities of life in a privatized, market-oriented, and dominant neoliberal economic structure.

From 2000 to 2008, another military dictator, Pervaiz Musharaf, furthered the idea of privatization and foreign direct investment. In 2008, oil and food crises made the situation worse. After 2008, food prices increased due to the global economic recession. From 2008 to 2018, two elected governments skyrocketed loans and debt burden. From 2008 to 2019, elected governments relied heavily on the loan of the Paris Club, International Monetary Fund (IMF), World Bank, and other financial institutions. The total external debt of Pakistan that is estimated to be almost US$105 billion in 2019 (Haider, 2019) start increasing from US$43 billion in 2008 to US$53 billion in 2013 (Younus, 2018). There is evidence that the public money provided for the social safety net mainly served undeserving beneficiaries, better-off, and those in power (Agencies, 2020; Maqbool, 2020). After 2013, the government increased the debt burden furthermore to an

unprecedented level, from US$ 53 to US$80 billion in 2018, by enormous investment in non-income generating and subsidy-dependent projects such as Metro Buses, Orange Train, and Laptop schemes instead of a sustainable economic and industrial development infrastructure (Khan, 2013; Hoodbhoy, 2012). All that resulted was mere privatization, circular debt, trade deficit, and in short, macro-economic fragility in the end.

The massive subsidies for top national institutions show how the country deprioritized macroeconomic politics, in which resources related to health, nutrition, education, agriculture, industry, were not adequately attuned. The country remained chronically dependent upon foreign aid, which compelled it to follow damaging policies (Gardezi & Rashid, 1983). Privatization seemed justified when national properties gradually became dysfunctional due to reduced governance, corruption, and nepotism. Instead of profit-making, these demand massive subsidies and become white elephants for the poorly managed country, a dilemma in all developing nations (Debiel & Lambach, 2008).

In the southern parts of Pakistan, cash crops were the primary focus of agriculture (Bhutta et al., 2015). Profit-making in wheat, cotton, and sugarcane crops did not contribute to household-level food security. Besides, there were problems related to chronic poverty, exceptionally low maternal literacy, high fertility, and early age marriage practices, which produce a vicious cycle of maternal and child undernutrition. (Di-Cesare et al., 2015). The higher South-Asian malnutrition (even that of Sub Saharan African, which has low food availability) was owing to the low socio-economic status of women, open defecation, and bad water situation (Ramalingswamy, Johnson & Rhode, 1996). Maternal malnutrition is strongly associated with maternal fertility (Farid-ul-Hasnain & Sophie, 2010; Khattak & Ali, 2010; Shah, Selwyn, Luby, Merchant & Bano, 2003). The socio-cultural environment of mothering and breastfeeding also impacts on the feeding and nutritional intake (Quandt, 1995; Stuart-Macadam & Dettwyler, 1995). The care and proper feeding practices play a pivotal role in reducing the construction of malnourishment (Ramji, 2009; UNICEF, 2016).

Concludingly, historical background, following structural adjustments, excessive privatization, poor market regulation, and debt repayment policies consequently deprived people of comprehensive social welfare policies. Hence, promises of good governance with its citizens could never be fulfilled (Isbister, 2006). The underdeveloped nation-state, thus,

remained unable to control inflation and provide necessary and basic development apparatus necessary for good health and well-being based on equity.

**Ethnic and Regional Disparities in Punjab:** The formation of the present province resulted in August 1947 after the great divide of the Indian subcontinent when the Punjab province of British India was partitioned on religious lines by the Radcliffe (Dalrymple, 2015). Its borders are contiguous with the Indian states of Punjab, Rajasthan and Jammu and Kashmir. The word "Punj-aab" is comprised of two small words 1) Punj means five and 2) aab means water; so Punjab means five water or land of five rivers: Jhelum, Ravi, Chenab, Sutlej, and Beas—all are tributaries of the Great Indus. The water politics on the national and provincial level is also problematic, especially for the low lying south.

It is the second-largest province after Baluchistan by area, adjoining its borders with other provinces Sindh, Baluchistan, and Khyber Pakhtunkhwa, the federal capital Islamabad, and Azad Kashmir. Punjab is the most populated province in Pakistan that almost represents sixty percent of the country's population. The capital of the province is Lahore. The province can be divided into three main geographic units: 1) North-Punjab 2) Central-Punjab and 3) South-Punjab. Three languages are spoken in these parts—Punjabi in the central part, Potohari in the Northern, and Seraiki in the Southern part. The most deprived division is Dera Ghazi Khan, and the most underdeveloped district is Rajanpur (MICS, 2009) in the South-Punjab. District Rajanpur is divided into three main administrative parts or sub-districts (*tehsils*): Jampur, Rajanpur, and Rojhan. On the western side of the district, Suleiman Mountain Range passes and Indus river on the Eastern side. There are almost fifty union councils (UC) in the district. Each UC is further divided into several revenue villages (*Mouzas*). Each *Mouza* is further divided into many more small villages.

The poorest districts are in Sindh, Baluchistan, and Southern Punjab regions of Pakistan (Haq & Uzma, 2013; Naveed & Ali, 2012). Although, Punjab is the most industrialized, prosperous, and least poor while districts in Southern Punjab are the poorest, for example, Rajanpur, where 60% of the total population have been identified as poor (Arif, 2016). Cheema Khalid and Putnam (2008) indicate the existence of a high poverty enclave in the Seraiki speaking districts, particularly Rajanpur, as compared 'with the

relatively low poverty in the more urbanized north, where households are well integrated into the national and international labor market.'

**Figure 1: District Wise Map of Punjab Province in Pakistan**

**Source:** Govt. of Punjab, 2018

In Punjab province, the southern part was largely neglected. It remained deprived in almost all development infrastructure, even a clean drinking water project for South-Punjab could not work, allegedly due to wide-scale mismanagement and corruption and nepotism due to corrupt and inefficient bureaucratic rule. Farmers from D.G. Khan, Muzaffargarh and

Rajanpur face an exceptionally high shortage of water because of a flawed mechanism of water distribution, who could get only 9,000 cusecs against 24,000 capacity of drinking and irrigation water from three canals (Dawn, 2008). This discrimination and disparities are visible from the flared budgetary allocation gap as the government of Punjab allocated Rs 36.75 billion for medical hospitals and colleges of only Lahore in the budget for the Fiscal Year 2017-18 while less than half Rs17.75 billion has been held in reserve for the peoples of whole South Punjab (Adeed, 2019).

Exploitation and marginalization have historically produced "Seraiki nationalism." Long term politico-economic deprivation took revenge from this geography and played a major role in the construction of the local's social psychology. Historical exploitation of Seraiki people by Punjab's capital (Lahore) is palpable in a short piece of a poem by a famous local poet Ashiq Buzdar (1986): "Coercion has stifled our voices; our hands are fettered; We are the prisoners of Lahore Throne, we are the prisoners of Lahore Throne ." The region faced chronic inequality that restricted nutrition capabilities, especially of marginalized communities and households.

Geographically, the Rajanpur district situated in the South of Punjab Province is a typical periphery of North Punjab. The study's locale has unique geography, a long mountain range on its West, and great Indus River flowing parallel in the East, facing chronic environmental disasters in the form of torrential floods from two directions. Politics has historically been revolving around *Tumans*[7] because of their colonial roots with the British Empire. In particular, in the remote Western areas of the district, there is still the centuries-old local judicial ritual of "*Aas-Aaf*" (fire-water—water part has been obsolete nowadays). In this, the guilty person is asked to cross walking (A walk on fire) on a "red hot burning coals" of an inferno to prove innocence. After a few minutes, the accused's feet are covered with a cloth and monitored after a short while. If there are bumps, a walking person is declared as guilty by the local jury. The religious basis of this ritual is provided from an old story when prophet Ibrahim was thrown into the fire, but he was

[7] *Tumandar* is the 'leader of a tribe, under any custom or usage or otherwise could obtain free labour from other persons or compel them to work against their will. (See Gazette of Pakistan, 1976.04.08, Extraordinary, Part I: System of Sardari (Abolition) Ordinance 1976 (No. 15).'

saved without any harm with God's will. Today allegations are proved and disproved through a religiously legalized ritual for justice, making an analogy with that story.

Several women who were accused of adultery were sold off or forced to be enslaved in the tribal chief's residence. Unofficial reports of physical and sexual exploitation abound. Some women succeeded in getting recovery and freedom from sale and slavery in the wake of pressure exerted through civil society and high court. The exploitative ideologies of influential people against weaker people often trickle down in society, and violence and injustice become an innate and integral part of the culture.

Native politicians and tribal chiefs, having roots in and linkages to colonial history, have not done anything substantial for the development of this area after independence. Instead, they are well-known and responsible for the deliberate underdevelopment of the region to prolong their rule. Feudals have even repelled the construction of a university in the district, once projected to be built with foreign help. Rajanpur is the only district where natural gas has not been provided so far. They were reluctant to bring such revolutionary changes with the fear that such development threatens their powers in the future. Often with their criminal support activities such as abduction and ransom are routine.

Social and human development levels are the lowest among all districts of Punjab Province (MICS, 2014). The small roads, which link remote and small villages with the main highway, are damaged. Low literacy levels and some traditional beliefs and practices make people especially female and mothers more vulnerable in remote rural and tribal areas. Underground water in western parts of the district is brackish; hence, inhabitants use rain and canal water as the primary source of drinking water. Two canals, *Dajal* for Western areas and *Kadra* for Eastern areas, which flow only for half a year, are the primary source of irrigation and drinking purposes, where cotton and wheat are favorite cash crops. The distribution of water inside the district is unfair, and many of the Western areas are mostly water insecure.

Rajanpur has almost a kind of desert climate, and there is a virtually low level of rainfall. The average temperature in Rajanpur is 26.0 °C and precipitation is 205 mm (Rajanpur Climate, 2017). Rainfall is almost negligible in the region. Forest, once existing, has been converted into deserts because of rapid and uncontrolled deforestation and widespread corruption within public institutions. Agriculture in the district relies mostly

on canal water irrigation; unfortunately, canal water is not provided yearly but only on a six-monthly basis. In some areas of Rajanpur, particularly the inhabitants of *Pachahd* (Western) areas drink canal or rainwater. People have to displace and bear heavy losses in agriculture and livestock during the rainy monsoon season (Rajanpur Climate, 2017).

Latest District Census Report of Rajanpur (Pakistan Bureau of Statistic, 2019) indicates that the total area of the district is 12318 Square Kilometers (Sq. Km), and the total population of the district is above 2 million. Population density is 89.6 per sq. Km. Out of the total, the rural population comprises 85% percent, and urban constitutes only 14%. There are 262,490 households in the district. Literacy ratio for the male is 29% whereas the female is 11%. Average Annual Growth Rate (1981-98) is 3%. Total housing units in the district are151733, but concrete (*Pakka*) units are mere 25598 (17%). The number of housing units having electricity 61372 (40%) and housing units having piped water is only 12895 (9%), housing units using gas for cooking are mere 953 (0.63 %) (Pakistan Bureau of Statistic, 2019).

## 1.3. Theoretical Framework

This section discusses the theoretical and conceptual frameworks, which helped in conceiving and analyzing the phenomenon of malnutrition in the local context. It reviews that malnutrition is a complex, syndemic, and interdisciplinary issue, determined by political, economic, social, and environmental forces. Beyond illness and malnutrition, there are macro and micro levels. It argues that there is a system of power that impacts culture, traditions, roles, customs, and social psychology.

UNICEF's conceptual framework highlights that malnutrition is the outcome of immediate, underlying, and basic determinants, therefore, "Global SUN movement" emphasized governments to provide enabling environment (basic and political) to cope with the problem of malnutrition through multisectoral strategies divided generally into Nutrition-Specific and Nutrition-Sensitive interventions (Underlying determinants). Most importantly, this section gives an anthropological point of view about hunger and malnutrition. It involves macro-level political-economic, such as neoliberalism, structural adjustment, privatization, market, equity along with behavioral determinants. It also discussed concepts such as social capital, cultural capital, symbolic and structural violence,

which are very relevant in the local context. These concepts have much helped to analyze the ethnographic data.

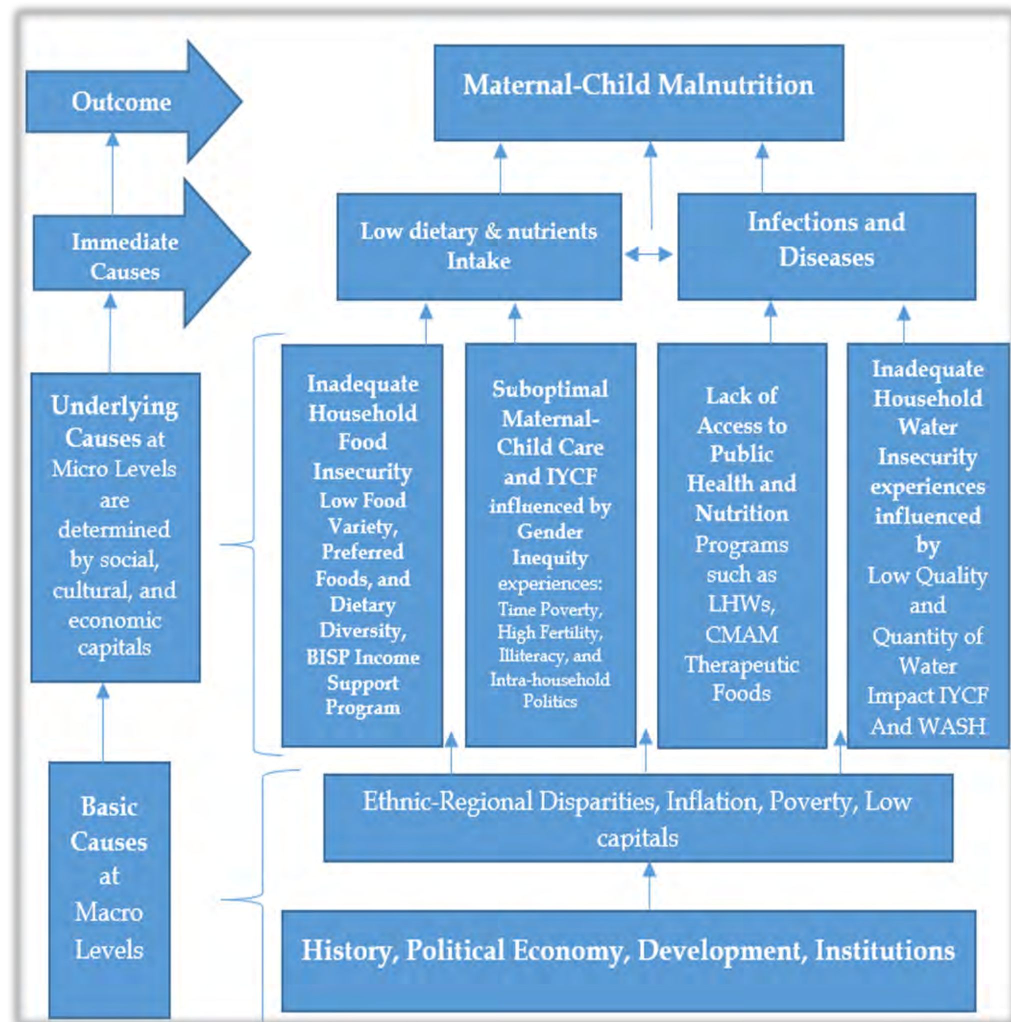
I describe that the lack of social and cultural capital affects the poor's access to Nutritional-specific and Nutrition-Sensitive services that are controlled by power institutions such as bureaucracy. I discuss that most of the literature uses the public health lens to interpret the phenomenon of malnutrition. To interpret illness, explanatory models used by the locals were simplistic and based on binary opposite realities; however, medical anthropology informs about the distinction of “Knowledge” and “Belief,” that help to deconstruct and interpret locals' knowledge, belief and practice.

**UNICEF's Framework on Malnutrition:** UNICEF (1990) developed a conceptual framework that showed mortality and malnutrition as a collective outcome of immediate, underlying, and basic causes. The immediate causes (illness) depend on the underlying causes (inadequate access to food, care, and a healthy environment). Inadequate access is, however, shaped by the basic causes: political, economic, institutional, ideologies, and policies. The framework's flexibility allows investigating the specific contexts and problems relevant to one specific research setting. Political economic and socio-cultural resources impact on household's food, water, and care resources through different routes, avenues, and pathways which indicate a missing link or gap or black boxes (Pelto & Freak, 2003 as cited Bennett, 2009). Around 2010, maternal malnutrition came out to be an integral part of child malnutrition. Through this frame, gaps in priority areas were identified, but "developing countries have never effectively translated this framework into their organizations' agendas." (Pelletier, 2002 as cited in Gillespie, McLachlan, Shrimpton, World Bank, & UNICEF, 2003).

UNICEF (2013; 2105) later updated the framework for maternal child undernutrition, which showed that the basic causes (socio-cultural, political, and economic context) determine underlying determinants of maternal child malnutrition (inadequate 1) household food insecurity, 2) care and feeding practices, and 3) healthy environment and inadequate access to health services). From these underlying determinants of malnutrition, immediate causes (Inadequate dietary intake, disease, and malnutrition) are finally determined. It is here I will adapt, draw on, and contribute to the literature in medical

anthropology. I will explore, examine, and interpret experiences and perceptions of poor households, the inadequacy of their access to potential resources particularly 1) Water Security, 2) Food security, 3) Public Health and Nutrition Programs, and 4) Care and Feeding Practices. Traditionally, "Healthy Environment" explains access to both healthcare and water, sanitation, and hygiene (WASH). In follow of this, I will particularly emphasize and explore access to water and its impact on maternal-child health and nutrition and access to health and therapeutic programs. UNICEF's framework, given below, has been adapted according to the local context and needs.

**Figure: 1.2. The Conceptual Framework for Determining Malnutrition**




**Source:** Author adapted from UNICEF (1990).

**Multisectoral Nutrition Strategy:** Almost similar to the UNICEF framework, the Nutrition-Specific indicators (immediate causes such as health, CMAM) and Nutrition-Sensitive (for example, Social Safety Net) indicators are commonly discussed. Currently, a multisectoral strategy [combining Nutrition-Specific and Nutrition-Sensitive indicators] has been adopted by governments of developing countries to tackle the problem of malnutrition. The creation of the Scaling Up Nutrition (SUN) Movement is the latest endeavor in this regard offering 'new opportunities to expand activities to improve nutrition, particularly in the areas of national policy and the mobilization of resources' (Tumilowicz, Neufeld & Pelto, 2016). The current high rates of malnutrition cost Pakistan approximately 3% of Gross Domestic Product (GDP) each year. The multisectoral approach is being considered a panacea in present times to address the current menace of malnourishment. Pakistan joined the Global Scaling up Nutrition or SUN Movement in 2013, promising to ending malnutrition in the country. However, there is evidence that multisectoral solution strategy remained less pragmatic or practically successful; therefore, social safety nets for poor females predicates micro-level or districts level nutrition sensitive and specific interventions especially after devolution (Di-Cesare et al., 2015; Zaidi, Bhutta, Hussain, & Rasanathan, 2018). It is here I will contribute to the literature by describing barriers and resources while accessing Nutrition-Specific and Nutrition-Sensitive services. I will focus on the issues of medical corruption, structural inequalities, and the role of social capital.

The poor avail them of several sub-standard options and opportunities for food, water, and healthcare in the local context. People treat a variety of ailments and medical conditions at the hands of traditional birth attendants, midwives, herbalists, spiritual and ethnomedical healers, and malnutrition has never been adequately addressed. During my fieldwork from 2016 to 2018, the provincial government was scaling up nutrition through nutrition-specific and nutrition-sensitive interventions. Lady Health Workers (LHWs) screened mothers and children, provided therapeutic food, and referred severe cases to the nutrition Stabilization Center (SC). The social protection program was also working to give support to poor women. At the district level, certain populations were served, while illiterate, poor mothers with lower cultural capital from rural and remote areas were

neglected. By exploring this politics and culture, I would draw on and contribute to the literature of medical anthropology.

**Anthropological Interpretation of Illness/Malnutrition:** Medical anthropology takes advantage of biocultural, politico-economic, and interpretive perspectives (Hahn, 1995; Grønseth, 2009) for understanding illness and social suffering. The first approach understands the role of inequity, power, class, caste, gender, colonization, and globalization (Baer, Singer & Susser, 2002; Morsy, 1996). The second approach highlights that ecological and cultural factors can be greatly impactful for biology, fertility, as well as disease (Grønseth, 2009). In Interpretive, cognitive, symbolic, and psychological approach, meanings, and the explanation are inferred and derived from the culture (Good, 1994). It helps in representing disease and distress (Kleinman, 1986), where "body becomes a phenomenological memoir that opens a new way of interpreting worries, distress, social suffering and illness (Mariella,1990, p. 255)." Sufferer experience is a social product, constructed and reconstructed in the action arena between socially constituted categories of meaning and the political-economic forces' that shape everyday life (Scheper-Hughes & Lock, 1987).

Morsy (1996) argued the culture at the micro-level is determined by the macro power structure. Baer (1997) urged 'critical medical anthropologists and cultural constructivists within medical anthropology to enter into a dialogue with each other because their two perspectives, despite the presence of obvious epistemological differences, share commonalities.' Traditional approaches decontextualize the basic determinants as it is an individual's problem, whereas a critical approach considers that power structure shapes illness among insecure social groups (Sheper-Hughes, 1990). Explaining the moral collapse of normal motherhood, Sheper-Hughes (1992, p. 22) highlights that suspension of ethical culture is not spontaneously produced but there is a social history of cultural practices:

> How are we to understand their actions, make sense of them? The practices described here are not autonomously, culturally produced. They have a social history and must be understood within the economic and political context of a larger state and world (moral) order the ethical in their relations towards these same women and within the religious order (or disorder) of Catholic church

> that is torn in Brazil, as elsewhere, with moral ambivalence about female reproduction.

For Howard and Millard (1997), malnutrition in Africa was a "larger socio-cultural phenomenon" where unequal control over agriculture caused marginalization. Scheper-Hughes (1992) discovered the exploitation of the workers, lack of interest from the government side, the destruction of the local sugar plantation industry, Roman Catholic beliefs, and superstitions were determining child malnutrition. De-Walt (1993) explored that food diversity was lost owing to agricultural commercialization. Escobar (1995) and Foucault (1994; 2010) argued that development Practices by the West planned and managed biomedical theories for economic and political hegemony. Dettwyler (2014) found local agricultural production and the marketing of food along with cultural beliefs and intra-household politics. Chary and associates (2013) viewed that structural and gender inequalities normalized childhood disease and deprioritized treatment. I would give not only the phenomenological experiences of suffering but also the interpretations of those sufferings. Asad (2003) argued that the humanitarian apparatus prioritized some suffering over others producing high competition between sufferers over resources.

**Sociocultural Capital and Structural Violence:** Both critical and interpretative perspectives constructed the ideas of "social capital" (Kawachi, Kennedy, Gupta, & Prothrow-Stith, 1999), "social suffering" (Kleinman, Das & Lock, 1997) and "structural violence" (Farmer, 2004). The sufferer's experience is a social product (Baer et al., 2002), which is shaped by structural violence. Illness disproportionately afflicts the poor, marginalized people, and females (Farmer, 1999). Kawachi et al. (1999) observed that cultural, social, economic, and political processes in society produce differential health risks because health outcomes were curtailed by the exploitative mechanisms of social control and distribution of resources and power. Farmer (1988, p. 53) suggested that "an interpretive approach not only must be based on a painstaking phenomenology of illness and grounded in epidemiology but also incorporate the lessons of history and political economy." The medical anthropology needs to associate "local ills" to the "larger systems of domination" that often influence or even produce them and to find "underlying forms of suffering to its multiple issues " (bodily, mental, economic, and so on).

Likewise, Bourdieu (1977; 1984) argued that both phenomenological and structural approaches to knowledge understand social reality in parts. He, therefore, constructed a theory of practice: combining habitus, field, and capital. The individual "practice" comes out of "habitus," which is based upon social structure. The relationship between individual practices and social structures is a dialectical one[8] (praxis) in which habitus mediates and field functions as competitive space[9] such as bureaucracy, academia, intellect, and medicine. The position of people fluctuates according to capitals—economic, cultural, and social. The social, as well as cultural capital, often turn into economic capital. Similarly, all three capitals also turn into symbolic capital.

State institutions, development, and poverty alleviation programs often ignore the individuals belonging to poor, rural, and lower castes (Aziz, Khan & Wood, 2015; Ferguson, 1990; Gazdar & Mohmand, 2007; Hull, 2003; Kwiatowsksy, 1998). Inequalities based upon castes, gender, and class in South Asia have failed development programs because they marginalized poor and weaker members (Gazdar & Mohmand, 2007; Kabeer, 2010; Mumtaz et al., 2014) which resulted in maternal and child health disparities (Mumtaz et al., 2014). Structural violence as Galtung (1969, p. 171) stated is "built into the structure and shows up as unequal power and consequently as unequal life chances." It is un-deliberated, systemic violence, non-personal, and faceless. The structural violence is indirectly exercised by different parts of the social machinery of oppression un-deliberately and apparently "nobody's fault (Famer, 2004; 2009)." Including cultural factors such as gender inequality and ethnic disparity in the structural violence, Quasada, Hart, and Bourgois (2011, p., 339) have defined structural vulnerability as "a product of class-based economic exploitation and cultural, gender/sexual, and racialized discrimination and processes of symbolic violence and subjectivity formation that have increasingly legitimized punitive neoliberal discourses of individual unworthiness."

Children and mothers with lower socio-cultural capital bear the brunt of cultural and structural inequities or violence because of the lack of transparent and impartial social

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[8] The human agency (ability to act upon and change the world) and social structure are intertwined.
[9] A structured social space has its own rules, schemes of domination, legitimate opinions. Instead of viewing societies in terms of classes, Bourdieu uses the concept of field. In modern societies field exemplifies education, politics, and economy.

protection policies and social safety nets (Mumtaz et al., 2014). I argue that poor people resultantly become indifferent, alienated, superstitious, careless, having a bad faith or false consciousness, and constructing their social reality with their interactions while living within an uneven society. Therefore poor often deprioritize health and nutrition and usually normalize disease, and malnutrition (Chary et al., 2013). The knowledge, belief, and experience of those facing insecurities, sufferings, and distress at the household and community level at the micro-level might be done through emic perspectives. After deconstructing local knowledge, reconstruction of social reality under the light of etic theories is possible.

As government servants are generally recruited due to political affiliation in the country, it lacked evidence that targeting beneficiaries for cash transfer were impartial and transparent. The poorest of the poor, for whom this program was supposed to target, remained unsuccessful in bringing the desired results (Agencies, 2020; Arif, 2006; Bashir, 2012; Maqbool, 2020; Mumtaz et al., 2014). Instead, it was blamed as it has increased the loan burden (Amir, 2016), and its impact is yet to be evaluated on the poor households (Bashir, 2012). Power is institutionalized (Famia, 1975). Development, as well as poverty alleviation programs, are controlled by power dynamics (Aziz et al., 2015; Gazdar & Mohmand, 2007; Kwiatkowski, 1998). In South Asia, poor often face difficulties becoming beneficiaries; therefore, Aziz et al. (2015) suggested gender, caste, class determinants of social exclusion must advise program objectives, eligibility criteria of clients, and selection process. Social capital is required to access medical settings. Along with it, studies (Gupta, 1995; Gupta, 2012; Gupta, Nugent & Sreenath, 2015; Gupta & Sharma, 2006; Qureshi, 2014; 2015) have explained that the corruption within government's medical settings in Pakistan and India showed a lot of parallels.

Evidence shows that awareness about the therapeutic program, distance, and handling of rejection at sites were three major socio-cultural determinants (75%) responsible for the failure of therapeutic programs in five African countries (Guerrero, Myatt & Collins, 2009). Studies showed that the program staff (Aziz et al., 2015; Kawachi et al., 1999; Kwiatkowski, 1998) do not often select poor mothers and children. Evidence showed that therapeutic programs with the lowest centralization could ensure maximum results (Ciliberto et al., 2005). Distant communities are potentially disadvantageous to be

covered by therapeutic programs, particularly for the treatment of complicated SAM because caregivers have to stay for many days at the therapeutic center (Myatt & Collins, 2009), more often adjacent to the children's hospital. Development and supplementary programs reduced moderate malnutrition in children who were prone to be severely malnourished if not treated (Berg, 1987; UNICEF/WFP, 1985; Singer & Laurelhurst, 1986; Beaton, 1993 as cited in Heinekens, 2003). The synergistic relationship between infections and child death can be mitigated with programs of such nature (Pelletier et al., 1993 as cited in Heinekens, 2003). Community experiences must be incorporated in every intervention, along with trained health professionals.

Some of the literature found similar results that only people with approaches and links to local politicians could be successful in becoming BISP's beneficiaries in Pakistan (Mumtaz et al., 2014). When resources are limited, competition is high; therefore, the humanitarian apparatus has to be narrow in its scope, leaving many deserving and potential beneficiaries far behind (Asad, 2003; Chary, 2015b). The international development aid reportedly failed to recover flood-affected villages in many ways. A few case studies allude to this fact in the coming chapters.

## 1.4. Research Methods

According to Bernard (2006), research methods in Anthropology are used to design, sample, collect, and analyze data. As qualitative research methods, it aims to capture individuals' experiences that are defined as day-to-day interactions constructed through socio-cultural and political-economic processes (Kleinman, 2004). An ethnographer is a person who spends time living with, interviewing, and observing a group of people describing their customs. Hence, ethnography is a description of society's customary behaviors, beliefs, and attitudes (Ember & Ember, 2004). For Hodgson (2000), an ethnography is a tool for 'gathering insights into the cultural perception of health and illness, and an explanation of knowledge, attitudes, and behavior of health care workers.' He noted that it should have 1) the exploration of a social phenomenon, 2) unstructured data, 3) the small number of cases, 4) analysis that involves interpretation of meanings of human action.

This ethnography is based upon fifteen months (2016-2018) fieldwork in the communities of Rajanpur district, conducted at various times and multiple sites. The research at Stabilization Centre of District Headquarter Hospitals Rajanpur was conducted from September 2016 to September 2017 where Under Five Children with complicated SAM were being treated, mostly accompanied by their mothers, and grandmothers. This research is influenced by my previous several years' work experience as Public Health and Nutrition Officer in the Health Department Rajanpur, development consultant and research collaborator on household water insecurity experiences research in the Southern Punjab. I lived in two Basic Health Units, one eastern riverside and other Western (*pachadh*) side, and a Rural Health Center, in the center. I engaged myself in communicating with communities, traditional healers, Lady Health Workers, and health and nutrition staff. These experiences helped to a great extent to understand the living conditions. I developed a good rapport and trust with my respondents to capture in-depth stories of the issues discussed with them (Seidman, 2006). My friendships and relationships with the communities and with the personnel of the Health Department worked very well in the smooth conduction of my fieldwork, including participant-observation, key informant, group discussion, and informal and indepth interviews. The impact of macro- politico-economic and socio-cultural processes at micro-levels can be evident when people represent their daily life personal experiences (Domosh, 1997).

**Participant-Observation:** I directly observed the culture at various sites such as the CMAM program, hospitals, and community. The nutrition assistant in the CMAM program identified malnourished mothers and children and introduced them to me and my research work to them. Some households' heads were requested to let me observe the way feeding practices were being implemented on their premises. One mother stated, 'you would see how we live, what and how we eat.' Most respondents asked me what the benefit of this research is. Some questioned, 'you want to write a book on our life.' Some people thought I came here for health promotion. Some, who were not familiar, asked: 'are you from an NGO for poor's help, regarding hand pumps installation.'

Upon their permission, I visited households in several days and those households who ultimately agreed and gave their oral consent. I made notes of observations after visiting their households. I engaged myself with their children, asking them about their

interests, food, schooling, agriculture, and other activities. My family also accompanied me on multiple occasions that increased the trust level of households on the research. Their women shared their life experiences with my wife that helped in collecting and analyzing data. It was where I could overcome the gender gap and crossed the barriers of gender. I conducted many interviews with females with the assistance of my wife, who is a sociologist.

I observed communication between children and parents and grandmothers, feeding practices, beliefs, and overall social environment of mothering and birthing. I tried to observe the environment during life, starting from pregnancy to birth and after birth to the early years of children. I observed the male attitude, the role of grandmothers, their influence, and woman status by watching their decision-making powers among in-laws, the way they took diseases and treated them. Gender discrimination in food distribution and treatment was a concern.

Along with the cultural aspect, I also noted economic and development related issues. How do they think about what healthy or unsafe food is, how they purchase food items, where they go for water fetching, and what restrictions they face? All this data greatly helped me to cross verify data achieved by other research methods. I engaged in community events as a participant-observer and observed and participated in the daily lives of people to understand how mothers and children get malnourished. Households that gave their consent to be part of the study and to be observed were contacted for detailed observation and interviews. Mothers and fathers were advised to discuss the nature of the study with their family members so that their consent and willingness could be obtained to avoid any unfavorable circumstances in the future. Almost thirty households agreed that they were ready for further collaboration. Six households permitted long stays. Others permitted short visits.

Participant observation is the main distinction of anthropological fieldwork, the basis of cultural anthropology that provides a broad context to a research aim (Bernard, 2011). It provides the researcher with the opportunity to be immersed in local culture and to be so nearer to participants that the researcher can carefully observe and write about their existing beliefs, practices, and experiences (Bernard, 2006). Learning about the population through participating in the routine activities of the population (Schensul &

Lecompte, 2012) or observing while becoming a participant of the local and native people and culture is considered as participant observation, which helps to see and understand the local people through their local lenses.

Participating in daily life activities during my stay in these villages provided me a great opportunity to deeply observe people's understanding of health, illness, and malnutrition. This provided insights on beliefs, behaviors, and practices, poverty, health literacy, sensitivity, and psycho-social care of females and their children and inequities. Participant observation and ethnography are sometimes taken as similar (Whitehead, 2004). As a participant-observer, I directly produced interaction with respondents in their natural environments, to obtain relevant data, to describe and interpret phenomena, and to write their culture (Fetterman, 1989). I tried to understand the ways locals conceived of and managed illness and malnutrition, shopped healers, contacted public and private institutions, coped with water and food insecurities, and suffered from structural inequalities. I observed their functions in the agricultural fields, rituals, weddings, funerals, domestic, and religious activities.

Additionally, I was in contact with local government officers, staff working for Non-Governmental Organizations (NGOs), teachers, doctors, birth attendants, herbalists, and local politicians. I conducted numerous informal, open-ended interviews and discussions with men and women of different ages, castes, and statuses. I gathered political, economic, cultural, gender, nutritional, agricultural, and historical information of the communities. Sometimes, I was assisted and accompanied by either key informants or LHWs. They guided me in noting anthropometric measures, taking notes, remembering talks, and recalling food lists, and so on. Lengthy field notes from participant observation were developed in the local language regularly.

**Key Informants:** My key informants were from different professions. The senior Nutrition Assistants of UNICEF appointed at Nutrition SC initially helped me in arranging meetings with families who were admitted to SC. A professor resident of Nowshera village provided very rich information about the lives of local people. Also, a veterinary doctor helped me to introduce communities of *Pachadh* (Western localities). A female community worker in Hajipur village and a Lady Health Supervisor in a Basic Health Unit Hazratwala

also contributed to introducing me with the community and arranging Focus Group Discussions (FGDs) with LHWs.

In short, all of the key informants helped me in providing important and relevant data during my fieldwork. They also shared local information about their area, beliefs, practices, and experiences. I was assisted by a few research assistants, who collaborated and contributed to my fieldwork in a great many ways. I also compensated them for their work as these assistants, and key informants contributed to this ethnography by offering their cultural insights.

**Focus Group Discussions (FGDs):** FGD is like an in-depth group interview, mutually authenticated, interactive, reciprocal, and a collective illumination (Bender & Ewbank 1994; Kitzinger 1995). It is quite useful when it is combined with other qualitative methods of research, such as structured and semi-structured interviews, as its sole use is not much appreciated because these can only present individual perspectives but not of a group. FGDs are conducted with a group of people who can discuss the relevant objective of a study. They can help to cross verify the other data collected through other sources. This method is, therefore, used as a fact-finding opportunity beyond normal interview techniques (Short, 2006). Three FGDs were conducted in this study, one with LHWs, and two with communities. In each FGD that lasted for two to three hours nearly ten people participated. A questionnaire was designed to collect qualitative data through probing and discussion methodology.

LHWs provided critical and useful information regarding child and mother health and nutrition. During the discussion, they provided data on many aspects of breastfeeding, water, sanitation and hygiene, female's perceptions about contraception, traditional and ethnic treatments, and health-seeking behaviors of mothers. One FGD was arranged in the District Headquarter Hospital (DHQ) Rajanpur, wherein 12 LHWs participated. LHWs were informed about the nature of the study. Qualitative data through probing was noted down step by step on various subjects. Other FGD was conducted in the Western (*Pachadh*) water poor areas, where ten males participated and discussed the vulnerable situation related to water, food, floods, development, and malnutrition. The third FGD with females members of water poor communities was assisted by female moderators and issues such as impacts of water insecurity on maternal stress and breasfeeding behaviors were discussed.

At the end of FGDs participants were thanked and served with tea and *pulao* (a local rice dish).

**Qualitative In-depth Interviews:** For qualitative data collection, purposeful sampling was preferred over random sampling. The major quality of ethnographic fieldwork is the limited number of participants, which is not a cornerstone of random sampling (Seidman 2006). Instead of following the rule of generalization, the study focused on in-depth experiences. Moreover, the number of participants was not pre-ordained (Rubin & Rubin, 1995) until I felt saturation and realized that the interviews and discussions were sufficient and that things were being repeated (Seidman, 2006). Selection of type and number of participants often hinge on 'what you want to know, the purpose of the inquiry, what is at stake, what will be useful, what will have credibility' (Patton 1990, p. 184, cited in Sobal 2001). With rapid assessments, limited comprehension of complex problems, such as malnutrition, is obtained (Dettwyler, 1998); therefore, it is recommended that for more intensive study sample should be smart, intense, and in-depth. The ethnographer participates covertly or overtly in people's lives for an extended period, watching what happens, listening to what is said, and asking questions (Hammersley & Atkinson, 2007). In anthropological and ethnographic studies, a core distinction of qualitative research is in-depth data of high quality (Carlsen & Glenton, 2011). The purposeful selection of a participant is necessary because of the research question. (Collingridge & Gantt 2008). Purposive sampling helped me to gather "specific information" of different issues. I conducted in-depth interviews that were sometimes informal and unstructured, and occasionally semi-structured and selection of these data collection tools were specific to the case (Berg, 1989). I deliberately attempted to concentrate on stories, discussions, and mental constructions (Seidman, 2006).

Relevant health and nutrition staff at the Health Department was interviewed for getting "specific and technical information." Prominent notables of health and villages were contacted to gather day to day and particular information. Child health and nutrition experts and active members of communities were consulted during fieldwork. The researcher selects those only who can best "describe the situation" (Kumar, 2005, p. 179). Through this, the most willing, knowledgeable, available, and with whom interaction was easy were sampled. District Coordinator nutrition program, population officer, child

specialists, governmental and non-governmental officers for informal and in-depth interviews were selected through a purposive sampling technique.

I restricted in-depth interviewing to the most severe cases of malnourishment only and interviewed the lactating and pregnant mothers or caretakers of all children below five years of age. Most mothers or parents were interviewed more than once, first in the health facility, then in their homes. Interviews were open-ended with a flexible format, so multiple issues were discussed during informal in-depth semi-structured and open-ended interviews, which ranged from an hour to two hours. I covered the following topics: child care and feeding practices, food security and diversity; understandings of child malnutrition, health, and illness; patterns of health care seeking for children's illnesses; and experiences of infrastructure lack and poverty. From the Basic Health Units, Rural Health Centre, and SC in the District Head Quarter hospital, mothers and fathers were contacted with the help of lady health workers and Nutrition Assistants. They introduced me to mothers, parents, and grandparents. Parents and mothers were told about the nature of the study and requested to participate in it. In total, 30 most willing households were finally selected, ten from the nutrition stabilization center with the help of Nutrition Assistant, ten from Rural Health Center (RHC), and ten from Basic Health Units (BHUs) with the coordination of LHWs and LHVs. The primary sample consisted of 30 households, including mothers, fathers, and grandmothers, using convenience and purposive sampling.

Extensive notes were taken immediately after non-recorded interviews. I used both English and Seraiki languages to write down the notes. Also, full comments or a summary of the argument of my participants have been given. Probing was excessively used, and dialogical communication was set up to gather the qualitative type of data. In structured interviews, the researcher often develops a list of questions and asks in sequence (Bernard, 2006), but in this research, the strict sequence was not followed. Health professionals, traditional birth attendant (*dai*), pediatrician, health and nutrition officers, herbalist, magico-spiritual healer, parents, especially mothers, and caretakers were interviewed and inquired, and the Interview Guide was also sometimes used, keeping in view the respondents' comfortability. Most relevant, fifty respondents in total, were selected purposefully for the research. To access a participant is a strategic process (Atkinson & Hammersley 2007). In addition to indepth interviews, twenty case stories were

purposefully studied that were mostly issue-focused, including but not limited to domestic female servants, agricultural labor, household politics, gender inequity, time poverty, high fertility, rushing errands, and leaving against medical advice (LAMA).

**Qualitative Data Analysis:** Hodgson (2001) argued that the philosophy and logic of the ethnography are opposite to that of positivists who use the experiment in physical sciences. It studies in a natural way, using emic knowledge. Interpretivism emerged out as a reaction against positivism, 'logical empiricism, and instrumental rationality during the 1930s and 1940s. Similar to phenomenology and semiotics, it provides an actor's viewpoint and 'experiential form of common-sense knowledge of human affairs' (Schutz, 1967). The second philosophy of ethnography is symbolic interactionism (Blumer, 1969), which states that human activities are based on the meanings, and meanings are derived and established through a communicative and interpretive process.

The socio-cultural construction of illness and malnutrition needs to be interpreted and explained under a broader socio-cultural context instead of narrow and limited theoretical frames that only blame the victim. Marcus and Fischer (2004, p. 86) concluded that "interpretive anthropology fully accountable to its historical and political-economy implications thus remains to be written." Farmer (1986, p. 58) reiterated this argument:

> It is inexcusable to limit our horizons to the ideally circumscribed village, culture, or case history and ignore the social origins of much—if not most—illness and distress. An interpretive anthropology of affliction, attuned to the ways in which history and its calculus of economic and symbolic power impinge on the local and the personal, might yield new understandings of culturally evolved responses to illness, fear, pain, hunger, and brutality.

To interpret, summarize, and represent qualitative data, the theme-based approach needs a matrix of themes emerging from the data, case studies, and respondents. Different themes emerged from the diverse kind of data sources that I collected until I realized that almost every research question had been sufficiently explored in-depth, and new themes could no longer emerge (Trotter, 2012). After that data was interpreted with the dataset. Translation of some local language words could not be done because no suitable English word for that was found. Therefore, these native words have been written as were listened without translation. In ethnographic research, data analysis and management are not merely important (Seidman, 2006) but the most difficult parts of the research design because the

data is often incoherent and complex. It demands strong analytic skills to structure as well as arrange complex social and cultural data because it is often in the form of conversations, dialogues, debates, discussions, stories, and observations (Atkinson & Hammersley, 2007). I analyzed and interpreted data manually and organized them into different themes and chapters (Seidman, 2006). I used methods that described and interpreted participants' views, such as content and thematic analysis. I did a systematic data analysis that was based on the theme and sub-themes. Employing both deductive and inductive approaches, texts were coded to find themes related to social and structural determinants of child malnutrition.

**Ethics and Limitations:** No research is superior to the moral values of those being studied. Ethics are always involved in any study whatsoever because it can potentially harm those who provide their personal experiences and beliefs. Marvasti (2004) defined that the ethics of research include both approved and prohibited forms of research. Every researcher must be familiar with them before treating and dealing with the respondents. Therefore, all respondents were informed about the purpose of research prior to being the study's participant, and then their oral consent was obtained.

Some of the ethics include informed consent and privacy of respondents and preventing them from any harmful consequences (Atkinson & Hammersley, 2007). Keeping in view the ethics, the privacy, anonymity, and confidentiality of participants were promised and strictly ensured. Some respondents participated on the condition that their identity would not be shared. Photography is another important aspect of this research. So, permission was demanded in this matter from the relevant people beforehand. Baloch tribal females were not photographed because their males had severe reservations about exposing their females. In other villages, there was no restriction, and it was easy to get their permission.

The methodology has shown some limitations, which might have impacted the quality of data during the research process. First of all, there comes "reflexivity" because of my background in public health that sometimes overshadowed my anthropological lens. Second, there was a gender gap, although female assistants accompanied. Third, some interviews had to be left incomplete because of multiple cultural and familial reasons. Fourth, questionnaires were asked in the local language and then translated again into the

English language. Translation from one language to another was a great challenge throughout this research and thesis writing that might have impacted the results. There were occasions when phenomena were short of words. Several local terminologies have been used, and some words could not be properly translated into English. English was not the researcher's native language, so there might be issues with expression in some places. Malnutrition involves a multitude of factors; thus, research has to review a broad range of literature, which was a great challenge in this research. In this research, respondents showed various feelings about the data collection process, a few showed mistrust of this study, evasion, and interviews had to be left incomplete, but the overall majority displayed none of these feelings.

## 1.5. Organization of the Study

The first chapter is an introduction to this dissertation. It discusses that malnutrition is a social product. A single factor does not cause it; rather, it is a syndemic, multidimensional, or multisectoral problem. It briefly describes research settings by highlighting Pakistan's history and political economy, regional inequalities in Punjab, and local politics in the district. Next, it provides theoretical tools and conversations to draw on and contributes to anthropology of social suffering, social capital, and structural violence, linking emic interpretations and knowledge to larger structures of domination. In this chapter, I also specify the research objectives and illustrate that ethnographic research methods like participant-observation and in-depth interviews are conducted to describe and interpret narratives and perform thematic analysis of qualitative data. Significant findings from ethnographic data would be mostly discussed at the end of data chapters.

In chapter 2, I present ethnographic data on water Insecurity in the district. How water, the most fundamental resource for WASH, well-being, and nutrition, becomes scarce at the macro as well as micro levels showing disparities in distribution. How households and mothers cope with this issue and what are pathways water poverty interacts with income, gender inequity, and nutrition. Next, chapter 3 deals with food insecurity and dietary diversity poor and malnourished mothers and their children face in the households. At the start of the chapter, I have given the history and political economy of food insecurity to introduce a broader context at the macro-level. After this context ethnographic data

revealed major themes such as what is staple foods, diet variety, diversity, how low income, and high inflation restrict freedom of choice, and so on. Poor mothers' subjectivity about accessibility and affordability has been discussed. The high prevalence of anemia in mothers and children is caused by low diet diversity. Chapter 4 examines that gender inequity experiences such as time poverty, high fertility, females' low bargaining powers, low birth spacing, and other socio-cultural gender constructs and ideals influence and shape female agency, mothers' care, and well-being, which ultimately impact infant and young children health and nutrition.

Chapter 5 revolves around the theme of "inadequate care and feeding practices." In current times, the first two years of a child are considered a trajectory to future growth and development; therefore, economic, social, cultural, and political constraints in breastfeeding have been the main purpose of this chapter. This chapter argues that breastfeeding is complex and determined by a multitude of forces. This chapter illustrates that in pregnancy and soon after birthing a child is at risk, and breastfeeding immediacy, exclusivity is compromised owing to pre-lacteal, colostrum wastage, formula milk substitutes. What roles doctors, nurses, and grandmothers play in the construction of breastfeeding behaviors?

Further, chapter 6 exposes mothers' interactions with the Nutrition program. What sociocultural barriers, structural inequalities, and bureaucratic structures, poor, illiterate rural mothers often face while accessing development programs. The role of social and cultural capital highlighted how the poor are often stigmatized and marginalized. In the next chapter 7, I aim to describe common response and health-seeking behaviors, often sub-standard, that locals use to tackle disease and illness and malnutrition owing to lack of social, economic, and cultural capital. I explore and analyze knowledge, belief and practice, ethnomedicine, and other spiritual and herbal treatment methods to deal with various health issues. Finally, chapter 8 gives a summary and conclusion of the whole study. It also reiterates theoretical insights, gives recommendations, and suggests future needs for anthropological research in other similar and adjacent contexts.

# 2. HOUSEHOLDS WATER INSECURITY EXPERIENCES: IMPLICATIONS FOR MATERNAL CHILD HEALTH AND FEEDING PRACTICES

## Introduction

Stunting rates in the Rajanpur district are highest in Punjab province (MICS, 2014). The water situation has implications for the health of both women and children. This chapter aims to investigate household experiences, perceptions, and practices regarding water relationship to optimal maternal-child health and nutrition. I argue that water insecurity is a syndemic and cross-cutting issue, associated with WASH, gender inequity, food insecurity, maternal child care, and IYCF.

The rural western populations of the district are highly water insecure as they mostly drink brackish, flood, or canal water. Canal water is available only half a year as against northern districts of the province. The responsibility to fetch water lies mainly on the shoulders of women, mothers, and children. The practice of bringing and borrowing water makes them a victim of violence, stigma, and disease. It increases mothers' work burden, anxiety, and stress. Mothers have to travel and leave their suckling behind and feel sickness and dehydration, particularly in the summer season, when the temperature soars up to 50-55C°. Foods, prepared with murky water for young children, become contaminated and cause infection. These practices make the IYCF compromised in many ways. Water interaction, with poverty, gender inequity, and maternal-child illness, is established, therefore, equity and justice in water resources are imperative for public health and welling.

Kofi Anan, Secretary-General UN, once stated: "access to safe water is a fundamental human need and, therefore, a basic human right. Contaminated water jeopardizes both the physical and social health of all people. It is an affront to human dignity" (WHO, 2003b, p. 6). Analysis of household water insecurity experiences is crucial to assess the risk of adverse outcomes linked with household water insecurity, target scarce resources, and measure the impact of interventions and policies on household water insecurity. Household water insecurity, as it influences hygiene, sanitation, domestic needs, feeding practices, care, education attainment, and economic opportunities and overall social development, becomes the central determinant of generating poor maternal

and child nutritional status. Water insecurity was shown to impact maternal and child health across four pathways in the Kenyan context: physical and psycho-social health, nutrition, and economic wellbeing (Collins & Young, 2018). This study anticipates that these experiences will be similarly observed in Pakistan.

This chapter explains the causes of lousy water situation, coping strategies, water quality, and quantity, which impact on maternal-child health, well-being, and nutrition. It finds that water affects multiple pathways in the Rajanpur district, a water vulnerable area facing moderate to severe water security, where underground water is brackish, and flood devastates crops and development infrastructure every year. Fetching and managing difficult water situations affect households' and mothers' care capabilities and opportunities that determine morbidity and malnutrition, devalued identity construction, time poverty, and sub-optimal care practices and IYCF (Wutich & Brewis, 2014).

Secure water guarantees prevention from maternal child illness and malnutrition through four potential pathways: physical, economic, psychosocial, and nutritional. The availability of safe drinking water is not possible without proper community development interventions. Among developing countries, the peripheries are deliberately ignored in terms of human development. Households and communities need a well laid out sanitation system to prevent infections. Macro-level political-economic factors determine water insecurity at micro-levels, therefore, it is important to review them first.

## 2.1. Political Economy of Water Insecurity

The macro-level situation of water in the country has implications, especially for the Southern areas. The poor management of water shows a lack of vision and strong will to good governance and development. Water is the backbone of Pakistan's agricultural economy, besides drinking and other domestic purposes. Pakistan might become dry by 2025 as it has already crossed the "water stress line" in 1990 as well as the "water scarcity line" in 2005 (Pakistan Council of Research in Water Resources [PCRWR], 2019). It is the world's fourth-highest water-intensive agriculture economy and third most water-stressed country in the world, with per capita annual water availability is closer to the scarcity threshold of 1,000 cubic meters, which was about 1,500 cubic meters in 2009. Agriculture alone consumes 93% available yearly surface water that goes mostly untaxed. Besides, the

highest population growth, rapid urbanization, imminent climate change, poor water management, and a lack of political will contributed to the ever-growing crisis (Shams, 2016). There might be severe political implications of this crisis (Kugelman, 2010; Shams, 2016).

Additionally, the country has low storage capacity, only for 30 days instead of 120 days, and 5 Million Acre Feet (MAF) of water is lost during canal and watercourse flow. According to the World Bank's report, the Kalabagh dam was supposed to be built by the 1990s but could not be initiated due to the lack of trust between provinces (Ramay, 2018). Water is distributed among its four provinces on an equity basis. The significant share is secured by Punjab in Pakistan, the biggest province in terms of its population. Almost half of the country's population lives in Punjab. However, the distribution of water within Punjab is biased because the canals flow only half a year in "South."

Micro-level water distribution was always also overlooked. In reality, the existing so-called modern irrigation system based on of barrages, weirs, and permanent headworks across the rivers in Pakistan is rooted in the British colonial times, which replaced traditional irrigation system of seasonal or inundation canals and disintegrated traditional harvesting system that was well incorporated into the local environment (D'Souza, 2006). The foremost drive behind transforming irrigation in central and southwest Punjab was to cultivate canal colonies and clusters that contrived a new socio-cultural and economic representation (Agnihotri, 1996). During these colonial times, from 1885 and 1947, over a million people had to relocate towards nine canal settlements. According to Mustafa, Gioli, Karner, and Khan (2017, p. 30) the colonial engineers fabricated a 'gravity-based hierarchical system of canals in which main canals take off from diversion points on the rivers and then branch out into distributary and minor canals:

> The water outlets for individual parcels of farmland are from the village watercourses, which emanate from either the distributary or minor canals, but never directly from the main canals. In such a gravity-based system, the supply of irrigation water to a parcel of land is determined by its location along a watercourse and by the location of the village watercourse inlet (*moga*) along the canal. Farmers at the tail end of distributary and minor canals—as well as village watercourses—are consequently worst off in terms of water access.

The water was transported not directly to individuals, but rather to the quantities of land linked to each outlet (Gilmartin, 2003; Gioli, Karner & Khan, 2007). The land proportions under British rule, in this way, became a device of water allocation that profited landlords and discriminatory land division disallowed a justifiable water distribution in Punjab (Farooqi & Wegerich, 2015). It was the consequence of the colonial guidelines that strengthened the power of rural elites, fashioned social grading and class manipulation, and mired inferior sections of society from the captivating gain of cultivation (Ali, 1987). This gratuitous license for large landholders increased insecurity of livelihood from the 'concurrent mechanization of agriculture' and still constructs the social reality of access to water (Mustafa, Gioli, Karner, & Khan, 2017).

Furthermore, the Green Revolution majorly advanced big landholders as only they were capable to procure expensive new machinery. Hence, small landholders failed to take advantage of the agricultural revolution. In consequence, between 1960 to 1990 nearly fifty percent reduction in tenant farms and a forty percent surge in rural population without land but only working as daily wage labor in Pakistan was observed, facing high livelihood insecurity and migration to urban centers (Mustafa & Sawas 2013; Mustafa, Gioli, Karner, & Khan, 2017).

Further, water theft either in the form of *moga* meddling and out-of-turn water taking is decided by the Punjab Irrigation Department's officials, without involving the police or the judiciary. Also, the big landlords are given undue favors and unfair proportions of water by the irrigation department as the distribution of canal water to "big landlords" has never been fairly audited. Small farmers and peasants have repeatedly launched demonstrations against such discriminations. The revenue and water tax (*abiana*) are largely debatable besides the implementation and monitoring of agricultural labor laws. The lack of accountability and impunity of powerful landlords cannot be transformed in isolation, without rectifying the bureaucracy and politics (Mustafa, Gioli, Karner, & Khan, 2017).

> This issue is exacerbated by the continued lack of accountability on the part of the relevant government departments and institutions, which still seem guided by a colonial bureaucratic ethos—which patronizes and is adversarial toward the public—rather than a sense of genuine civil service. An effect of the Pakistani water bureaucracy's isolation from, and occasional hostility toward, civil society is its vulnerability to meddling by powerful politicians, who

> exploit the weak relations and pervasive suspicion between the state functionaries and the public (Mustafa, Gioli, Karner, & Khan, 2017).

The already poor community's infrastructures faced severe damages after the 2010 massive floods. Also, no solemn plans for an adaptive crop system were implemented. Diseases and distress increased maternal and child malnutrition. Water nexus with food and nutrition is well established. In Pakistan, water availability has gone lowest in Asia and Africa. Insufficient irrigation and poor drainage have produced waterlogging and soil salinity. This situation created an unsuccessful harvesting and energy crisis on which most agricultural technologies depend (Kugelman, 2010).

## 2.2. Floods, Water, Sanitation, and Hygiene

Parallel to the main Indus Highway and near to Suleiman Mountains, the remote Western areas of the district (*Pachad*) are geographically secluded. After the monsoon season between July to August, the floods from the Suleiman Mountains make the situation more vulnerable by destroying health, education, roads, and other facilities. Besides, there is a tribal influence on locals‘ beliefs and behaviors. Never did a robust political will live among the rich politicians for constructing a dam or a reservoir or developing any other mechanism to control the flash flood water for irrigation or electricity as a result of excessive rains during monsoon from the Suleiman range. In consequence, people are compelled to displace, migrate, and become defaulters as they often remain unable to pay their loans. Health facilities and sanitation infrastructure are severely damaged, causing an increase in the prevalence of malnutrition. A severe shortage of doctors, midwives, and LHWs is always felt in these flood-affected Western areas of the district.

The recurrent floods severely damaged drinking water sources and sanitation infrastructure, which aggravated the vulnerability of people, especially coming from lower economic backgrounds. Children and women and other vulnerable groups have to suffer from water-borne diseases and, consequently, child malnutrition. The cholera cases also apeared in the flood-affected areas. Peoples' exposure to extreme cold due to damaged shelter infrastructure and while living in temporary dwellings has increased the chance and probability of Respiratory Infections and pneumonia. Malaria and Dengue fever has risen

dramatically after floods. The disruption in Polio eradication activities has also resulted in the flood-affected areas.

International development agencies responded after 2010 floods and started social mobilization for the rehabilitation of water sanitation and hygiene. People were sensitized in these rural and backward areas of the district to change their behaviors regarding Water Sanitation and Hygiene (WASH). As open defecation was common practice, these development agencies started Community-Led-Total-Sanitation (CLTS) programs to improve the prevailing behavior. When people were requested to use soap for handwashing, their reaction was that buying soap was neither possible for them nor they had much interest in the expensive items. Many temporary latrines were built, which later choked because of the low-quality material, water scarcity, and also local people did not accept the ownership. People left their usage because no one looked after the maintenance. The training did not prove useful for the most vulnerable and needy. When the parents belonging to the Baloch caste of *Pachadh* area were interviewed, they complained:

> The hand pumps and the latrines were built far from our houses, and females and children felt reluctant to go there, especially in the nights and during hot days in summer. The latrines were built with metal sheets, and in summer, when the sun was too hot in the noon the excessive heat was unbearable, and it seemed no less than punishment to go to these kinds of so-called toilets. Another dilemma about these latrines was water scarcity and cleaning. We had to fetch water in a low quantity from a far place. So we ultimately couldn't develop the habit.

The problem of malnutrition has deep relationships with gender and development (Chary et al., 2013; Chary, 2015a; Kwiatkowski, 1998). International development programs often ignored local sensitivities, and their interventions often clashed with the centuries-old customs and traditions and prevalent perpetuated structures of socio-economic, gender, and ethnic inequalities (Ferguson, 1990). The humanitarian apparatus has to be limited in its scope, leaving many deserving and potential beneficiaries far behind (Asad, 2003; Chary, 2015b).

The father stated, 'he is 40 but seems older than his actual age.' The illiterate mother stated, 'she doesn't know her exact age, she might be 25.' The father mentioned, 'he is not able to earn much; he earns 200 rupees (less than $1) a day'. They have five children with the average birth space of one year, in each child, and she is pregnant again. The husband

has one marriage, but he wants to marry again. He was a manual laborer (*mazdoor, Tabakhi*). The mother also worked in cultivation and harvesting. Their monthly income is Rs. 5000 (less than $100). Mother is illiterate. They had three goats in a mud house and a hand pump for water, but there was no latrine and defecate openly. The quality of drinking water was not very satisfactory, and its taste was a bit salty. They informed me that their children were suffering from diarrhea. They added:

> Our goat drinks water twice in hot summers and once in winter. Women and men both have responsibility for fetching water. Rainwater is collected in a pool or ditch almost equal to the size of 250 feet. People fetch water from *talai* (pond). This water is used by animals and humans alike. Flood water for crops of corn, maize, and wheat is also utilized. Also, some crops are sold out for little cash. We also have to migrate for work as manual laborers for earning money, almost 10,000 Pakistani rupees (approximately $70 per month).

A small dam at the village Muranj nearest to the Suleiman hills has a higher probability of being a successful project on a small scale. It is also believed that a vast area of *Pachad* can be cultivated with its water. The lands are productive because they have been less used, but most of the floodwater is always wasted without any utilization. Food production and a sustainable water situation would certainly safeguard a considerable reduction in malnutrition in these most affected areas. But sustainable development projects have always been deprioritized because of regional inequities in Punjab.

Father revealed, 'they have to bath twice a month.' They added, 'mosquitos keep biting them the whole night, and they can do nothing.' The practice of open defecation was usual there. Women usually went some distance far away from their courtyards, but children defecated in the house premises in open drains. Women halt defecation until they all go together for defecation in a group to a distant place reserved for this call of nature. They returned when everyone had finished because sometimes alien males of other villages and ethnicity followed and harassed adolescent girls and women, which resulted in the feud and even honor killing (*Kala-kali*).

As there were no toilets inside the house premises, the female could not leave home alone without accompanying some other ladies; it not only provides security but also this practice is vital in saving women's sanctity. Males were very dominant, and younger females' moving out of the home without getting permission from them or older women

was not a good sign because of the social ideals of women's modesty and chastity. Women complained these situations had terrible effects on their physical and mental health. Domestic violence, not a very strange phenomenon, was routine, and females generally had to be normalized after being beaten by husbands. Outsiders did not interfere as they like to solve their problems themselves, without taking help from outsiders. Locals generally did not follow methods of family planning and contraception, and producing up to seven children per mother was a norm.

## 2.3. Household Water Insecurity Experiences

Household water insecurity experiences influenced by structural drivers showed that the majority of the households could not access sufficient quality and quantity of water resources, and households lacked preferred as well as enough water as they had no water supply. The respondents stated that the bad water situation was impacting agriculture and livestock. They had to borrowed water as there was not enough water in the household. Water fetching practice has also impacted income in the majority of households. Some respondents faced stigmatization and difficulties and had to displace because of severe water conditions.

**Table 2.1: Household Water Insecurity Experiences**

| Strutural Drivers | Impacts on Health | Impact on Nutrition |
|---|---|---|
| Colonial history and post colonial policies on water | Maintaining WASH becomes tough | Milk production in cattles become low because of absence of water |
| Politicization of water issues and regional disparities | Women face sexual harassment while fetching water | Dehydration makes breastfeeding difficult among lactating mothers |
| Absence of water supply and bad quality of water | Poor face stigmatization while borrowing water | Water fetching and anxiety influence and reduced breastfeeding behavior |

**Source:** Field data

## 2.4. Causes of Water Insecurity at Community Level

The majority of households from western areas (*Pachadh*) had poor water conditions, as the water looked, tasted, and smelled awful. Participants reported that bore and underground water was hard and not suitable for drinking purposes, and its taste was also foul, salty, and sour. Canal or flood water was unsafe and muddy. One middle-aged woman remarked:

> We depend on rain or flood water collected in ditches. As underground bore water is salty, so there is no choice but to use dirty and muddy canal water. Though somewhere sweet bore water is available, bore is very expensive because each foot of bore adds to the cost. Canal water is much polluted and tastes like clay. Also, peas and meat are hard to be cooked with salty bore water. The hard water is not suitable for feeding and bathing. Bore water is chemically unfit, and fetching is difficult. Bores are at places having harmful chemicals underground. In some months, people use bitter underground water because canal water is not enough.

The majority had no water supply system. From severely insecure areas, one mother stated:

> No water supply is available here, water supply schemes are necessary for us, only rain or flood water is available here, and we pray for rain on the Suleiman Mountains so that we could store water in ditches. Most of the people did not treat their drinking water, but only a small minority treated water with the correct method. The primary source of drinking water is a borehole, rainwater collection, small water vendor, and surface water. The task of carrying water mainly lay on the shoulders of women and children.

Poor were unable to bear expenses for bore water because it was very deep, up to 200--300 feet. Respondents from Western areas who depended only on rain or flood water expressed their miserable condition and demanded urgent measures to solve this critical situation. Responsibility for providing water in the house was shared among parents and children. Nearby, water was not available, and water fetching was very hard as most of the people complained. Water fetching was burdensome because of so many trips. One mother stated:

> Water fetching is a very hectic job, my husband works out of the country, and kids are still small who can't be left alone at home. Even the father-in-law at

> his old age helps to fetch water from the bore or pool. Often, children cannot attend school due to water scarcity and delays in getting water. Also, bringing water is difficult, especially for old persons, children and women owing to the distance, number of trips to water sites. It requires more than a half an hour to return home.

One older man expressed he was unable to bring water from far-flung places. According to most participants, infections and dehydration increased when there was a lack of water. In short, the absence of water plants, low quality of underground water, and rainwater in areas were the leading causes of insecure water conditions in highly water vulnerable sites. Rajanpur has a virtually low level of rainfall, and precipitation is 205 mm. Small forest areas near the river were ruined because of rapid and uncontrolled deforestation and corruption.

Some respondents indicated that local politicians were the cause of the water problem. Because of their indifference, selfishness, and corruption, no water supply scheme mounted there. One key informant stated:

> The leading cause of the water problem is our political leaders. They don't give us the required water. Our politicians are disloyal and insincere to solve this problem. The government should take responsibility for the water supply for this area. The district and provincial government and their inept administration have turned deaf ears to this essential demand. We need a clean water supply here. If we were opulent, we would have left this area. The canal flows only a few months, water stored in the pool becomes very murky over some time and undrinkable. In some places, a bore of good water might be found, but it's expensive. The government should improve irrigation because the canal runs for five months. Also, pumps should be installed as at some points bore water is good, but it's deep at 250 ft. and boring is expensive. Unfortunately, our government is not serious. The people are poor; life is difficult and tough here. There is no life without electricity and water. They need clean water and help for livestock, so small dams or reservoirs are desperately needed here.

## 2.5. Coping Strategies

Respondents were asked, "what do they do when they don't have enough water?" Most of them reported that they used impure water from a pond that was always very muddy. The surface muddy water of the canal or pond was their last resort when there was no water available. They used surface water because the borehole was very far from their

place and precious time was wasted while fetching water. Some of them also used to bring water from another village on a bike, but it turned out to be costly. However, one participant informed, 'we try to bring water in one way or another and often travel to other villages to fetch bore water.' One mother said, 'I ask my husband and children to fetch water from another village.' Another person added, 'we collect the rainwater and divide it equally.' Some also declared that they go to the only borehole of brackish water that runs with a solar system, and fetch the water. A few participants stated that they fetched water from the village's mosque.

Many respondents articulated that they borrowed the water from the neighborhood or collected water from relatives. Few respondents also expressed they borrowed money in such hard times in the form of a loan. One participant voiced that they either requested or borrowed small amounts for water as they were poor and could not afford to purchase water from their pocket (Ilahi & Grimard, 2000). Some respondents stated they thought to move to other places where water supply was better, and earning opportunities existed. One older man remarked:

> It's a big punishment for our children, animals, and older people to stay in a place where water is not available. Also, travel is stressful. The ground is our room, and the sky is our roof, but no rain and no water. Where there is water, there is God. Migration begins when water ends; the grave situation has compelled us to keep traveling in search of a place where water is aplenty. During this arduous journey, we become nomads, homeless, and without food and water. The crisis of homelessness is a curse and doesn't end quickly. We do not have a home, toilet facility, and pool. We've to travel to another city when survival becomes almost impossible. We become exhausted during long hours of travel and become disposed to diseases also and have no medicine to treat serious ailments, especially to our children. On a long journey, some animals even die due to water scarcity.

During Focus Group, one participant showed compulsion as he stated:

> For us, water is everything. We live here because of our tribe; otherwise, the water situation is not right here, it's a dry place where we are forced to drink unsafe muddy water collected through rain or flood. Deforestation is causing problems, dryness is ubiquitous, no green grass is found here, it's dry everywhere, and how can our children be healthy. We wait only for the situation to get better before seriously undertaking the movement plan. We sit silent, wait, and be patient, as we can do nothing in these crucial times. But somehow, we manage drinking water. We either pray for rain or bring it from

the nearby village. The rain comes in "July and August" while dry season months include May, June, September, October, November, January, and February. The canal water is available only in June and July, but not in January, February, September, and October.

**Photo 2.1: The Water Resource in Dry Season**

**Source:** Author, 2018

After the Green Revolution, the exploitation of water resources increased more than ever. Water distribution is the most prominent political question. Water and Power are strongly connected as one key informant informed:

> Water was never so competitive until the cultivation of cash crops. Canals only run for less than half a year. The width of the canal is narrow, and then water is stolen by the strong peoples and *biradaris*[10] through making *mogas* (cuts), often in cooperation with the irrigation department. People bribe them. As a result, the water level is reduced at the tail end, which is insufficient for agriculture. The most disadvantaged group is small peasants, who also often protest against this injustice. It has become a day-to-day practice now and is happening for decades. It impacts on our whole life, affecting foods, income, and health.

[10] The term *Biradari* in local languages means a well connected network of similar families often residing at one place, and fellow caste-men, or tribe in rural social organization, often reflects power and symbolizes men-force. It shows vast relations, and a kind of social capital in rural settings.

## 2.6. Pathways Water Insecurity Affects Maternal Child Health

Money approximately Rs. 1700-2000 was spent on acquiring water. The water situation impacted the cultivation, and raising of livestock and prevented them from earning money. Problems in learning and skill development shrunk opportunities that tremendously influence the economic pathway and cause poverty, subsequently aggravating maternal child health and nutrition. Children busy in water fetching in two-third of households either missed school or went to school late because of problems with water shortage. In severely insecure areas, children never went to school because they had no formal schools close to their areas. An increase in their medical expenditures for the treatment of infections was mentioned too. As one mother asserted:

> My child has been suffering from severe malnutrition because bad water did not suit him. We used bottled water, but it was costly. We need a free water filter plant from the government or non-government organization for drinking purposes. We've to pay an inflated amount for fetching water.

In most of the rural areas, open defecation is common practice due to lack of water and proper toilets. Treatment of these infections entails money and time, and the poor are devoid of both, unfortunately. A local practice for body purging (*Gheesi*) is performed in many water-scarce areas after open defecation with either mud or a pebble that involves jeopardies concerning feeding.

Many mothers indicated that these risky and unacceptable water settings caused infections, and muddy and dirty water had worms. Children also felt irritated by dehydrating. Water supply was available in a few areas, but it was often disconnected, interrupted, and provided unclean water. Children suffered from Diarrhea and Typhoid fever and became malnourished due to repeated attacks. Hepatitis B, Diarrhea, Cholera, and skin infections were frequent as surface water infected the infants.

Hygiene and prevention from infections require water. The unhygienic environment, along with the unavailability of proper infrastructure, made the poor more vulnerable and prone to infection and malnourishment. It was observed that rural communities failed to maintain personal or community hygiene. When asked, "water in district's Western areas (*pachadh*) is a serious problem you know, what infections it causes and what is being done," replied Coordinator of the nutrition program in these words:

> If water isn't sufficient for drinking, how they can wash hands; so what benefit of teaching handwashing lessons. A common man is hardly surviving there, how can you advise him to live a better life (*o tan zingai jeenda waday hookon akho behtar zindgi jee; pehlay hokon zindgai tan jeewan daywo*). Diarrhea, pneumonia, and small intestine problems are common as water is muddy. Besides this, hepatitis is the biggest infection due to bad water. Hygienic methods are not followed. At the policy level, handwashing is hotly debated, but it's just a debate. They give responsibility to typical people of local NGOs, who go and conduct a seminar, hire 20-25 individuals, select the same favorite villages always, just for photography.

Some respondents expressed that it was expensive to buy a bar of soap for handwashing and bathing. More than half of respondents in rural areas did not wash hands. Open defecation is considered a usual practice in many households. After defecation of children, many mothers did not wash their hands as they were observed continuing with food preparation in many instances. Water insecurity is closely related to hygiene maintenance because the scarcity of water creates a culture within which it is almost impossible to wash hands frequently and take a bath and keep houses clean. Floors in homes and streets are also seldom cleaned, and children and toddlers frequently crawl in dirty places. It was observed that dirty cans were being used to fetch water. Dirty utensils and cans caused liver and stomach problems. The animals and humans drink water from the same source. The bad water condition damaged good health and well-being practices. A mother revealed:

> Frogs and lizards are often found in our water ponds, but we still use this type of water. Water filtration plants and boring don't exist here, and also it is much challenging to secure the floodwater. The kidney problem is commonly found due to flood water because some harmful chemicals and salts are mixed in rainwater flowing from mountains. We know boiling the water is good, but boiling is difficult, expensive, and time-consuming. It requires money and wood to boil water; therefore, we cannot afford this.

Problems with water significantly increased difficulties within and outside households (32%), and they felt angry. Children, especially girls, complained to their parents, 'when they go to fetch water older boys harass them, and they feel insecure so elderly members from their household must go along with them for fetching water. Poor people felt stigma by rude and disgusting behaviors of other people because of borrowing water. They explained how rich people made a mockery of them several times whenever

they requested to fill their cans. They often put them on labor in compensation and get domestic labor in place of water. They revealed they sometimes had to listen to abusive words, which pinched them several days after getting water.

More importantly, females complained that they felt much insulted when they entered others' houses for water. Girls were reportedly blackmailed that they could get water free of cost if they were ready to maintain the illicit relationships. Water insecurity constructed limited or devalued social identities, and such people were socially isolated and stigmatized. They were often perceived as inferior and backward. The construction and isolation have very severe psychosocial impacts on the personality development of these women. One woman reported:

> Children face harassment while fetching water, and there are chances of harassment and even rape. Women also take a bath when they go to fetch water, which most often causes embarrassment and even fights as rival women protest on water wastage. They felt danger, especially after sunset, to carry water because of male harassment. Husbands often feel not only angry at wives but also cast suspicion when they are late from bringing water. Females, therefore, usually go to fetch water in groups in daylight and avoid facing strangers. The group formation is a safe method for women, so they go to the pool to wash clothes jointly where they feel safe. People who give water demand something in return. In return, the borrowing family usually provides shawls with some embroidery work (*kadhai*) as well as a shirt (*kurtas*) for males and infants as an act of reciprocity. It is a hand-made work that takes time and energy. Some have to make tandoori roti (wheat flour's loaf) in return of borrowed water, which is a very hectic job in hot summer days, but it is water scarcity that forces us to do so.

A nine to ten years old girl was raped when she went to fetch water near to her household. The kidnapped girl was later recovered, the culprit was arrested but soon released through a deal. The girl went for fetching water in the neighborhood. She knocked at the door, and a man who returned as an immigrant from an Arab state opened the door. The girl asked him, 'uncle, who are you? I want water, can I fetch it?' He replied, 'yes, why not, come in;' she was afraid and asked, 'where are other family members? He said, 'don't feel scared, I am with you; actually I was abroad and recently came back, and my family has gone to attend a marriage ceremony, come in the bathroom and fetch the water.' When she entered, he closed the door and raped her.

Her father got very upset, and he implied, "he was a feeble man; it was his poverty that made his daughter beg for water and suffer from the brutal onslaught of the offender. His daughter remained in shock and trauma, and also under treatment for a long time. The man remained in jail for just two years; his family then pressurized the victimized family to accept money and forgive their son. Some other people of the village also advised him to take this amount because the boy's family was influential people, and they would get their son released soon in anyways. So the poor father was blackmailed, and he ultimately had to accept their offer.

Several times quarrels on the issue of water erupted. One woman recalled she had a severe fight with neighbors on water fetching as it was her turn, but someone tried to take her number. Water fetching causes fatigue and leads to critical health problems, including injuries. Women can often be observed fighting with one another for their turn to get water. Sometimes trivial fights convert into a family scuffle and feud. Women often abuse each other during fetching water, and their children also fight with each other and sometimes get injured. The reason for clash is mostly women want to save their precious time, as they get tired waiting in the queue for the water. They start labeling, abusing, and pushing each other to get to the water first. These women are also dependent on some rich people in the village who use them for different purposes like cleaning courtyards, buying something from the market, and dropping their children at school. Some people fetched water from mosques, but it is not easy because a lot of men who offer prayers use water for ablution, and water is reserved for them.

### 2.6.1. Negative Impact of water insecurity on IYCF practices

Bad water situations affected IYCF practices also. The data consolidated the different responses accumulated from participants during the fieldwork.

**Time poverty deprioritized care and feeding:** Children and mothers usually consumed much time in water fetching, and this task made them stressed, lethargic, and slow, especially during sickness and menstruation. Weight loss and low breastfeeding were reported as the significant consequences of this inferior water situation. Time was wasted

in bringing water, mostly not much in quantity. "Once children had diarrhea, but there was no water in the household. We had to travel, ignoring care and cure. Water scarcity weakened my children and me so that we couldn't work actively," remarked a woman. Due to distant travel, they get tired and become sick, and their immunity becomes poor. One mother expressed:

> I am feeble, and extra energy is required to fetch water in heavy cans, especially during pregnancy and lactation. During summer (June, July, and August), breastfeeding is stopped because there is a lack of water in the house, and the water situation affects travel and care, which increases stress.

Another mother stated:

> Breastfeeding practice is disturbed when we are fetching water, the burden of domestic work, leaving babies at home, knowing very well that nobody will take proper care of my children, and this anxiety makes my breastmilk dry as there is no permanent solution of water. When I go somewhere, family members don't take care of my children.

The women involved in labor work could pay no proper attention to their children, and fetching water often compromised children's care, and dehydration was common during this phenomenon. Due to the worsening water situation, infants and mothers became weaker, and mothers became unable to produce milk in sufficient quantities for the baby, shortening the breastfeeding duration. Female-headed households also had a high level of water insecurity as compared with the male household heads because fetching was much more difficult for them.

**Anxiety and stress influenced breastfeeding:** Stress was another outcome of the insecure water situation. The constant tension and feeling of scarcity of water made many of the mothers mentally sick. The breastfeeding frequency was consequently reduced, babies felt irritation; mothers reported low blood pressure in such water situations in vulnerable areas. The number of trips and time taken to fetch water made mothers uneasy and unhappy during special days and sickness. One mother reported:

> Water increases our nervousness if not available in abundance, and often the same type of foods are cooked; mother is like land, and child is like a plant; with water, they grow, otherwise become dry. We can't buy water; therefore,

> we've to wait in long queues, and it causes stress and weakness. In crop cultivation and harvesting seasons, we leave infants and young children at home for a very long time, which impacts on feeding and care.

**Hygiene requires adequate water:** A sufficient amount of water is needed to maintain hygiene. Canal water channeled through River Indus was muddy, underground water was brackish, bottled water was costly (Rheingans et al., 2012). One respondent reported, "the infant is going to the hospital every week because of bad-water. We only use pure bottled water when the infant becomes sick." Feeding practices were not safe; mothers did not take care of the hygiene of baby-bottles, plates, as well as glasses for drinking and eating. They could not get a bath, clean, and wash bodies and breasts due to lack of water scarcity, especially in summer. One mother reflected:

> Our children have low weight because they get sick recurrently due to unsafe water. Sometimes they remain thirsty because water is not available. Water vessels are filthy in these areas. There are a lot of flies around water containers. Hand washing is overlooked due to security and scarcity of water, and that has often made children suffer from sickness.

People reported that dirty water created vomiting, digestive, and stomach issues. Food prepared in bad water becomes contaminated. Some mothers claimed that when dry milk was mixed with bad water, infants faced constipation with formula milk, utensils remained unwashed, and children were fed with dirty hands. The constant tension and feeling of scarcity of water made them mentally sick. What mothers drink affects infants too. Infants used the same cups and glasses that were used for all. One mother said, 'We don't have electricity; therefore, we cannot preserve food and water and use pitchers and plastic coolers. Due to lack of water, maintaining cleanliness is not possible, which causes problems during pregnancy, deliveries, and lactation.'

Food becomes contaminated because of heavy water; infants cannot afford this food. Infant's growing speed is gradually lowered because of poor quality of water and food, and infants cannot survive for a long time. Very few respondents said that boiling water was better for infants. Heavy water and food made them weak; babies could not play well but kept on weeping.

**Low milk production:** Animals produce little milk when water is at risk. Their fodder is critically reduced. In severe water insecure areas, people had to quench the thirst of their

livestock so that they could produce a sufficient quantity of milk from them. When there was a shortage of water, animals remained thirsty and produced an extremely less quantity of milk. Animals were taken to the other villages for drinking just one time in a day. The situation became much more critical in months when water reservoirs were too close to drying up. Low milk production due to water scarcity also affects IYCF indirectly. Brackish water caused digestive problems and proved fatal for the infant's stomach. A mother lamented:

> Doctors also restricted us to give canal water. We used to boil water in the past, but it is difficult to boil always, so we don't treat water now. Infants sometimes feel pain in their bellies due to hard water. When there is no rain, the ponds and underground water is depleted and in the absence of adequate water dehydration in children. Only one borehole was working in Drighri village, but there was reported that arsenic was mixed in this water. People from Alipur, Shlobha villages reach here at Drighri to fetch water.

When a mother is not healthy due to a bad water situation, infants also get much weaker. Water, therefore, becomes a source of worry for both the mother and her baby alike. Because of brackish water, low agriculture production that endangers nutrition was also reported. In Rajanpur, the Western side of the district adjacent to the Suleiman mountain range is considered high water insecure. Brackish or hard water is also not suitable for agriculture purposes. Therefore, food becomes expensive and hard to get for the inhabitants. They have to travel long distances for water and food requirements. Sometimes, when there is a lack of money, it becomes difficult to decide between water and food as both are equally compulsory.

In high water insecure areas, the primary source of water was either rain, flood, or underground brackish water from a borehole. In moderately water insecure neighborhoods, the major source of water was canal or underground brackish water. However, bore or supplied water was the biggest source in areas that have low water insecurity. Bad water situation generally affected everyone, but in moderate and high insecure areas, mothers and children were key targets. The crops needed plenty of water to grow; hence low availability of water was unable to fill the requirements, and crops, therefore, suffered the most (65%).

**Unsafe water and dehydration threatened the feeding:** Participants maintained that they demanded concrete pools for water collection so that stored water could be protected from contamination of any kind. One mother reported:

> Current sources of water are open to humans, children and donkeys drink from the same source. These animals urinate in the water and cause life-threatening health situations in the community. Also, worms are found in drinking water that feels nasty. Due to this, unclean water is drunk in little quantity, which produces a reduced quantity of breastmilk. As we have to work hard and walk far away, it also impacts on our kidneys when thirst is not quenched.

**Photo 2.2: Unprotected and Contaminated Drinking Water Source**

**Source:** Author, 2018

Dehydration makes breastfeeding difficult. Mothers, who often experienced extreme levels of water insecurity in their households and slept thirstily, were compelled to drink unclean drinking water. They reported increased cases of dehydration and reduced breastmilk as serious issues to which they had no immediate solution. These mothers expressed in consternation that constant stress had greatly influenced the reduction of breastmilk quantity (Rosinger, 2015).

## 2.7. Discussion

This chapter analyzed the association between maternal-child health and nutrition and water insecurity. Good water governance has been described as a basic determinant of

household water security (Gerlak et al., 2018; Miller, Vonk, Staddon & Young 2020; Porcher & Saussier, 2019; Sultana & Lotus, 2020; Wutich & Brewis, 2014), which means that, at the household level, water insecurity has a political context. It found that water insecurity influenced WASH, IYCF, food security, and maternal mental health along with gender inequities. Water insecurity has formed complex and syndemic relationships. Post-colonial larger water distribution policies developed in colonial times influenced and shaped water injustice at micro-levels (Mustafa, Gioli, Karner, & Khan, 2017). The canal water was available only a few months in the district. In North-Punjab, canals run the whole year. People in the district were deprived of a due water share. Resultantly western areas could not receive a just supply of water either for crop production and also for household consumption.

The boring water was good at some places, but it was deep and expensive, so small dams or reservoirs were desperately demanded in Western areas of the district. In these high water insecure areas, the main source of water was either rain, flood, or underground brackish water from a borehole. The severity proved when locals faced severe water scarcity exceeding a month in a year (Mekonnen & Hoekstra, 2016), which hit women and children in critical days. The canal water was never so competitive until the cultivation of cash crops; water was stolen by the strong peoples.

People from these areas showed helplessness as they only waited for the situation to get better before seriously undertaking the movement plan. They possessed few options in these crucial times that impacted their health and nutrition, especially of women and children. When there is no water migration begins in the end. They became exhausted during long hours of travel, immunity was lost, and they became disposed to diseases. Animals were taken to the other villages for quenching their thirst, which affected their milk production. Agriculture and livestock required sufficient amounts of water that were not available there (Whitney et al., 2018; Tesfamariam, Owusu-Sekyere, Emmanuel, and Elizabeth, 2018). In result, crop yields reduced (Sorenson, Morssink & Campos 2011; Rahut, Ali, Imtiaz, Mottaleb, & Erenstein, 2016; Sinyolo, Mudhara, & Wale, 2014) and even animals and livestock could not drink water, and their fodder did not grow well (Verzijl & Quispe, 2013). It all had serious implications on household food security, which is the major underlying cause of hunger and malnutrition.

The study conducted by Aihara, Shrestha, and Sharma (2016) in Nepal corroborated, as participants worried that they would not have enough water, so they consumed small amounts of water and faced a lack of hygiene and less time for childrearing. Studies indicated that in almost all regions of Pakistan the water supply system was outdated and leakage contaminated water supply (Cohen, 2018). The respondent stated, "the main cause of water problem is our political leaders." The political economy links water insecurity with weak infrastructure (Cole, 2017; Swyngedouw, 2013). Water insecurity in Rajanpur was one of the major causes of poverty and under-development in the southern district. The purchase of water increased the burden on income, and it became difficult to decide between water and food (Collins et al., 2019).

If water is not sufficient for drinking, how they can wash hands; so what benefit of teaching handwashing lessons. Due to lack of water, maintaining cleanliness is not possible, which causes problems during pregnancy, deliveries, and lactation. At the policy level, handwashing is hotly debated, but it's just a debate. Frogs and lizards were often found in water sources. Animals urinated in the pond, and also worms were found in drinking water that felt nasty. Doctors restricted giving canal water, as mothers reported. They confessed that they did not use treatment methods for cleaning water. They had to pay an inflated amount for pure bottled water when the infant got sick.

Many of the locals cleaned defecation with either mud or a pebble that jeopardized feeding. Schmidlin et al., (2013) showed severe effects of hygiene and defecation behavior on helminths and intestinal protozoa infections in Taabo, Côte d'Ivoire. The river (Indus) water is widely used in the district. Evidence showed it was contaminated with coliform, fecal coliform and E. Coli (Azizullah, Khattak, Richter, & Hader, 2011; Khuawar et al., 2018) that was a big threat to public health. Khan et al. (2012) found that coliform bacteria caused gastroenteritis, dysentery, diarrhea, and viral hepatitis. Another study in Bangladesh revealed that food became contaminated with pathogen E. coli (Islam et al., 2012). Improper hygiene practices in women and their children greatly affected well-being among mothers (Ahira, Shrestha & Sharma, 2016; Wutich, 2009)

Also, results indicated stigma related to water fetching. At some places, the better-off people made a mockery of the poor. They often put the poor on labor or got domestic labor from them in compensation. They also sometimes had to listen to rude and abusive

words. In the worst case, one girl was even raped ('uncle, who are you? I want water, can I fetch it?). Girls were more frequently blackmailed that they could get water free of cost if they were ready to have illicit sexual relationships. Girls felt danger, especially after sunset to fetch water. Husbands often felt angry at wives if they were late in bringing water. Females, therefore, usually prefer going to fetch water in groups in daylight and avoid facing strangers. This situation also exposed young girls to stigma, physical, and sexual violence (Kevany, Siebel, Hyde, Dema, & Huisingh, 2013). Some children were missed and dropped from education as well (Hemson, 2007).

Moreover, sometimes trivial fights converted into a family scuffle and feud. The reason for the clash was women wanted to save their time, as they got tired waiting in the queue for the water. Several interpersonal conflicts were reported (Collins et al., 2019; Stevenson et al., 2016; Wutich, 2009) due to the problem with water, and many of the respondents felt angry (Mason, 2014; Wutich & Brewis, 2014).

Mothers fetched water during pregnancy, delivery, and lactation (Collins et al., 2019). They concluded they had to travel, ignoring care and cure, breastfeeding was stopped because of lack of water or frequency was reduced, and babies felt irritation. They also observed that anxiety made their breastmilk dry, and they experienced low blood pressure and nervousness. In their opinion, mother-child health was integrated. They opined mother was like a land and child a plant. Children could only grow when land is watered, otherwise, they might become dry and malnourished. In this way, water insecurity influenced the infant and young child feeding.

Further, fetching water during sickness impacted not only on the mother's well-being but also on infant's health (Rahman, Lovel, Iqbal, Bunn, & Harrington, 2004) that reduced their daily caloric requirement in the dry season (La Frenierre, 2009), and increased fatigue and other physical illnesses (Geere et al., 2018). Also, breastfeeding was difficult due to water fetching (Brewis, 2019), and breastmilk production and breastfeeding frequency were consequently reduced (Nichols, Schutte, Brown, Dennis, & Price, 2009; Scavenius, van Hulsel, Meijer, Wendte, & Gurgel, 2007). They left their children at home while fetching water that impacted care and proper feeding (Black & Dewey, 2014). The finding showed that many mothers used brackish water to drink. Evidence showed such water contained arsenic that might turn breastmilk poisonous (Concha et al., 1998). Among

all of the Punjab province, the current highest stunting prevalence in the Rajanpur district might be strongly associated with severe and chronic water insecurity. It was also supported by a previous study in Southern Punjab by Hoek, Feenstra, and Konradsen (2002) who observed that inadequate water quantity, mainly because of distance, was the significant predictor of height-for-age (HAZ) and prevalence of diarrheal infections.

## Conclusion

This chapter suggests that water from boreholes and canals is perceived to have poor taste and quality. Along with insufficient water supplies, perceptions of mismanagement of water supply by government entities have been highlighted in this chapter. Water insecurity is detrimental to social change and development. Insecure and unsafe water at the community level in the Rajanpur district is a result of a lack of political indifference and regional inequities in Punjab province. Water emerges as a cross-cutting theme. It increases gender inequities through time poverty, work burden, reduced maternal care, and child feeding. Mothers complain about the negative quality and quantity of water. Sanitation and hygiene are other factors attached to sufficient water quantity. Due to a lack of water availability, the practice of open defecation highly prevails. The stunting rates in Rajanpur are highest owing to this fact. Furthermore, floods disaster aggravates the vulnerabilities. The remote western population of the district needs justice and equity in water. It will not only bring positive and sustainable agriculture, food security but also increase in income, health, and nutrition for many of the households currently suffering from hidden hunger, low food diversity, chronic poverty, and malnutrition.

The research illustrates the relationship between water insecurity and gender inequality. A lot of public health campaigns focus on WASH. A major goal is to provide people with information about unsanitary water, in hopes that information will change their practices and improve hygiene, infection prevention, however, many respondents here were aware of the ill-effects of not having water and of consuming/washing with dirty water. Behavior change, however, is not completely feasible here. The practice of coping with recurrent floods and water-related issues helps them to build risk reduction and resilience strategies. In this chapter, I have discussed how poor mothers experienced the

water insecurity situation that restricted a healthy environment and impacted their health and well-being. Next chapter, however, discovers and interprets different themes related to food insecurity experiences from ethnographic data.

# 3. HOUSEHOLD FOOD INSECURITY EXPERIENCES, AND POOR MOTHERS' DIETARY PERCEPTIONS AND PRACTICES

## Introduction

Food security is a situation when "all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life." (FAO, 1996) The lack of access to a sufficient quantity of nutritious food causes malnutrition in children and mothers (Reis, 2012). Inadequate nutritional status in early childhood has long-term consequences (Black et al., 2008; Grantham-Mcgregor et al., 2007; Victora et al., 2008). The dietary diversity is associated with the nutritional status of a child (Pangaribowo, Gerber & Torero, 2013). Average caloric consumption in the poorest households (1570 calories) is 23% lower than the recommended level (Household Integrated Economic Survey [HIES]; World Bank, 2016a). The major source of caloric consumption is wheat, followed by rice; Poor and rural households' cost of consumption is lower than non-poor and urban households (Friedman, Hong & Hou, 2011; Malik, Nazli & Whitney 2015). The average diet in the country is not fully diverse (Shabnam et al. 2016). The cost of food rose up to 270% between from 2000 to 2013 (World Bank, 2016a). From 2007 to 2009, wheat flour and rice rose up to 200%, and onion, milk, and oil up to 150% (Government of Pakistan 2014).

Household food insecurity is the underlying cause of hunger and maternal child undernutrition. This chapter intended to understand household experiences, practices, and perceptions regarding food insecurity, dietary diversity at the community level in one of the most underdeveloped districts, Rajanpur, in South-Punjab. It attempted to investigate households' inability to access food and to analyze poor mothers' perspectives and practices regarding daily diet, healthy and unsafe foods for health, along with variety and diversity of diet. It was found that the immediate and the most conspicuous problem was the limited diversity of food. Overall, the low income of poor households determined the low quality of the diet. The foods unavailable or sparse in the households were supposed to be healthy foods. Data revealed low-income households had to eat monotonous, old, used, expiry, and rotten foods. Poor rural households often had to sell off their highly energetic food items

(honey, chicken, milk, clarified butter, and eggs) only because they wanted to earn a little amount of money, which makes poor rural mothers and children food insecure. Besides, local markets also sell out low-quality foods. The most serious issue was inflation, which was beyond the poor's buying capacity. The analysis revealed that micronutrient deficiencies in mothers and children (hidden hunger) were resulted in owing to the consumption of low diverse food. Analysis informed that although there was no absolute hunger in the community, limited diet diversity or lack of access to high energy food products such as protein, mineral, and vitamins were the real barriers for poor households because of high inflation. Income inequalities and lack of government control on food markets are the basic causes that determine insecurity at the household level.

## 3.1. Political Economy of Food Insecurity in Pakistan

It is vital to contextualize a recent history and political economy of food security before studying it in current times at the micro household level. Neoliberal policies and programs have been the core of Pakistan's national economy. The "Green Revolution" supported by USAID in the sixties benefited landlords more than the poor because cash crops of sugar, wheat, and cotton consumed more water, used pesticides, and reduced food diversity. Pakistan, once a sufficient country in wheat and rice grains, became deficient after 1980 when globally decreased food prices reduced demand for the grain, which resulted in low investment in agriculture in the country (Gera, 2004).

Consequently, imports rose to 2.5 million tons in 1990, yet, the state could not even control hunger and malnutrition because of unfair resource distribution and weak purchasing power. Worldwide food grain prices were increasing in 2007, but international financial institutions forced Pakistan to export its already scarce wheat surplus, which increased poverty. Second, giving agricultural lands to foreign countries and agribusiness investors on long-term leases exported all grains to investing countries (Kugelman, 2010).

Minimum state intrusion policy of neoliberalism could not be successful in combating hunger and malnutrition, but no noteworthy steps and actions were taken at the policy level to wrestle on-going hype in food prices as the wheat price increased from RS. 400/40kg in 2004 to RS. 630/40kg in 2008 [that crossed 1400/40kg in 2019] (Task Force on Food Security Report, 2009). Wheat domestically was much cheaper than the

international market, so it was smuggled, which aggravated crises more intensely. Then petroleum and gas prices rose, fertilizer prices greatly influenced agricultural production, so wheat had to be imported in 2008 at an expensive rate of $300 a ton. The consumer price index increased by 25%, and wheat prices increased by 20% (Malik, 2010). In addition, the decline in agricultural investment from 2.1% to 1.1% (1999 to 2009), low-quality research, monitoring and evaluation, weak coordination in federal policy, and poor provincial implementation intensified hunger and malnutrition (Malik, 2010).

The policy reform was never taken seriously but committed to the demands of the the Asian Development Bank and World Bank for just the balance of payment and budgetary support. A holistic and long-term approach to agriculture development and poverty reduction is impossible without good governance and political reform in the country. Policymakers' extra focus on production only has undermined the question of the poor's accessibility (Kugelman, 2010). Similarly, demanding only for betterment in issues such as storage, transportation, irrigation, and agriculture are secondary measures, but unequal land distribution is a primary structural issue because access to land will decrease relative food prices (Kugelman, 2010). Further, the World Bank (2015) found that the cost of food rose from 2000–2014 by 270 %, whereas prices increased 180% of nonfood items.

In southern Pakistan, cash crops such as cotton and sugarcane do not contribute to household-level food security (Di-Cesare et al., 2015). Household food budget and intra-household food distribution determine maternal nutrition in Pakistan, but it has historically minimized due to slow economic growth, especially food prices hype after 2008 (National Planning Commission, 2009), and gender and social inequities. Malnourished cases in Pakistan amplified from 24 million in the 1990s to 45 million in 2008. In early 2010, the prices of major commodities such as staple crops, sugar, and cooking oil prices increased by nearly 20% and were more likely to grow in the future as predicted by the wholesale price index (Kugelman, 2010).

## 3.2. Household Food Insecurity Experiences

Household food insecurity experiences explored that many households were unable to eat preferred foods and often had to eat a limited variety of food, the most significant indicator,

and a strong reason behind micronutrient deficiencies or hidden hunger. Many of the household domestic females servants mentioned that they had to eat disliked foods because of a lack of resources to obtain better and multiple types of foods. However, the majority stated that they never experienced extreme hunger. The following major themes emerged from the ethnographic data.

**Table 3.1: Household Food Insecurity Experiences**

| | | |
|---|---|---|
| Availability: carbohydrate, staple foods and a daily diet of low-income households | Unfreedoms to make choices compel to eat disliked foods | Quality does not matter; everything is good for poor |
| Purchasability: Household income determines the dietary quality | Selling pure domestic foods for buying marketized thing with high quantity: compromising quality over quantity | Reliability: Marketization and Low quality cheap available junk foods |
| Inflation has reduced buying capacity | Diversity: Limited food variety | Perception of what makes health Good: things beyond access, unavailable, and sparse |

Source: Field data

**Daily diet and staple foods of low-income households:** The wheat grains were the most widely available food in the locals' daily diet. It is grown universally, and other grains like millet and corn are produced only in minor quantities. The reason for this is that wheat is a commercial crop and gives a hefty profit in the agricultural and feudal mode of production; also, wheat in dietary habits have replaced cheap and more energetic millet grains. Rural households use a paste (*chatni*) of mint, green chili, bhringraj, and coriander along with wheat-made loaf. The majority of poor rural households keep cows and goats in their courtyards. They sell or drink their milk because buffalo keeping is comparatively expensive.

Additionally, yogurt drink (*lassi*), widely used in rural households, is being gradually less frequent. There is a local saying that there is no worry if milk and butter are unavailable, one may drink *lassi* and be healthy (*kheer makhan di jhanjh na kar lassi pi gutkala thee*). The yogurt drink contains traces of raw butter, and especially for the poor,

it has special importance as it is economical and serves all household members with a small quantity of yogurt.

Excessive use of carbohydrates and sugar products deprive appetite. Often wheat loaf (*roti*) and rusks dipped in black tea prepared with milk (*chai papay*) were given to small children by their parents. Some mothers gave a full small bowl (*mungri*) of sugar to young children to keep them busy eating white sugar most of the time. This practice removed their appetite, and other deficiency of essential nutrients such as protein and vitamins led to undernourishment in them. Such practices were strongly connected with the household's lack of access to diverse foods and awareness about the overuse of white sugar.

When asked about daily diet, the parents from *Pachadh* informed, "we eat two times a day with tea, loaf, potato or peas. Young children's diet is goat milk and potato only. Motions (*Julab*) started when we initiated goat milk, formula milk (*dabba*) is expensive, and we have no money. Onion with wheat loaf is often eaten. We usually store and eat peas, *gur* (jaggery), and lentils. *Gur* is used frequently, and even we prepare black tea with this. Black tea is our favorite drink to serve to their guests. Here is a norm that we first serve "black tea" and then start a conversation with their guests. Always water in our kettle remains on fire for preparing tea. We serve the tea to guests before a meal and even after the meal."

**Limited diversity of foods:** The majority of the low-income parents declared they usually ate 2-3 times in a day with tea, loaf, potato, or peas. One woman replied, “Pulses, rice, and vegetables are our common diet, used almost every day. Chicken is expensive and a luxury, is cooked once a month, but to think of meat either mutton or beef is almost impossible, or when someone becomes weak and sick, its broth is then used.” Some mothers often reported eating cake, potatoes, eggs, and meat once in one month and fruit once in a blue moon while their young children liked rice and vermicelli. One nutrition expert from the community highlighted the problem of the hidden hunger due to the limited variety of food diversity in these words:

> Mothers and children in poor households overcome their hunger by eating wheat, rice, potato, or peas. The stomach is filled in this way, but the chemical variety required by the human body is not achieved. This is why most of the maternal malnutrition is conspicuous in the form of micronutrient deficiencies

> along with low weight and height. This factor is further transmitted in next-generation, causing low birth weight babies in poor households, and it continues cyclically in an unending process.

District Coordinator Nutrition program once commented:

> Pulses are eaten every time; if a person eats rice for several months, it ll of-course deprive variety because other things are also necessary, like fruit, but they consume *lassi* (yogurt drink) Only it's due to Calcium and vitamin D availability that is making them hardworking if these things were not available they would 've been entirely sick, although they are yet anemic (*hika daal hay jehri khari hay thaee biyan cheezan vai zaroori hin insan kon, fruiting vai kay naen, lassi hay albata*). Most of the village people are poor and rarely can eat meat, as they have the least power to purchase it. They can eat meat on marriage or Eid, after six months, on someone's marriage ceremony.

**Selling household foods for money:** Most of the poor rural mothers revealed that they do not cook curry two or three times like people in towns and cities do. They grew corn, maze, and wheat with rainwater and bought onions from nearby towns. Mushrooms that were acquired had to be cooked or sold out in the nearby small market. Although some eggs are reserved for kids, rest are sold (at the rate of 15 rupees each) when somebody is going to town, eggs or hens are given to him to earn a little money. *Lassi*, once available free without any demand for payment in return, milk collection companies finished the trend of free sharing. Presently, companies collect milk from villages and extract cream as respondents reported. The tradition of sharing milk is very rare now after companies have started buying. On the most important occasions household foods are sold out in the market in severe compulsion. One respondent, who runs a shop in the local market, stated a short story:

> One day in the market, I saw two young children selling chicken. I asked 'of how much this chicken would they sell,' the elder boy said, 'in 400 rupees.' When I took the chicken from his hand and paid the money, the little child cried, I asked, "why are you crying?" His elder brother interrupted 'there is nothing.' But I was surprised and felt strange. I said, 'what is the matter. He cried and looked at the chicken and looked at the brother. I asked his brother, 'what is the matter, tell me clearly without fear.' Tears fell down his eyes, he said, 'it is his chicken and he used to eat its eggs too. Now we are selling it in compulsion because my mother is very sick. For her treatment, we have to sell this chicken. My brother loves it and doesn't wish to leave it'

**Household income and quality of diet:** Mothers considered income as a prerequisite of good health. One mother stated: "if the household head is not earning, family members can't afford to buy anything, which impacts on health. When the needs of life are not fulfilled or when a good diet becomes unavailable, then it makes health worse." Similarly, another grieved mother remarked: "when earning was good, it had a positive impact on their health, but with low-income, they felt sick because they had no food buying capacity." Some mothers opined, "poverty brought worries while rich diet and peace at homemade their health better. A good income can ensure food diversity, which emerged a great hurdle in the majority of households.

**Inflation has reduced buying capacity:** One couple complained that day labor or daily wage work is not sufficient for a reasonable living, "food is so high, utilities and other stuff consume much of our income and bearing expenses with daily wage manual work are almost impossible (*Tazi mazdori nal mail nain milda*). Once we brought our children to the clinic, and the doctor prescribed they were anemic and weak and needed blood drips (*khoon dian bootlan*). The milk, fruit, and meat are so expensive we are unable to purchase without fear. We buy one-liter milk and water is mixed into it to increase its quantity so that it can be distributed into the whole family."

One mother, working as a domestic household servant, stated, "when I go to market, I see different fruits, but the prices are so high that I never dare to touch them. I often think about why my children cannot eat fruit and milk even if I work more than 12 hours a day. Is it my fault? Why one is poor, and the other is rich. I can only afford to buy a 10 kg bag of wheat that costs 700 rupees. It is too tough to fight this inflation." One poor widow wished, "we want to eat meat, but it is very costly. We can eat the meat on Eid of Sacrifice, one time only in a year. We have no power to purchase fruit; we can only eat just loaf, potatoes, curry, peas, rice, and pulses. There is not enough diet for elders as well as for children." The cheap labor is the only source of household income, and that is certainly unable to ensure food diversity, essential to be safe from hidden hunger and stunting. One unemployed husband got angry when her wife asked for ration. He insisted, "I have nothing to feed you; go to others' house, become the female domestic servant (maid), and eat."

**Perception of preferred Foods or good for health:** Mothers' perception of healthy foods was explored to understand their knowledge, awareness, and accessibility. When

asked what makes the health of a child good? Mothers showed a mixed response. They wished for what they could not buy. Many mothers wished for clarified butter (*asli ghee*), fruit, and meat because they severely lacked food diversity in their daily diets. Some poorest women even stated that "all that is accessible and available may be good for the hungry and poor." Many mothers perceived that soup, eggs, tea, and fruit are good for a mother. One mother, Naseem, explained that watermelon was a healthy diet. Her husband bought it off and on when he used to earn a good income. She also emphasized on the fruit as good food for health. She pronounced the chicken was good for health. She expressed that she had not eaten eggs since she got sick last time. She also added that fruit, apples, and bananas are good for health.

It indicates that income level determines the perception of what is good and what is bad. Medicinal and herbal products were also considered good by very some mothers. One mother revealed that multivitamin tablets might make health better. A few others believed that things made by traditional pharmacists like herbs, *turanjbeen*, *ghutti*, and *arq* (extract or distillation), spiritual, and magical things might make health better.

**Food does not want to eat/ disliked foods**: Some respondents expressed that they have to eat rotten, old, and expired foods. When asked what things make health bad, poor parents in the stabilization center replied, "with being hungry and with eating onion, and with dry loaf (*suka tukkar*) as we often live with it." Most of these respondents opined that for better health, they needed accessibility to meat, fruit, and milk, which, according to them, had been much more expensive in present times. These parents indicated that their family members often had to use old and expired foods taken from neighbors and relatives. Some mothers preferred fresh yogurt and curry (*lassi* and *bhaji*) and anything as per their wish, and with freedom of choice in eating. But poverty has restricted their dietary preferences. One domestic household servant informed, "they often collect old, expired, left over or residue foods (*joothay khanay*) from the houses where they work." They adduced "they burn the sour smell of old and expiry curry and foods by heating" due to the inability to command food commodities.

**Intra-household politics and diet:** Data showed that household head and male children were served first for the meals in the households, and often with a big and good portion of food. The food quantity and quality were gender-sensitive. It was owing to this

discriminatory norm that one traditional birth attendant once emphasized that female baby deserves to be breastfed more than boy child because females have to face difficulties:

> The female baby needs to drink more (two and half years while boy for only two years) because she is like a "guest" as she has to leave her parents' house after marriage and work hard.

The older women in the households or compounds act as authority and experts because they influenced pregnant and lactating mothers to determine "what was good to eat and what was not good to eat." But when food is secured, health becomes good. Milk or dairy products increase the child's and mother's weight. The availability of food comes first before handling and hygiene. A mother asseverated that availability of raw buffalo milk increased her weight:

> After marriage, there were cows and buffaloes in my husband's house, and my mother-in-law gave non-boiled milk to my baby and me. In the early days of marriage, I resisted this practice because I used to think it was unhygienic to drink raw-milk without boiling, but she articulated, 'listen, this is my house, there is no such care in my home. I became silent, but later I found that my child and I have started growing speedily with milk. So, in this way, both my son and I improved weight. I remember I used to look like a skeleton in my parents' house, but I have got flesh here.

**Perceptions about hot/cold and restricted food:** Data revealed that hot foods, pulses, and some vegetables such as onion, cauliflower, and spinach were considered harmful for small infants, and pregnant and lactating mothers. It was perceived that eating loaf could obstruct while delivering a baby. Grandmothers forbade pregnant mothers using different kinds of peas and pulses because these might cause vaporization or heat burn (*tabkhir*), which indirectly disturb babies. It is better if the mother prefers broth and chicken soup (*yakhni*). It was also believed, what a mother eats is excreted from her baby's excreta. Mother also feared that watermelon might be harmful as the water immediately after eating it could cause diarrhea. Clarified butter and lemon might trigger asthma. Pulses are widely used, but these were restricted to both small babies, pregnant, and lactating mothers. Children between the age of six months to two years are given no hard to digest except only soft things such as yogurt, boiled potatoes, egg, sabudana, bread, and milk.

When a mother knew about the sex of the baby during her pregnancy, her diet was influenced reportedly. Data revealed that mothers differentiated their diets during pregnancy and lactation. For example, one mother reported, "I used to eat a good diet, especially meat when I was pregnant with a baby boy, but I did not care much about diet when a girl was inside." One traditional birth attendant advised hot foods in winter and cold foods in summer: "foods vary for summer and winter. *Sattoo* (wheat grain) and a drink made up with *gur* and lemon are good in summer, but desi ghee is perfect in winter. The mother should refrain from dal-chana, sag, rice, onion, and hot things. Meat and potato in summer are not good, but milk and mango pulp can be given."

**Quality matters or everything is right:** Everything was considered good by impoverished mothers. Some mothers perceived that even rice and wheat were excellent for making a good health. This indicates how the perception of food and diet changes with the level of a household's income. In extreme cases, carbohydrates are also valued. One mother stated, "everything is good for poor people (*ghareeb log*), we can just speak the names of good things but cannot eat them."

**Marketization and low-quality cheap junk foods:** The use of low-quality junk foods was frequent. Children wasted money in purchasing several substandard junk food items available in the streets and local shops. Parents were observed allowing their children to use these unhealthy things from local markets. In villages, local unregistered companies sell their stuff without fear of any penalty. The multinational's products attract mothers as a glossy, reflective, colored, and beautiful picture of a healthy baby with a smile and best physical health and nutrition is playing on its packaging. Often, unhygienic soft drinks were being sold off. Some experienced mothers emphasized on using the "healthy foods instead of marketized foods." Although market-based ready-made products are easy to prepare, they cannot make the child healthy. Instead, they preferred using hand-made complementary food such as meat, soup, and rice for infants and young children, and avoiding low-quality things. Discussion on commercialization with a local traditional pharmacist is summarized here:

> We are living a substandard life. Everything has become expensive, polluted, and impure. The pesticide is mixed in all foods. Poultry farming isn't right; we have restricted ourselves to eating unhealthy diets. Once upon a time, people used to live a healthy life without many diseases because they heavily relied on

> natural foods. People were not getting vaccines and antibiotics. Everything was a low price and cheap. Inflation has made living a problematic task for impoverished households. There was no waste around houses as it is nowadays. The population has increased, and resources have become scarce. Time was good in the past, and people used to live a happy and healthy life. Today everyone looks pale, frightened, worried, and psychologically disturbed. It's just due to inflation and poverty in this so-called modern period of life.

**Climate change and low production:** The farmers believed that change in the climate was impacting their crops' yield. One person posited:

> Our environment is changing, we don't know why it is so, but we are pretty sure that such change is regularly occurring every year. We remember it was not in the past, but this phenomenon has taken place more frequently in the last few years. Both summer and winter are fluctuating temperatures. Also, temperatures are going to be extreme every year. It is harmful to our cash crops. Also, the chances are that flash floods are worsening gradually and could cause devastation. Almost every year, our crops are destroyed as flood water inundated the fields; thus, no income is generated from the harvest, and we remain unable to pay back our loans. We can't imagine spending money on our health in these circumstances. We sometimes become unable to feed ourselves as well as our children properly.

## 3.3. Discussion

Poor mothers showed the emotions and extreme grief over their inaccessibility to buy meat, fruit, and other high energy food items from the local markets. Their household incomes were too low to afford such expensive commodities, although available for better-off people. They expressed deep pain in this economic injustice (Arriola, 2015). Coping with diet poverty affects not only their nutrition but also physical and psychological health (Hadley, Deborah & Crooks 2012). Coping strategies lead to an increase in disliked meals (Arriola, 2015). Findings of this research that the poor and rural households' caloric consumption was lower and majorly comprised only wheat is aligned with the results of Household Integrated Economic Survey [HIES] and World Bank's (2016a) study that average caloric consumption in the poorest households is lower than the recommended level, and the major source of caloric consumption is wheat or rice. Also, poor and rural

households' cost of consumption is lower than non-poor and urban households (Friedman, Hong & Hou 2011;  Malik, Nazli & Whitney 2015).

Findings indicated that the poor become ready for sending their female members to work as domestic household servants. One unemployed husband stated to her wife, "I have nothing; go, work, and eat (*Ap Kamao tay ap khao*)."  Poor mothers coped with hunger situations by borrowing and taking foods from other houses [where they worked], often leftover and expiry meals, which they had to burn for killing the bad smell. This situation suppressed their dignity and morality and caused stigma and alienation. Almost similarly, Maxwell and others (2008) have analyzed how the poor tackled the problem of food insecurity in sub-Saharan Africa and found that the poor often cut the meal size or number, use less of preferred diet, borrowed from other households, sent family members away from the household, and even begged for food.

Much significant finding was the fact of “commodification of food," which contributed to food insecurity. Even the village mother did not drink milk and preferred selling milk, clarified butter, and *desi* eggs to earn money for buying dowry and other household items. Local made clarified butter (*desi ghee*), known to be pure, and energetic is, unfortunately, "sold out for money" and often rich people buy this. Bhutta et al. (2015) found food marketization has also affected the access of poor and rural populations who prefer to sell it instead of using it. This is much similar to the results of a recent study (Raju & D'Souza, 2017), which states that 'while real household consumption spending has increased, caloric consumption has declined in the recent past, particularly for rural households.'

Meat, fruit, and milk have become expensive nowadays. Poor children alternatively consumed jaggery and white sugar that caused protein and micronutrient deficiencies. Sadly, due to wide corruption and bad governance, old-time was romanticized when life was easy and healthy, as pronounced, "today everyone looks pale, frightened because of inflation and poverty," indicating, markets are not well controlled by the government and public. As social welfare is being awaited for long, therefore it is high time neoliberalism must reconcile with humanity now. The cost of food rose to 270% between from 2000 to 2013 (World Bank, 2016a). From 2007 to 2009, wheat flour and rice rose to 200%, onion, milk, and oil by 150% (Government of Pakistan 2014)

There is evidence that the average diet in the country is not sufficiently diverse (Shabnam et al. 2016). Mother's diet was found very limited and micronutrients deficient (Bhutta, Soofi, Zaidi, Habib, 2011; NNS, 2019) that perhaps retarded and slowed down growth, immunity, and cognitive development of infants and young children. The investigation revealed that diet diversity was a serious issue in poor households, which might have caused micronutrient deficiencies and stunting problems. They used a very limited variety of foods, which deprived them of the most important vitamins and minerals. Low dietary diversity issues can be mitigated through home gardening strategies, which might be the most easily applicable option to tackle micronutrient deficiencies and thus child and mother undernutrition. Similar suggestions have been advocated by Bhutta et al. (2008), who considered poverty as the major cause of micronutrient deficiencies.

Also, Pelto et al. (2013) similarly found the positive effects of kitchen gardening in Afghanistan in increasing households' incomes. They found daily diets were ranked as low, while rarely used foods such as fruits, vegetables, and animal-source foods were considered as healthy. Their study, however, showed no cultural barriers in the form of incorrect beliefs that have restricted the use of nutritious foods. The main issue was accessibility, not availability. Pakistan, an agrarian country, has 58% of food-insecure households. Capacity development for scaling up kitchen gardening and livestock farming yet remains a great challenge (Di-Cesare et al., 2015).

Inflation, inability to command commodities, and lack of household income were the major causes of food insecurity experience (Sen, 2013). Besides, repeated floods from the Suleiman Mountains and Indus River increased poverty and social suffering. Climate change was believed to bring more poverty and deprivation (Cook & Bakker, 2012).

Overproduction of the crop of wheat is profitable for landlords and investors and traders, but it ignores other grains (Government of Pakistan, UNICEF, & UK Aid, 2018). Low food diversity and micronutrient deficiencies in the mothers and children find ground in low diverse food culture and decline in traditional food production and distribution (DeWalt, 1993). Policies and programs which concentrate upon the most vulnerable population opposite to that of commercialization bring highly positive influence on food security as well as nutrition. It should be made an urgent political-economic priority.

Also, data revealed that the foods available in the local markets were not composed of rich nutrients. The use of low-quality junk foods in rural and poor households was very common. There were reports of lack of hygiene, food adulteration, and contamination. Some literature in Pakistan alluded towards the sale of food contamination and unhealthy foods in different localized contexts (Ahmad et al, 2016; Hassan et al., 2010; Hirani, 2012; The News, 2017; Waseem et al., 2014)

Male sex and dynamics of the diet were found relevant. Studies conducted by anthropologists and others found that feeding better to those in the household who had to work was prioritized (Singer, 2004). Messer (1997) indicated that non-egalitarian allocation of food within the household is not deliberate discrimination, but their inner purpose is "household maximization," explaining that more active or income-earners, often male members in households, have greater nutritional needs. The females and mothers who perform household chores are also valued by the husband and his mother. It was found that the role of grandmothers was significant in decision making. Nutritional anthropologists also viewed intra-household politics and processes that cause variations in diet, nutrition, and health (Messer, 1997; Sharman et al., 1991).

The findings corroborate with the very recent studies (Government of Pakistan, UNICEF, & UK Aid, 2018) that accessibility for the poor was the real problem in the district, so the idea of kitchen gardening may be useful as households may not only eat but also sell to earn. Mothers' perception that commercial foods are good shows the influence of business and media. This conversation with locals illustrates how bio-power's political control over the health and lives of the public (Foucault, 2010) is maintained through the neoliberal commercial economy (Harvey, 2005). Sen (2013) found that the ability to command the commodity is the main cause of food insecurity. The participant stated that their health and nutrition status varied with good and bad income levels. The experience of food insecurity at the household level and government policies at the macro-level are in close connection (Anderson, 2013). Evidence showed that this macro-micro connection determined health and well-being (Laraia, 2013). Therefore, it can be argued that the experiences, perceptions, and practices of mothers regarding food insecurity and dietary diversity were constructed concerning power and political economy (Arriola, 2015).

## Conclusion

This chapter suggests that most of the households faced high food insecurity experiences and low diet diversity. The analysis of this chapter figured out a "limited variety of diet" as the immediate cause of malnourishment. The barriers behind limited dietary diversity included high focus only on commercial wheat production. The low household income is another basic reason for a poor diet. The poor mothers being unable to purchase fruit without fear never dare to touch them, and they eat the meat only on Eid and marriage ceremony or when someone got weak and sick. Domestic household servants even use old, rotten, dry, smelly, expiry, and disliked foods. Some respondents complain hunger could not be satisfied with eating onion and dry loaves only. Few mothers give regularly some sweets like white sugars to small babies to kill their appetites. For extremely poor mothers, everything was considered good as they had no free choice to buy from the market. Low income and inflation deprive the freedom to choose between healthy and unhealthy foods. Additionally, the availability of cheap and low-quality junk foods contribute to disease burden. This chapter concludes that hunger and malnutrition can be combated with equity, development, and social justice, as poverty is not acute but chronic as well as intergenerational. Also, control of markets is important so that the poor can also access energetic foods such as fats, proteins, vitamins, and minerals. The study also concludes that most of the constraints, which need corrections, are related to the political economy of a country. Reducing inequalities, enhancing household income, controlling food prices, producing a culture of diverse food instead of commercialization is highly recommended to alleviate hunger and malnutrition at the micro-level. This chapter explored and discussed how poor mothers experienced food insecurity and limited diet variety and diversity at household level. In the next chapter, I will discuss gender related inequities such as time poverty and high fertility, which impact on maternal-child care and contribute to ill health and malnutrition

# 3. GENDER INEQUITY EXPERIENCES IN POOR MOTHERS: TIME POVERTY, HIGH FERTILITY, AND MATERNAL CHILD CARE PRACTICES

## Introduction

Exposure to domestic violence against women may threaten children's survival, health, and nutrition (Yount, DiGirolamo & Ramakrishnan, 2011). Evidence showed that distressed and malnourished pregnant women with low psychological health status produced low birth weight children (Deyessa et al., 2010; Valladares et al., 2009). Illiteracy, fertility, and time poverty are the leading socio-cultural forms of gender inequities in the South-Asian Context. Gender inequities are the most critical social determinants of maternal-child health and nutrition outcomes (Commission on the Social Determinants of Health, 2008). UNICEF (2011) noted that 'overall women's status has the strongest effect in South Asia, followed by Sub Saharan Africa and lastly, Latin America, and the Caribbean.' The chapter investigates how practices of perceptions of time poverty, fertility, and illiteracy impact mothers' life and maternal child care. This chapter aims to discover how status of females, intra-household decision-making, and locals' gender-related constructs influence maternal-child care and feeding practices. I will explore why contraception and birth spacing is not much preferred, and what are common perceptions and practices about reproduction? Maternal fertility, illiteracy, and poverty construct an atmosphere that exploits female gender in the local context. Females are deprived of proper time and necessary for their self-care. All work burden lies on their shoulders. The husband and his family control their body, and sociocultural constructs normalize this exploitation. Reproduction and fertility-related issues have been discussed in great detail in this chapter.

## 4.1. Gendered Labour, Domestic Female Servants, and Time Poverty

It was revealed that the grandparents brought many of the severely malnourished children admitted at the stabilization center because their mothers were busy taking care of the rest of her children. Mothers of severely malnourished children with the complication at the Stabilization Center also frequently discussed the domestic household service was a serious problem. In poor households, mothers have to do breastfeeding during pregnancy,

along with other domestic errands, taking care of animals, fieldwork, cleaning, and cooking duties. Even the last months of pregnancy, despite getting fatigued, also, females of the villages reported negative males' attitudes towards them. In return, women achieved less proportion of food. Many women complained their males never realized the work burden inside and outside households. Also, their labor was not much valued and often considered obligatory, even during pregnancy and lactation.

Besides, respondents viewed that education was not their priority because no jobs were readily available, and they wanted their children to work with them in the fields so that they could contribute to the overall household's income. It is usually opined, "what is the benefit of educating girls" as they have to leave their parental homes after marriage, and their future welfare becomes the responsibility of their husbands. Poor send their small and younger female children as domestic servants on meager wages, they are paid just 5000 to 10,000 rupees (~50$) per month. These little household children are expected to do much work, and they have to work for long hours. In Pakistan, it is a growing trend to put younger girls, who have not yet been adolescent, into some domestic work. Violence against children in Pakistan is usual; from villages, poor children are sent to towns and cities to work on the lowest wages.

#### 4.1.1. "Because of a heavy workload, I often feel tired:" Raheela

Suffering from anemia and diabetes, a 30 years old woman with a pale face, Raheela belongs to the lower caste and entrusted with duties of sweeping and cleaning on roads. She is paid a meager salary for her tough physical work. She has to get up early in the morning to leave her house after preparing breakfast of only roti (loaves made with wheat flour), which her children continue eating all day. She has no time for her two low-weight and stunted children and one special child. She has to work inside the officer's house without salary, and this work burden affects care practices:

> I wake up early and start working, first sweeping on roads, then domestic duties in many houses, including the municipal officer's house, I can't get free from this massive work burden till sunset. When I get free from road cleaning, the officer engages me in the cleaning of the house, buying food and vegetables from the market, cooking food, washing clothes and utensils, and other trivial

> tasks. Because of the heavy workload on me, I often feel tired. As I always arrive home late in the evening, care and feeding are missed.

Her husband does not cooperate. She indicated intergenerational poverty when she expressed that her life is nothing different from that of her mother. Her husband was a drug addict. He used to abuse her physically. She wanted to get divorced, but her husband's sister was her brother's wife. Lack of food creates malnutrition for the children of poor mothers. Due to malnutrition, the natural beauty fades away, and rich people here start stigmatizing the weak, pale, and anemic children. The mother repents how her children are hated. She narrated that:

> Religion claims that all humans are equal, but in fact, we are not because of caste differences. How can we say we are equal? Equality is just a matter of talk, as no one follows this rule. I've been fed up with such a life that doesn't respect human values or measure humans on the basis of fairness and equality. When I go to the market, I can't touch fruit, milk, and meat. My deaf and dumb daughter needs care. As now I spend a major part of my earnings in her treatment; 10,000 rupees per visit were consumed since the medicines are quite expensive. It is too tough to fight this inflation. Why the rich use the poor for their personal benefits. My children come with me in the officer's home, his wife does not let them come inside rooms, saying, your children seem weak as well as ill. These children can spread germs all around through sneezing and coughing; you better leave them at your own home. Officer's wife is also a mother, but she doesn't understand the feelings of a mother. This condition makes me cry. Rich people always underestimate us. I am a single mother; their father has left us. How I can create confidence in my children. Mother and father both are necessary for children's care. How can a mother properly take care and breastfeed if there is no peace at home? Due to this everyday stress and violence, my breastmilk has become dry now. But the father does not come home; if he comes, then he demands money for drugs. I say I do not have, but he hits me in front of my children. My kids start weeping; and my son told me one day, 'I will kill my father.' I muttered, never repeat this; after all, he is your father.

Evidence showed that in South-Asian settings, poor mothers spend most of their earnings on purchasing pharmaceuticals (Das & Das, 2005). Studies in other contexts (Abubakar et al., 2011; Nankumbi & Muliira, 2015; Mwangome, 2010) showed that the work burden on mothers was the main barrier to childcare feeding. Evidence showed (Bruce & Lloyd, 1997, p. 222) that "a noncontributing father in any household type is among the most severe welfare risks mothers and children face."

### 4.1.2. "*Aap kamao tay Aap khao*:" Nasreen

When all economic responsibility lies on the wife's shoulders, care for both mother and children is lost. One woman stated her husband says, "*Aap kamao, tay Aap khao*" [earn yourself and eat yourself, I have nothing], replied Nasreen, a malnourished and anemic mother with a dry face, who works as a domestic household servant in better-off houses. Likewise, many women of Seraiki ethnicity from this area have to move to either big cities outside the district or big towns inside the district, as female domestic servants, to earn little income to run the hard to manage households. Evidence from Guatemala shows that making ends meet with such limited income shows how poor women strive to live; and men who could not provide support for the family owing to labor exploitation and high unemployment rates prefer abandoning them (Chary, Messmer, & Rohloff, 2011; Chary et al., 2013; Chary, 2015b). It was a result of the regional inequalities and chronic exploitation of the Southern Seraiki part of the Punjab province. Policymakers, particularly in social safety nets, need to pay special attention to this pressing issue if the menace of maternal child malnutrition is to be tackled. Nasreen stated:

> Diet is poor, overwork exhausts, and tensions continue to multiply. I am unable to purchase any fruit and milk from the market. One kilogram milk is taken for making tea only. There is no time to relax. I quarrel with my children most of the time, unnecessarily and squabbling has become my hobby and daily routine.

Thirty years old mother, Perveen, of 1-year-old baby, explained how time poverty had deprioritized childcare:

> The child is suffering from a fever. I work in houses on deficient payment; tomorrow I will get him for diagnosis as there is no free time for child's check-up (*kam toon farigh thewoon taan dikhaoon*).

During fieldwork, many females complained that 'household males do not consider the work burden on females, in households and the fields, in a positive manner' that reduces their agency and self-respect (Follingstad & Hart, 2000).

## 4.2. Gender Fertility

It revealed that effective birth control through culturally approved birth spacing, as well as less harmful family planning programs, could reduce mortality and malnutrition in mothers and children. Female high fertility and low birth spacing were due to economic, religious, rural, traditional, and ethnic backgrounds. It was found during research that factors such as poverty, masculinity, social disapproval of contraception, and more boys were admired. Frequent births and low-quality care caused low breastfeeding and hidden hunger. Some mothers stated that they got malnourished after giving birth to their son because the son needs more care for mothers. The engagement in economic activities, serving husband and his family, domestic chores, and work in agricultural fields were the predominant reasons that overburdened the life of the mothers. The poor mothers expressed their inability to decide freely about their physical body needs.

**Bargaining Powers and Intra-household Politics:** The lives of women are controlled by intra-household politics after marriage. Mother-in-law, husband and his family have the decision making powers at the household level. As most of the rural mothers are uneducated and unemployed, the social status of the mother is not much valued. In low-income families, pregnant and lactating mothers are generally dependent on the husband and his extended family decision making power dynamics.

### 4.2.1. "Body is mine but controlled by others:" Hajira

"How did your child die?" I inquired about the reasons for child mortality from Hajra, a 35 years old woman with six children: three daughters, and three sons. "Our family doesn't like education," she mentioned. She and her husband cultivate a small piece of land for survival. Most of their time is consumed in performing their field duties in agricultural land. None in their family is educated and seldom prefers consulting a medical doctor for a checkup as well as treatment. Although government school functions in their village, when a girl usually enters in sixth grade at nearly 12 years of age, she is married off with her cousin or relative as people of this caste always prefer intra-family marriage. In

addition, child-marriage is quite frequent and regular in their village. Hajra was very young when she got married. She remarked:

> It's tremendously challenging to become a mother at this tender age. There're so many responsibilities while being a mother. My husband isn't caring, but he likes children. Our family doesn't like contraception. There's not much romance in life because we have just to deliver babies and take care of them always. Women are totally dependent on husbands. I obey my husband; I agree with his opinion. It's necessary for the peace of the family.

She has delivered eight children so far. Her elder daughter was twelve years old when her husband arranged her *nikha* (Islamic legal marital contract) with his sister's son. Now their daughter does not go to school. Early marriages are the biggest enemy of girls.

Hajra articulated that she respectfully obeyed all of her husband's decisions. He is our decision-maker. Our daughter also respects all the decisions of her father. There is no reason to refuse. Last year when she was pregnant, she requested her husband for an ultrasound, but he refused. He insisted that she should go to a doctor for a checkup in the last month of pregnancy only, upon which she agreed. When she got an ultrasound in the last month of pregnancy, the doctor conveyed to her that she was carrying a baby boy, but there was a big hole in the baby's heart, it is a C-Section case and not a normal delivery. The doctor asserted that she should have had an ultrasound in the early stage of pregnancy, but it was too late now. She came home and told this to her husband; he rejected saying 'doctor is wrong.' He argued by stating, "Our baby would be alright, and there is no need for C-Section. You already delivered six normal deliveries, how is it possible to believe the doctor's assertion? My mother is an experienced and renowned *dai* in this area, and she knows very well how to manage such a complicated delivery, she would deal with this case very confidently and successfully, don't worry." When labor pains started, her mother in law performed multiple traditional, customary, and crafty tactics, but unfortunately, the baby was born dead. What happened next, I asked? She continued:

> After that incident, this year, I got pregnant, again I asked my husband's permission for an ultrasound, and he refused again and asked me to shut my mouth. At last, when I succeeded in getting an ultrasound at the lady doctor's clinic, she disclosed,' baby is too weak and not in the correct position, but upside down. It's a C-Section case once again, so you should come at any cost on this date, don't hesitate from C-Section, as your normal delivery is

impossible, you are also weak, and this is your eighth pregnancy. You must stop delivering children now.' I returned home and told my husband, but he totally disagreed with this opinion. My mother in law also interrupted, '***har puter da baal putha honday***' that means every baby boy's position in his mother's womb is as legs come first because he does not want to see her mother's vagina, baby boy want to do *purdah* (veil) from his mother's body, so he does not open his eyes. But don't worry, when labor pains start, the baby boy will suddenly somersault and adjust in a normal position.' So my arguments went in vain…… As usual, my mother-in-law got alerted when I felt the labor pain and attended towards me, forcing me to push hard, but I had no energy left in my body, and I couldn't push anymore. Then suddenly my mother in law started shouting 'the baby's feet are coming out [not the head], it's no more my case, so rush the girl to the doctor. Meanwhile, for me, it was a horrendous experience and I was almost unconscious and could not move an inch. The lady doctor burst with anger and after a quick examination, she pronounced my baby dead. I had delivered a "dead baby" again. Later the doctor operated and cleaned my uterus and that gave me little comfort. Everyone was dejected and disappointed, especially my mother-in-law. After this my family showed the picture of my dead baby, I was shocked and started weeping. He was a very good-looking baby, I remembered him for much time, but gradually, my memory faded away as I had no control over him as 'I was convinced my baby was not for me but nature, so he returned to his creator.'

**Photo 5.1: Intrahousehold Politics and Structural Vulnerability**

**Source:** Author, 2018

Many mothers were unable to make free choices for their decisions regarding medical treatment, and women happened to be severely dependent on the male for care (Mumtaz & Salway, 2007; 2005; Qureshi et al., 2016) because in-laws had substantial control over intra-household politics. Hajira's baby could have survived if the husband and his mother had not been reluctant to agree to the caesarian operation at the clinic or government hospital. Nevertheless, it is reality there is a “trust deficit” between low-income households and modern medical professionals, and poor and illiterate people are often afraid to visit private hospitals and clinics because private doctors charge hefty fees for surgical operations. Also, the case could be dealt with in a government hospital, but the family was not willing due to the lack of social linkages, structural inequalities, and rude behavior of the public hospital staff (Bennet, 2009; Chary et al., 2013; Chary, 2015a).

### 4.2.2. The "obedient wife" never says "No" to her virtual god: Rashida

Women in patriarchal settings are further relegated by the deep reverence shown to their husbands who act as virtual god and owner of their "black and white." The role of an "exemplary wife" is not to object but to submit, serve, and suffer until her last breath. Anemic and low-weight mother (43Kg), Rashida of 24 years, was a barber’s obedient wife. They lived in a small house made of bricks and mortar that was hardly enough for two families. Her husband used to do two or three types of manual work, "barber during the day" and "selling dry fruit in the evening." Even earnings (~9000 Rs.) from multiple jobs were not well enough to make both ends meet. During her married life, she had already been pregnant five times, along with lower birth gaps and complications. Her blood pressure was too high to deliver a baby. During previous deliveries, doctors often emphasized the husband to stop pregnancies now, as her health had already deteriorated due to deliveries. Because of maternal depletion, she now looked like a "skeleton" and needed to gain energy and a gap in being fertile. However, her husband, as usual, though it was not a very serious matter and took it usually. Ultimately, she had to be carried to a hospital where she spent several days in an almost unconscious state due to an attack caused by high blood pressure.

Doctors were afraid she might go into a coma if her condition got worse. Much of the money was spent on her treatment. She has been low-weight because of her repeated pregnancies and other health issues. She remains psychologically stressed, with lots of work looming over her head. The husband remained worried about how he would look after his children without their mother. His children were very young, and the father was unable to control them in the absence of their mother. After the fifth time, the husband agreed he would not make her wife pregnant next time because he had already paid a heavy price for this when the wife had been incapable of reproducing anymore.

He often expressed his economic woes, and work pressure increased because numbers of his children have increased, but he liked fertility because of religious injunctions. High fertility has close links with income generation activity as their parents put them on labor during childhood. They start earning for their parents and profit maximization. It might be these reasons a male child is always welcomed with high spirits and the birth of a female is not a thing of joy for the parents, especially among the poor, because they cannot earn and bring something, female children become a burden on parents as they have to feed them, they are therefore married underage. To be a woman is to suffer and face difficulties in an unequal society.

In poor circumstances, females are exploited not only economically, but their reproductive capacity and capability are also "culturally controlled." This control often goes "unnoticed" but is instead "justified" under the moral disguise of socio-cultural norms, values, and beliefs. Gender inequities, such as illiteracy, fertility, and time poverty, are, therefore, "normalized" because they are socio-culturally constructed, socialized, and inherited. Maternal child health outcomes constrained owing to a variety of religious and cultural reasons, lack of awareness, and low access to education for females. Also, every year thousands of rural Pakistani women die due to the complications of pregnancy and delivery. In rural areas, births often become complicated due to poor prenatal care. The poor maternal health outcomes are caused by the political or "cause of the causes" (Horton, 2010). Due to socio-economic and cultural reasons, methods for treating illness and malnutrition are often magico-religious and traditional.

## 4.3. Perceptions and Practices about Contraception

**Concern for the health and safe method**: Although many of the females had no problem following the birth gap in their pregnancies, as far as their personal opinion was concerned. There was a common perception that one must produce babies consecutively, without gaps so that all could grow up once for all. One mother reported, 'we are much disturbed with our poor circumstances, and we could adopt birth spacing in the future.'

Many mothers announced that they would think about spacing in the future. What methods they should adopt was their concern, however. They were confused about what methods could be "safe" that did not disturb their health and menstrual cycle and must not cause obesity. Mothers reported breathing problems associated with contraception. Contraception is not considered a beneficial thing for women because it can cause health problems such as constipation, arthritis, weakness, headache, and dizziness, and it stops a regular menstrual cycle (*mahawari*).

Some females expressed that there was no strict compulsion from their in-laws, but it can be harmful and can cause illness. One mother remarked, "my husband likes a gap in reproduction, and we take great care ourselves (of releasing semen inside the vagina) but not use contraception from the hospital because of adverse consequences." Also, biomedically recommended ways of contraception have been so notorious that mothers are afraid to become sick after using these methods. A mother revealed that a lady doctor operated for contraception without her knowledge soon after aborting the sixth pregnancy. Lady Doctor made her own decision and inserted an IUD, claiming this device might work for five years. She narrated:

> I was so surprised the doctor hadn’t informed me about inserting a contraceptive device. Anyways during the 5th year, my menstrual cycle got disturbed. I initially thought periods would stop on the seventh day, but now it was white discharge coming out. I visited the same lady doctor who diagnosed that there was darkness in the uterus and asked first to visit a radiologist for an ultrasound. Spending almost 3 weeks in trouble, the radiologist discovered waste collection inside the womb. I was later operated on and my uterus was removed. Now my complexion has gone darker. I will never go to that lady doctor again; she is not a doctor but a [abuse].

Recently, I have come across some other similar cases which have also been exposed to similar bad experiences regarding the IUD method. A mother informed that LHWs used to visit her household and educate them on family planning methods, especially the use of a condom. When she discussed this idea with her husband, he did not like this and replied, "It's an insult for males to use a condom." One man shared that the males did not easily agree to the use of condoms saying, "Why should a husband need to imprison an organ by putting a veil around, while his wife's womb is his property." Population welfare officer reported, 'in husbands' opinion, using a condom is like spoiling pleasure and enjoyment. Men do not feel much pleasure in making love while using a condom. Without a condom, men ejaculate timely but with more pleasure.' For this reason, women chose to adopt alternative contraceptive methods such as tablets, injections, Intrauterine Device (IUD), and so on, in compulsion, because they have no other way out.

**Permission from In-Laws:** However, some females reported otherwise too as they were in favour of it. A woman stated, 'my husband does not allow it. I was getting pregnant some months after each delivery. One mother stated, "I was using contraceptive pills, but I've stopped taking them as I've to bear more babies because my in-laws are also asking me to produce more babies." One mother informed her husband was aged, and she wanted spacing now, but her mother forbade her to do so because it may cause diseases to women. However, she secretly got an injection for birth control because the husband had not allowed her to do so. Some mothers learned that birth spacing was urgent after frequent deliveries. One mother stated, 'now I have got an injection for contraception after delivering twins twice.' One lady informed me that LHWs visit their house and give essential information, and they perceive that contraception is right for females. In these cases, it found that the husband's cooperation is vital.

**Contraception as a sinful act:** Religious ideology is also crucial for determining fertility and reproduction. Husbands want more babies because it is the prophet's saying the *Ummah* (prophet's followers) should expand. There was often a concept of "sin" in the local's minds. Contraception is understood, most of the time, to stop the human race that is against the natural phenomenon and, therefore, a sin. Religious people consider it as an act of worship (*sawab*-opposite of sin), as obeying any obligation and command of God. In religious households, most of the females replied they did not practice contraception

because they were fearful of the Lord as such practice was almost equivalent to committing a great sin and stopping the human race. One mother opined, "Why we should use contraceptive methods, as every child who takes birth brings her food with herself." According to a woman, her husband refused birth spacing and believed that babies would grow only on wheat grains stored in the house." A traditional birth attendant remarked that controlling birth was against faith, "Our side, mothers, usually deliver almost seven to eight children. Birth spacing makes God angry, and God says, 'I can take back what I give to you.' Only a faithful lady can produce a good number of children." Again, the low birth gap caused anemia in mothers, which automatically became a significant determinant of the lack of breastfeeding. The mothers perceived that contraception effects are dangerous. In the patriarchal society, contraception is not socially and culturally appreciated.

The religious-minded people produce more children; not only there were religious motivations but also ethnic and economic factors were involved in it. What are the reasons behind high fertility, I asked the population officer? She opined that locals' customs were responsible for high fertility:

> There are old customs; they believe that if the number of children is increased, they might earn more. There are more often cultural and religious reasons, especially maximum boys are required, you know, the norm of ethnic fights are common. LHW convinces the local woman for the birth gap, but a woman can't convince her husband. There is a third party requirement too, which woman alone is unable to influence. Religiously a higher number of children are also preferred in some households of our area as religious-minded people think it is totally according to the Islamic faith and part of religion.

When asked by another mother (Nusrat Mai) how many kids you wanted, she pointed out that at least four are compulsory; two sisters and two brothers; two are not good, four can become helpful to one another. When asked a father, how many kids do they wish to have in total? Father assumed, 'we want twenty, we have the custom of three marriages, and I want to marry for the second time but cannot afford; my brother's daughter has just been adolescent, so he [brother] will marry after her daughter's marriage.' I asked the reason for wishing for so many children, he replied to me, 'their children will help themselves struggle and hardships will make them strong and self-sufficient.' Rural and tribal people live in extended and joint family structures. They need more protection and workforce in rural and tribal settings. Their subsistence depends on livestock, so they reside in villages

where there is no scarcity of land. Poor also produce more babies because they need more children, to add small remuneration by each to make a reasonable collective-sum so that household expenses could be met.

**Early marriages:** The body of a poor woman is to be exploited and high fertility becomes the cause of low quality of care and nutrients deficiencies. Some mothers had to produce an increased number of children not because of their own choice but were forced to marry at a younger age with older men by their parents after receiving some kind of bride wealth owing to poor economic conditions. All sisters were sold off one by one to old age men. When girls are married late, their social capital increases. They feel more empowered in the future and decide better about their health and nutrition (MSNC, 2018). Marrying daughters at their young age is a determining factor for maternal malnutrition. The poor younger girls are married by their parents due to cultural and economic reasons. The young mothers are bound to produce babies without intervals or birth spacing. As these women have low control over their bodies, they get pregnant frequently and are expected to give birth almost every year without spacing. The girls married at an early age cannot meet the energy requirement of protein, minerals, and vitamins due to poverty and the burden of frequent pregnancies, which subsequently becomes a robust cause of maternal depletion. Furthermore, these mothers have to breastfeed along with repeated and continuous pregnancies and high work burden. After continuous deliveries and breastfeeding, young mothers become weaker and deficient in many macro-micro nutrients.

Zubaida was a Feemi's daughter. Feemi sold her daughter as she herself was once sold off by her mother, a long ago. Daughter selling is now considered a normal phenomenon in their family. Feemi's mother has so far sold nine daughters; she has just three daughters left who are yet to be sold. They usually sell a daughter at a price of approximately three hundred thousand rupees. Before selling them, they often work in other households as domestic female servants. Zubaida was sold two years ago and went to Kaleem. Now she is just 16 years old and has become the mother of two daughters. When asked if her husband or in-laws give permission for contraception or birth spacing? She replied:

> No, they didn't allow me. I've been getting pregnant almost six months after every delivery. My husband doesn't let me do birth spacing and even says let the babies be born, they'll grow themselves, just there be the loaf of wheat in the house.

Wives are usually beaten; it is normal. It is considered males' right to decide about her wife's destiny. It is considered a household's private matter, and even police never interfere with family affairs. State laws come into action only when the media takes notice of an extreme occasion.

## 4.4. Perceptions of Gender Discrimination

**The Pride and Power of Birthing Male Child:** The child's nutrition is started even before infancy, in the wombs of the mother. The diet, health, and other needs of a mother must be fulfilled before producing a healthy baby. After that, a child should be prevented from infections and poor feeding practices. It was noticed that female babies are less likely to be wished. Boys are expected to play a superior role in a society where males are dominant. The parents usually grow up girls until they become able to be married, mostly before the twenties, with some exceptions in urban towns. In almost all respects, parents prefer male children to females.

The elder female siblings are advised to take care of little brothers in the parent's absence. It is a common expectation that sisters should not fight with their brothers, which makes the boy gender over-confident, and they tacitly learn that males are superior and stronger. Since childhood, they learn this kind of behavior that transfers from one generation to the other. Not all this seems as deliberate but a spontaneous attitude.

Each time parents expect the birth of a boy, and fertility continues until the baby-boy is born, and the size of the family increases in the desire to have a male child. Mothers have to be pregnant, almost every year, to give birth to male babies that wastes mothers' nutritional status. They had to sacrifice their biological needs in being boys' mothers in this way so that their social status might be uplifted, and they should get social appreciation and avoid the "stigma of giving birth to girls only." It is true to imply that fertility works as upward mobility for the poor also as a coping strategy to tackle poverty.

If a mother remains unsuccessful in delivering babies, especially boys, she is often advised by family and community to visit a spiritual healer, *pir,* for prayer

and *taweez* (amulet). It is not much expensive for the poor mother because it is mostly in the form of a present, often a small amount of money compared to expenditure expected to be consumed at the clinic or hospital for the treatment that is mostly unaffordable by many poor rural females. Mothers are most often prescribed by the spiritual healer (*pir*) to 'recite the *surah Inam* (Verses on Gift) from the holy Quran in the first trimester and *surah baqarah* from first to last month, in the first week of every Islamic month during pregnancy.' For these reasons, the treatment of girls was also undermined in their household.

### 5.4.1. "I pray to God, please don't give me another daughter" Rani

The mothers dislike the repetition in the female childbirth. Even an educated mother exposed:

> When I look at my daughter, I pray to God, please don't give me another daughter, this is enough for me. It's very much difficult to be a female in society, having tremendous difficulties and responsibilities. I am pregnant again, and my husband wants a baby boy and advises me to recite *wazifah*[11] so that I could give birth to a baby boy. It's so lengthy to recite *wazifah*; my husband asks me every week whether I have started reciting *wazifah* or not. After this, I went to see a lady doctor confirming baby sex inside my belly. The doctor tacitly informed that the baby had female sex. When my husband knew this, he got red and pale. When I returned home, my mother-in-law asked me about the sex of the baby. I articulated, the doctor says it seems like a daughter. My mother-in-law replied after listening to me 'I already knew you have a girl inside you because you always seemed angry since you got pregnant, I even dreamed that you had grown a garden of turnips which is a prediction of a girl instead of a mango garden that predicts a male baby.'

She expressed that enforcement from my in-laws forced her to deliver a baby. For their happiness, she got pregnant, but they were still unhappy because of delivering a girl. Her in-laws believed that every woman first gives a boy, then a girl, then again a boy and then a girl. They expected this time it was a male baby's turn. She further illustrated how she suffered from stress and diabetes, and how it affected her overall health, well-being,

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[11] The literal meaning of the Arabic word *Wazifah* is to employ. In Urdu language, however, to seek a special favor from God some people recite phrases or verses.

and ultimately her baby's breastfeeding, in the form of breastmilk reduction, and early weaning after following the advice of women who frightened that mother's disease would be transferred to baby, through breastfeeding if continued for a long time.

Mumtaz, Shahid, and Levay (2013) stated that fertility is not only a source of status and power, but it is also the only pathway for women to ensure their marital security. Winkvist and Akhtar (2000) explained women had limited control over their lives, so they strongly preferred for sons, mostly for economic reasons, and to be protected from harassment from family, relatives, and society.

**Male as Sweet and Female as Sour:** An interesting social construct revealed gender difference and taste dichotomy that if someone from the family dreamed that a pregnant lady in their family had cultivated a "mangoes' garden" she would predictably deliver a baby boy, and if some mother has planted "turnips" it would be female. Also, if the intrinsic desire of a pregnant mother is to eat some sort of "sweet," a baby boy inside her belly, and if she wants to eat "sour or salty" things such as spinach or lemon, it is a prediction of a girl. Sonia, a mother of two girls, got pregnant for the third time and asked her husband that she felt a craving for watermelon, but her mother in law wittingly chipped in "**you want to eat a sweet thing, but giving birth to girls only**" (craving for sweet thing imply that pregnant lady has a baby-boy inside). During pregnancy, if the mother's leg is caught, pulled, or stretched, it shows she carries a male, and if the mother's eye looks white, it shows the sex of female in the belly.

Further, backache in pregnant women is the symptom of the female gender. Similarly, aggression and anger are other signs of carrying a female baby inside the belly. More interestingly, if a pregnant mother feels a "sensation like needle prick" inside her stomach, it shows she carries a baby-girl in her womb. What constitutes or constructs the thinking that "boy is sweet" and "girl is sour?" Interpretation and analysis can give interesting meanings inside this phenomenon and people's dichotomy and binary opposition of sweet for male and sour for the female gender. This shows how knowledge of gender inequity is inbuilt as mangoes and sweet things for the boy because they are sweeter to mothers more than girls are. The difficulty is attached to a female baby's birth. The traditional explanatory models often use dichotomous constructs: hot/cold, sugar/sour, sacred/profane, spiritual/pathological. This phenomenon better reflects how soft, and

symbolic violence of culture has been normalized and justified (Bourdieu, 2001), if reconstructed or deconstructed.

**Infertility as Disorder and Stigma:** Failing to deliver babies, primarily male, is considered a disease and disorder, and severe stigma is attached to it that becomes a source of gender inequity. What is a disease or not, it is decided by the culture, and culture gives meaning to it, and it is diagnosed and treated accordingly. Many infertile women go to the shrine and tie a cloth with the inner gate of the shrine. One mother revealed that once her husband even begged for money as it was his votive offering (*mannoti*) for the birth of a male child.

Study participants admitted that they differentiated child genders in treating their babies. The parents preferred male children. They maintained that they treated male children in good, expensive, and private hospitals, whereas girl children were brought to government hospitals where treatment quality was low, with less care by the staff. In their opinion, male children were more important; they opined that girls were to go to another's house after marriage while boys were to stay with their parents. Therefore, they should give priority to those only who could payback. Girls leave their parents' homes and live with another family; therefore, there is no particular need to spend money and energy on that gender.

In addition, females usually do not earn money, so it is unnecessary to invest in them. The treatment of females was also initiated late as compared to the male child. One mother stated, 'I get treatment for our sons from the city, a private clinic, but we bring our daughter to the village. We go to DHQ Rajanpur for the treatment of our children. However, we consult a doctor of a private clinic for the treatment of boys and do not prefer syrups or other medicines but injection. We prefer boys to girls and bring girls late for treatment in hospitals. However, few women claimed, "they treat girls and boys equally and don't differentiate."

When asked a mother, "do the boys and girls get treatment from the same place?" She replied, "**Girls never get sick, but boys more often**." It is interesting to highlight the female perception regarding treatment discrimination is based on gender that female child has more resistance to fight against diseases than boys and diseases could not affect her because of her natural resistance. Women believed that since boys were more vulnerable

against disease, therefore boys ought to be preferred for treatment as well as for nutritional outcomes. Also, the treatment of boys was started earlier than that of girls.

Better-off people object to why poor people differentiate between genders. The reason behind this is apparent owing to limited resources, which makes them behave like this. This is pragmatic but seems strange to those who live in a different socio-economic environment. It implies that they do not deliberately act like this. Evidence suggests (Messer, 1997; Sharman, Theophano, Curtis, & Messer, 1991) that a more significant and vital food part is reserved more often for a male member in the household who is bringing earning, without any deliberate effort. Nevertheless, it is all-natural in the household according to their micro-economic realities.

Many women informed me it was a male child who was first served for meals in households. A big proportion of food with good quality was also reserved for a male child or head of the household. It was also observed that female children had more restrictions in the home than male children and intra-household competition for food quantity and quality. It was due to this discriminatory perspective one traditional birth attendant highlighted that female baby deserves to be breastfed more than boy child is because females have to face many difficulties in the future:

> The female baby needs to drink more (two and half years while boy for only two years) because she is like a "guest" as she has to leave her parents' house after marriage and work hard.

This chapter has explored the reasons for increased fertility and found multiple pathways. The first reason is the female's low control over her body. Then, being a mother of children, especially boys, enhances social status. Third is households' reduced income level. Next, it is a religiously appreciated exercise. Other rationales include explicit or hidden intention to generate male babies; the impression that fertility is an expression of masculinity; male's negative attitudes towards contraception; and wife's adoption of submissive behavior. It predicts that the females demand fertility but due to improper and culturally disapproved biomedical methods of birth spacing and contraception need to be improved along with communities' social development. Fertility is higher, owing to the reasons for poverty and resource maximization. Therefore, condoms and IUD are

insufficient, but minimization of poverty might be imperative instead of blaming the poor only and their cultural behaviors.

Poor and malnourished mothers are less resourceful, especially in health and education. They are burdened with extra household responsibilities, causing more stress, having less time to care for them and their babies, with fewer bargaining powers in in-laws and more fertility and reproductive labor, low access to a healthy environment, and regaining insufficient energy levels and, therefore, breastfeeding often becomes difficult due to overburdened life-impacting child health and nutrition.

## 5.5. Discussion

In this chapter, gender ideologies were deconstructed in relation to local power structures. Gender inequity is the result of a trickle down effect of larger ethnic and regional disparities. Household resources at micro levels determine what role and status women would adopt in the family and community. Women decision making powers in the household and intra-household politics must be reviewed in this context. Poors' economy is closely attached with high work burden, fertility and low gender status. Literature (Abubakar, Holding, Mwangome & Maitland, 2011; Nankumbi & Muliira, 2015; UNICEF, 2011) corroborates the study findings (Perveen and Raheela) that work burden and time poverty are one of the robust barriers that affect feeding and treatment children. Women believed that their heavy work-load impacted on the care of the child, and optimal care practice (Mwangome, Prentice, Plugge & Nweneka, 2010). Finding from Guatemala showed that women ignore the personal treatment of illness and often deprioritize their own health as they are socially and culturally bound to first perform caregiving duties for other family members (Chary, 2015b).

A qualitative study on breastfeeding in Brazil found that the child's weight continues to decrease when the burden of productive work increased (Piperata & Mattern 2011). In South-Punjab Poor slum, working mothers early weaning was too soon, and alternative feeding materials were cereals, banana, rice, and bread. Being a mother is difficult, but being a poor mother is unimaginable. In some cases, the father was unable to contribute and the burden lied on mothers.

Results showed girls were married at an early age, which has ramifications for public health. Marphatia, Ambale, and Reid (2017) have reviewed and found that there were broader health and social implications of early marriage practices in South Asia. Though fertility slightly declined from 5.4 to 3.8 and marriage age increased from 18 to 19.5 during 1990 -2012, Pakistan has failed to attain Contraceptive Prevalence Rate (CPR) to 55% by 2015. The evidence similarly showed that in the Rajanpur district, this rate was even less than 20% owing to unmet needs, unsafe and methods of contraception (Afridi, Ashraf, Family Advancement for Life & Health and Population Council, 2010).

The case of Hajira showed how the husband and his mother possessed household decision-making powers. Literature from South-Asia and South America shows that husbands and mothers-in-law have substantial control over intra-household politics (White et al., 2006). They found that the primary decision-makers in the household are the husband and his mother. Also, they were not very concerned and familiar with the need for routine antenatal care. Studies indicated that extra control and authority on mothers by the mothers-in-law might severely affect the health and nutrition of grandchildren (UNICEF, 2011). Danforth, Kruk, Rockers, Mbaruku, and Galea (2009) found that increasing women's decision-making powers through involving husbands might increase the number of mothers delivering their babies at healthcare facilities. Hossain, Phillips, and Pence (2006) found that nearly half of the child mortality in four rural areas of Bangladesh reduced with empowering women with both autonomy and authority. Also, studies (Maitra, 2004) demonstrated that increasing a woman's decision-making power and control over household resources increased the desire for prenatal care and options regarding delivery at the hospital.

Literature showed the government in Pakistan lacked modern healthcare policies and infrastructure on an equity basis for all, which deprived and isolated poor mothers (Aziz, 2015). Chary (2015b) argued that the public health care system is under-resourced, non-functional, as well as disassociated with the poor's real-time situations as a result of neoliberal policies and programs. In these circumstances, care becomes the responsibility of closed near and dear ones (Biehl, 2005; Garcia, 2010; Han, 2012). Sometimes, the family bears a caregiving burden but, most of the time ignores it (Biehl, 2012), which restricts

low-income and poor's access to adequate public health care affecting micro-level care politics within impoverished households.

Literature suggested that malnourished women were liable to be frequently sick due to less immunity and slow recovery. Also, they might experience an obstruction in labor, postpartum hemorrhage, and deliver low-birth-weight babies. During lactation, they might produce breastmilk of low quantity and quality. Malnourished fetuses in Pakistan are responsible for smaller and stunted infants. Childbirth was considered from nature, so contraception was perceived as sin (Mumtaz & Salway, 2007), but frequent and repeated pregnancies caused not only maternal depletion but also stunted growth in children (Bhutta & Hafeez, 2015). The local proverb "*joon viyai tay leekh jaee*" (when a louse delivers it can just produce a larva) sarcastically but almost accurately depicts low-birthweight problems integrated to maternal malnutrition. Imdad and Bhutta found that (2012) malnourished fetuses in Pakistan are responsible for smaller and stunted infants. The analysis of Di-Cesare et al. (2015) that only well-nourished, well-educated, and better-off mothers grow the well-nourished children better fits here.

Women's agency and the choice is restricted due to gender inequity (Carey et al., 2013). Rural females had to play multiple roles at the same time, of wife, mother, caregiver, domestic duties and looking after own health and nutrition in the face of micro-local inequalities and everyday violence (Hughes, 1992), the trickle-down effect of "supra-local structural inequities" (Chary et al., 2013; Farmer, 2005; 2009), and nexus of social sufferings (Kleinman, 2004). Similarly, in the African context (Lowe, Chen, & Huang, 2016), rural Gambian women during pregnancy faced heavy work pressure, limited prenatal care, and unpaid fieldwork along with domestic duties. Also, birth care and delivery were not in women's control that increased adverse risks and complications. This qualitative study similarly suggests that high maternal morbidity and mortality of Gambia is due to the culture of gender inequality.

Literature from Brazil and Guatemala (Chary, 2013; Scheper-Huges, 1992) show that poor mothers have to ultimately "normalize" the childhood mortality, morbidity, and malnutrition. Poor females face uneven power relations not only at global and regional levels but also at a micro level within village and households too that make them reluctant to actively pursue the health and nutrition of their children as well as of themselves, and

therefore, they "normalize" disease (Aziz et al. 2015; Chary et al., 2013; Mumtaz et al., 2014) and accept discomfort and illness as "part of the prevailing mode of living" (Sen, 1994 as cited by Chary et al, 2013). This alienated and indifferent belief and behavior were termed as "bad faith" by Sartre in Being and Nothingness and “symbolic violence” by Bourdieu (2000) in Pascalian meditation because poor think poverty and differentiation as their fate and normalcy and rarely dispute with the human-made power structure. Most of the time, the dispensation of justice and power is considered the will of Nature or God by the powerless and vulnerable people. So, such a hierarchy is seldom objected to.

Literature indicated that female babies faced discrimination in the form of post-natal neglect by their mothers through many different ways such as inadequate feeding, inferior care practices, and treatment-seeking during sickness (Bhandari et al. 2005; Li, 2004; Pandey et al. 2002; UNICEF, 2011; Willis et al. 2009).

Dewan (2008) concludes that many different development actions are needed to improve food security and nutrition of women as gender inequality in nutrition is present from infancy to adulthood in India. Women can never reach their full growth potential due to nutritional deprivation due to poverty, lack of development, lack of awareness, and illiteracy. At the macro level, basic determinants of malnutrition, neoliberalism, and structural adjustment also caused social sector cuts, unemployment, inflation, and hype in global food prices that ultimately restricted women agency in multi-dimensional ways (Farmer, 2004; Galtung 1990; Hughes & Bourgeois, 2017; Thomson, Kentikelenis & Stubbs, 2017).

A study in Nepal on women’s rights to land ownership and women’s empowerment (Allendorf, 2007) found that the ownership and control of land tenure system benefit only men. Low control and use of land for income-generating activities restricted maternal healthcare expenditures to improve maternal health issues. Men participating in women’s works are often criticized and stigmatized because of social barriers. They are even labeled as women’s servants (*Run Mureed*), and, therefore, males generally feel shame due to multiple socio-cultural reasons (Abbas et al., 2012; Dumbaugh et al., 2012; Mullany, 2006). Evidence from Pakistan and South Punjab corroborate that the division of labor and household powers among males and females is determined and distributed by ideals of gender and socio-cultural constructions (Agha, 2011).

## Conclusion

The chapter suggests that high poverty, which is rooted in regional disparities, increases work burden, fertility, and illiteracy--a common form of gender inequities in the district. At the household level, women have to bear the brunt. The girls are discriminated against in terms of treatment, feeding, diet, nutrition, and health in the community that restricts female gender agency in multiple ways. There are socio-cultural reasons and ideals of gender, which affect mothers. Reproductive work spent in children's care, cooking, cleaning, fetching water, and firewood, along with productive work to earn money, cause time poverty, and work burden. It shows how maternal malnutrition determined child malnutrition even during pregnancy. In the struggle for basic needs, mothers have to be indifferent to the weakest of their offspring, and they "normalize" their disease and malnutrition.

Biomedical approaches want to change locals' behaviors without contextualizing the cultural and structural backdrop of women agency. They often blame males and ignore the structural causes of gender inequalities. Along with it, the contraceptive methods recommended by the biomedical community are also disliked because of their long-term negative implications on the female body. There is a need to advocate more natural ways of birth spacing instead of market-oriented ways of contraception if the purpose is really to promote low fertility, thus, behavior change strategies should not only be protecting biomedical and neoliberal interests but they must focus on pro-cultural methodologies. In this chapter, the focus was on time poverty and high fertility of females but the next chapter emphasizes the impact of illiteracy, and lack of knowledge and cultural capital on care and IYCF practices.

# 5. SOCIAL AND CULTURAL CONSTRUCTION OF CHILD CARE AND FEEDING PRACTICES

## Introduction

This chapter is divided into two parts: 1) Care Practices, and 2) Infant Young Child Feeding Practices. A child's body is in the control of parents and the community and mothers often follow beliefs and practices under sociocultural influences. The care and feeding are influenced by the household's level of literacy, knowledge, beliefs, and practices. There is a complex socio-cultural atmosphere of birthing and feeding, which impacts the growth and development of the infant and young children.

This chapter suggests that pregnancy, infancy and delivery, breastfeeding behavior, and feeding practices are shaped by a multitude of factors. Child care practices such as head shaping, pre-lacteal, colostrum wasting, and choice of complementary foods depend upon the socio-cultural circumstances of households. The local's explanatory models and belief systems seem to be impactful in this regard as their knowledge, beliefs, and practices might become very risky when these are multiplied by poverty, illiteracy, unawareness, and influence of family elders in patriarchal settings. Mostly, females who face a lack of opportunities and illiteracy owing to structural vulnerabilities have to suffer in care and feeding practices. In the state of poverty, sub-optimal feeding practices might bring serious implications for the health and wellbeing of infants and young children (Ahmed, Leghari, Alam, & Shahid, 2020).

## 5.1. Care practices

The mother and the child require proper and adequate care, especially during infancy, adolescence, pregnancy, and delivery. Maternal-child care is affected owing to a lack of socio-cultural capital, low-income, gender inequities, time poverty, illiteracy, and fertility. Care practices are the practices of caregivers that might influence nutrition, health, growth, and development of the child. Optimal childcare practices can decrease malnutrition as much as good water, sanitation, and hygienic conditions can minimize infections (Abate, Kogi-Makau & Muroki, 2001).

The pregnancy stage is susceptible; mothers need extra care during this time, along with healthy foods and adequate care practices. Also, the birth of a child is not only natural but also a cultural occasion for families, which is considered a blissful occasion and, therefore, widely celebrated. The purpose of this symbolic representation describes how rituals might be impactful. Several significant rituals and cultural aspects are performed soon after the child's birth. People expressed cultural beliefs and practices, which symbolically indicated the patterns of religion, ethnomedicine, and overall body construction. The way a child's body is conceptualized and symbolized, it has repercussions on child and mother as cultural activities are performed. Several traditional customs are practiced. The short explanation of each of such care practices is given below.

**Pregnancy and Craving for the Pica:** I observed pica habits among many pregnant females. Pica is the craving, and purposive consumption of substances like earth practiced across cultures (Young, 2011). Biomedically, the practice of pica eating deprives mothers' the habit of good food. It is considered a habit of pregnant women as a socio-cultural adaptation. In the following, I have described a case of a mother who narrated her life story about relevant issues at length. When asked why, how, and what made you addicted to using pica? Mother considered that her meals became smaller during pregnancy, and the baby in the womb could not grow well, but after the delivery higher frequency of breastfeeding helped in gaining the infant's weight.

> I have five children, four daughters, and one son. At first pregnancy, I disliked the smell of cooking and felt nothing acceptable in food. I used to eat a minimal amount of food each day. My first baby was born weak.

Then, the mother explained how she developed the habit of eating pica, which helped her in eating meals by stopping feelings of nausea and vomiting in the second pregnancy and her second the baby had proper height when born, as against the birth of the first baby. The mother explained her craving for pica in these words:

> In my second pregnancy, I used to eat clay (*mitti*). When my second baby was born, she was covered by this clay, even the lady doctor asked, 'have you been eating mud, as your baby is covered with it all around.' It was astonishing how mud reached in my uterus from my stomach. This baby was suffering from high fever (103C°) when born; however, she was tall. In fact, the clay used to

> give me pleasure and satisfaction and save me from vomiting and nausea during pregnancy.

Next, she illustrated how this behavior became her addiction. She tried to replace mud eating with husk, but she had to start again.

> In the first place, I just started to eat husk without water, but soon I felt it was costly, and then I started using earth. I chewed the husk because it used to keep my mouth busy for long time and got stuck to my tongue and teeth, which provided me with a play and pleasure. It was like chewing gum. But how I first put myself on clay was due to the reason that once I had to donate blood to my grandma. After that, I felt to eat something solid, although I had already experienced it during my second pregnancy, I had quit it later too. Sometimes, I use it even now when it comes in front of me but not regularly. Instead, I eat uncooked rice grains now.

It indicates that mothers need some extra energy during pregnancy and lactation, and they like to chew some extra stuff to satisfy incomplete hunger. In addition, there is mouth-taste, which may become so strange that females wish to eat something, which can dissolve that feeling of nausea or tastelessness of the tongue during pregnancy. The story of the mother explained how women during pregnancy feel craving due to a lack of micronutrient deficiencies. Physical changes such as mouth's taste compel mothers to chew non-nutritious foods and to remain busy. Such activity is maintained and sustained into persistent behavior, which is often difficult to quit. This practice of eating pica is hard to quit, as expressed by the many mothers.

***Veeyum* (Delivery), *Mun dikhai* (Gift on first sight):** Nearly two months before and forty days (*challiyaa*) after the childbirth, pregnant mothers are attended or looked after by community *dais* (traditional birth attendants). When labor pains start, she comes and stays a long time with the pregnant mother on a call from the mother's family members, and a small amount of money is offered to these *dais* as remuneration or compensation for their work. After delivery, the umbilical cord (*naara*) is cut with a sharp blade, and hygiene or cleanliness is less strictly followed during this process. Improper cord cutting makes the navel wrong shaped and ugly due to infection. Therefore, after this bath is generally given because the baby is considered profane owing to a long-stay inside the mother's belly.

After delivery, relatives and neighbors congratulate and give old currency notes as *mun-dikhai* into the infant's hands. As these notes have been old, dirty, and circulated

from people to people, there are higher chances of pathogens' transfer and infections through this custom. Nevertheless, rarely do locals bother that the baby has taken dirty notes into the mouth as a risk factor. Besides, some people tie a *chosni* (pacifier or nipple) around the neck of the baby, which is put into the baby's mouth off and on who sucks it more often, especially when weeping begins (Premji et al., 2014). The pacifier keeps the baby busy and quiet. If the baby continues weeping, then the mother breastfeeds. Rarely do village people seem sensitive about the cleanliness of these pacifiers, and flies can be seen upon these pacifiers.

Delivery is considered not very hard for rural women, and they continue to do physical work until the last days of pregnancy. Due to eating *desi ghee* and doing regular hard work, birth became very smooth as one pregnant mother illustrated:

> In summer, we sleep in open courtyards and get up early in the morning, sweep the whole house, and shift all wooden cots into rooms to save them from hot sunlight. After that, boiled vermicelli are mixed with *desi ghee* (vernacular condensed oil extracted from household butter), and *shakkar* (brown sugar) is sprinkled onto it. Then after two hours, almond oil is mixed into the milk along with *kesar* (saffron). I gave birth during my work in the morning, even without much labor pains. After delivery, I got astonished and called my family members to see what happened to me as the baby had been born, normally and smoothly in loose trousers.

Otherwise, traditional birth attendants manage the delivery. One attendant claimed:

> Made-up of goat-milk, jaggery clarified butter, and cumin seeds, ***Tarang***, is given during labor pain. Boiled eggs for mothers are recommended in winter. If an infant comes out unconscious, the air is blown, and the baby becomes conscious after some time, or we make the child upside down and beat the child's back, and the child starts weeping. At the same time, my father reads sacred verses on a sweet thing that helps in a smooth delivery. During delivery, the mother, who is in trouble, speaks to God. I already know if I can handle the case or not. Every *dai* has its own hand, some have a heavy hand that causes infection, but my hand is soft and gentle and does not cause inflammation. Turmeric powder and clarified butter are applied on the cord that dries it soon.

***Tahor* (Circumcision):** When a baby girl is delivered, her ears are pierced at three places, and when a boy is born, he is circumcised soon after birth. A few days after birth, a *nai* (barber) is invited to visit the newborn's house and perform circumcision, and this

practice is known as *tahor* in their native language. A sharp blade is used by the *nai* to perform circumcision. It is considered a religious obligation. Usually, it is performed immediately because it is considered awkward at a young age when a child has grown up. This ritual is celebrated as a mini marriage where close relatives, neighbors, and friends are invited, and a sweet thing is served to them. Some mothers believe that healing takes place early if the baby wears pampers, and his urine works as antiseptic. It shows the perception that dirt or pollution acts as a cure.

***Sathee* (Removing Child's First Hair):** On the seventh day of birth, the *nai* shaves the child's first hair on the head with a blade. These hairs are religiously considered profane (*haram)* because of long-stay inside the mother's belly. Silver equivalent to the weight of this hair or sometimes money is also distributed among the poor as a kind of *sadka* (voluntary charity) because it protects a child from evil-eye and evil spirits. The practice of getting a child's first haircut is known as *Satthee.* It is also considered as a religious liability as the hair is not sacred, and it is construed that it might also invite sufferings for the new baby. Hygiene is not strictly followed. The concept of sacred-profane is relevant to analyze this ritual.

***Murakha* (Face adjuster) and *Nazarwatoo* (Anti-evil eye necklace):** Present almost in every *Seraiki* household, *munrakha* is a mud-brick in which two tiny wooden columns are so fixed that it does not only help to cover the sleeping infant with a shawl but also used to shape top and back of the soft head skull of a newborn. This works as a net in which a child is sleeping. A small thin pillow is placed under an infant's scalp so that a required shape of the back of the head can be achieved without any discomfort for the little child. Some people used a metal plate for the back head (skull) so that it must become round in shape. Sometimes the head is molded extra and de-shaped, which looks awkward.

*Nazarbatoo* is tied around the neck of an infant; it is a black colored, round plastic thing used for protection from bad *Nazar* (Black or evil Eye). According to locals, when jealous and envious people deeply ogle at the child, it ensures safety from the bad and harmful intentions of the beholders.

***Bundhna* (fastening), *Aadhna* (massage):** Older women suggest that the child must be kept tied in *bandhna* otherwise child might be frightened due to a jerk, and start weeping. *Bandhna* is a long cloth used to tie the child's arms and legs so that she or he may

not stir or move her/his legs during sleep. Tieing is done for a long deep sleep after the practice of *aadhna.* As women believe that children might get afraid during dreams, *bandhna* saves babies from becoming scared, so it has specific cultural care and cure for infants and babies from becoming ill owing to the fear of unholy spirits.

Mothers want to beautify their infants and babies. For this, they sometimes perform painful and dangerous things such as stretching their noses with the help of wheat flour and olive oil. Mothers and relatives press the forehead of the infant during breastfeeding for the sake of shaping a beautiful forehead, which might cause hic-cups that are very dangerous during breastfeeding; even sometimes, during pressing forehead, the infant might vomit all mother's milk. Also, mothers want to get rid of unwanted hair on the infant's body as well as on the face. Mothers or someone closer in the family apply some local infant beauty tips (*totkay*) that show how inadequate care may cause harm to infants, as one mother once informed in the following words:

> I observed many yellow hairs on her face; I later found it was due to bleach. First, I was happy to see the white and shiny face of my daughter but later got disappointed to see the hair growing and becoming thick on her face at this early age. Now I repent, no one should do unhealthy care practices like this.

***Potray* (local Hughes) and *Surma* (antimony):** In rural and poor households*, Potray* is predominantly used instead of diapers. *Potray* has to be changed every time the children urinate or defecate. During winter nights, if the mother sleeps infant is remained wet the whole night and may catch pneumonia and the common cold, which can develop chest wheezing. Also, defecation is cleaned with these wet *potray* as wipes or tissue. One grandmother once remarked they did not use pampers because male baby organ stops growing because of using tight pampers. Mothers insert *surma* into the eyes of children. They apply *surma* in eyebrows too. In this way, eyebrows look long. They believe that *Surma* could relieve the swelling of eyes and waste the bad water of eyes besides beautifying the child. Scientifically, *sumra* is considered harmful because it contains lead.

Memom et al. (2013) stated that the majority of neonatal deaths in developing countries occur in the first week of life, and Pakistan experiences one of the highest newborn mortality rates. They found harmful newborn care practices like early bathing of

newborns and the use of traditional cord applications. They argued that antenatal care services were a strong predictor of well newborn care. Delivery care practices are considered essential for good nutritional status of newborn babies (Chaparro & Lutter, 2009). Bandage or dressing is soaked in the turmeric powder and *desi ghee* (clarified butter) and applied to the umbilical cord, which will automatically drop when the injury heals.

In Pakistan, traditional birth attendants handle most of the pregnant females, and antenatal care is rare (Khadduri et al., 2008). While midwives are respected in Jamaica, Malaysia, and Africa, however, in India, Bangladesh, and Pakistan, midwife (*dai*) is a low caste, inferior, old age, and illiterate woman, often working on a small remuneration for her unvalued work. However, the *dai* is recognized as experienced and useful as birth attendants (Sergent, 2004). Rozario (2010, p. 154) found that the *dai* visited during labor only and rarely provided prenatal or postpartum care. He stated, "in practice, both [dai and doctor] may have serious deficiencies in terms of delivering effective health care, and their effectiveness may be further compromised by the cultural and material situation within which they work... neither the village midwife (the *dai*) nor the village doctor are really in a position to care effectively for birthing women." Sargent (2004) suggested that the global influence of biomedical services has also contributed to declining respect for these midwives and *dais* in South-Asian contexts. Literature indicated that in Pakistan and South-Asian context, socio-cultural ideals strongly influenced child-caring practices (Asim, 2017). However, the conceptions and constructions regarding sacred-profane, dirt-pollution, spiritual etiology of illness help analyze local knowledge, beliefs, and practices. Models of binary opposites, contradictory, dichotomous, lingual construction are basic, simple, but very real for the majority of the local mind.

## 5.2. Sociocultural Construction of Infant Young Child Feeding

This part of the chapter presents a nutritional perspective and incorporates the anthropology of breastfeeding. The deconstruction of knowledge, beliefs, and practices of feeding reveals that this phenomenon is not only socio-cultural but also politic-economic. Ideally, biomedical IYCF practices advocate the introduction of immediate and early breastmilk to a newborn for half a year. However, practically mothers have been reported

to disregard these recommended IYCF protocols. What makes mothers disapprove of these principles and adopt alternative feeding patterns? What beliefs and experiences guide their breastfeeding behaviors? How do community elders convince, train, and advise young mothers about feeding practices?

This study navigates various social and cultural forces that influence IYCF. It aims to understand breastfeeding behavior according to the locals' perspectives. It strives to interpret related social constructs, myths, and taboos, analytical models, traditional wisdom regarding barriers, and resources of breastfeeding. This study finds that multiple social and cultural rationales determine breastfeed. Breastfeeding is delayed meanwhile pre-lacteal is introduced, and colostrum is excreted because of the belief that it is harmful to a newborn. Numerous cognitive conceptions such as envy, evil eye, sacred-profane, hot-cold, thick-thin, color, odor, and adhesion determine infant and young child feeding activities. Besides, mother's father relations, limited diet diversity, time poverty, high fertility, and illiteracy are also essential factors. Optimal IYCF practices require a full understanding of social and cultural constellations and environment so that schism between theory and practice could be bridged.

The first two years of a child's growth are considered very critical. Using a life-course approach, WHO (2003) necessitates adopting optimal feeding atmosphere, ranging from mothers initiating breastfeeding as early as possible soon after delivery, exclusive breastfeeding for six months without introducing water and other nutrients such as butter, and then continuing breastfeeding at least for two years. A robust social environment of motherhood and delivery, in both health centers as well as in the community, is essential. Barriers to such atmosphere have been explored in particular here such as pre-lacteal, the introduction of various foods to infants such as butter, animal or formula milk, which are day-to-day routine practices of mothers, grandmothers, particularly on the advice of community, elders, neighbors or even healthcare professionals. The income, literacy level, gender status, and access to public health care are relevant factors that shape the belief and behavioral construction of IYCF.

## The Case of Shahana

Anemic and low weight mother of 30 years, Shabana, brought Sahil of 1.5 years to the Stabilization Centre (SC) of District Headquarters Hospital (DHQ) with MUAC measurement of 10 centimeters and with the weight of just 5.5 kilograms. The birth interval of only one year after every child was unsafe. The husband was a guard by profession and used to earn mere 7000 rupees (less than $100) a month. According to them, this amount was too little to meet the household's daily expenditure. With this lowest salary, the husband hardly managed ration from the market every month but was unable to give pocket money to his wife for day-to-day needs.

Mother has got no formal and non-formal education and only contributed to domestic work. The only little land they owned was where they resided in a housing unit, which was half *kacha* (mud) and half *pakka* (bricks). Also, they possessed two baby cows. They had to sell the mother cow because they had economic problems in buying grass and fodder from the market. The source of water in their house included a hand pump and electric pump (borehole), but there was no toilet in the household. They had to go outside in the fields, most often in cotton or in wheat crops, to defecate openly without the washroom.

When asked what was the daily diet of the mother and child? She replied, 'she takes the egg, tea, wheat loaf, and pulses. However, her two years old child eats biscuits, fruit cake, *sabudana*, *halwa*, *namkeen chawal* along with breastmilk.' 'Do you think breastmilk during sickness is important?' I asked. She replied, 'a child must be given breastmilk during sickness, women who do not give in sickness they do wrong; it is a kind of great sin and doing like the shirk (equating God with something).' The mother's diet was much limited. She was unable to consume fats, milk, meat, vegetables, fish, and other vital foodstuffs. It was due to these reasons she was anemic and low weight. Besides, the child was eating unhealthy bakery products, mostly available in unhygienic ways, because these food products were without quality control standards.

I asked, 'what makes health good and bad?' She answered, 'yogurt and banana mixture, *cerelac* (Nestle's food product), biscuits, are good and for mother *yakhni* (chicken soup), egg, chai (tea), and fruit is a good diet for mother. *Ghutti* and *arq* (extract) are also good for health and openly available, and foods fried such as *dahibalay*, *samosay*, *pakoray*,

and sour gummies make health bad.' When asked what you used in pre-lacteal. She revealed, they gave *turanjbeen*[12] (this word is used as a translation of "manna and quail" in the Quran, Bible, and Book of Exodus but the herb is known as Alhagi Camelorum or camel thorn), it is black, and we mix it in water. We give a mixture of *turanjbeen*, honey, and egg so that the child is safe from cold.' *Cerelac* was used and recommended on the doctor's advice. It was expensive and became a burden financially for many poor households. In addition, it was not as such an alternative to naturally available fruit and other food items like yogurt (what it claims to have inside it).

When asked, do you give early breastmilk (colostrum) to newborns or infants? She replied, 'we give it, my mother-in-law advised me to give it; it is good for health.' Do you use anything else other than breastmilk during the first six months; I asked to know about the practice of exclusive breastfeeding? She answered, 'although our family generally has a practice of giving butter to babies during this period, however, I did not give it except *sounf* (fennel herb for digestion) and water.' It indicated that she did not "breastfeed exclusively."

Next, I inquired about the maintenance of hygiene. "Do you boil the baby's bottle (feeder) and milk?" I asked. She exposed a very exciting fact: "we always used detergent (*surf*) to wash baby's feeder, mostly after three days we wash," shocking for me to know that a detergent (which contains strong chemicals to wash dirty stains on clothing) was being used to wash infant's bottles. There were higher chances chemicals retained inside the bottle because of its narrow neck, even after washing that might have been harmful to the tiny stomach.

When asked how many kids they wish to have? She opined that 4-5 are compulsory; at least two sisters and two brothers. She agreed that her husband also wanted the same number as she did. I asked, 'do you feel any compulsion on you for not using contraception.' She stated, 'there is no compulsion on her, but I think contraception might be very harmful; therefore, I have never used it in my life. It could be dangerous to health.' She also pointed

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[12] It is a yavasa and perennial plant originating from the rhizome system, bears maroon color flowers. It contains the tiny legumes pods constricted between the seeds, like brown beans. Its habitat is Central Asia, Mediterranean or Sahara, South-Asia like Punjab, Kashmir see www.plantayurveda.com)

out that she never used multivitamin tablets during pregnancy because their taste was terrible, and it increased appetite and caused laziness as well.

In addition, she revealed that the aunt mostly takes care of her children in her absence. According to the mother, the aunt took care of her children and gave them everything as an experience. Most of the time, care was compromised, and children started eating sand or mud from the wall or floor. When children crawled on the floor, they took everything into their mouths, whatever came in their way. The young kids of the aunt, siblings, or other relatives often offered whatever they were eating, drinking, chewing, or sucking.

A mother needs to look after her children instead of relying on her relatives, but producing so many children with short gaps compels a mother to engage someone for help. Nevertheless, close ties among relatives build trust. The children are often given under the care and custody of close relatives. Lack of hygiene or other types of cleanliness and carelessness is not done deliberately, but in their opinion, it is all-natural. The mother stated that her children most frequently suffered from diarrhea, fever, and lung infection. In this case, the lack of care, the absence of latrine in the household, and the practice of open defecation caused infections among children.

Children were fed on foods containing carbohydrates such as *cerelac* and cakes, which are not so energetic. It was also interesting to find that instead of dish bars, they used "detergent powder." Diet of mother and children was limited, and diversity was strictly lacking due to the insecure and low income of the household. The employment status is considered the most critical determinant of health and nutrition. The nexus of illiteracy, poverty, fertility, and carelessness jointly contributed to making children and mothers undernourished. However, access of mother to the Stabilization Center and health facility was ensured by LHWs as the area was not very far from the Rajanpur city, otherwise for mothers who come from remote areas, staying at the stabilization center was much more difficult.

### Work Burden and Breastfeeding Behavior

Matriculation passed mother of 25 years age brought her severely malnourished son Tayab of 7 months at the stabilization center with a weight of 4.5 kg and MUAC of 9.5 cm.

Delivering twins twice caused anemia and low weight. Now three are alive, and one has died out of her four children, mostly due to vomiting and diarrhea. She treated them from the government hospital as she was living near Rajanpur city.

Although she was literate, she used to work in others' houses as a domestic household servant. Her husband was a manual daily wage worker. At the end of the month, they barely earned a small income (Rs.10000) that was not enough to run the household. They resided in a house built with mud (*kacha*). Off and on, the mother was able to eat eggs, and fruit, but not meat and milk. Her children often used to eat *bhatt* (a dish of rice), *sewayan* (vermicelli), and eggs in the winter, along with cow's milk.

Due to C-section, she had to initiate breastfeeding after four days. In the first four days, infants had to drink formula milk in a bottle. It was revealed that they did not boil the feeding-bottle but just washed it with kitchen soap. Generally, the mother was advised to boil these bottles, as there were high chances of germs staying even after a simple wash with water and soap. For satisfaction, mothers needed to boil bottles so that all pathogens could go away. Although the mother was somewhat literate, she intentionally avoided it because fuel was required to boil bottles every time. For poor households, wood purchasing is expensive. Mother stated how work and income reduced the behavior of breastfeeding:

> I don't waste colostrum; I gave it late, however. Bigger son drank my milk for two years. The other two twins just drank for two months because I had to leave my house for work as a household domestic in the homes of better-off people to earn some money; therefore, I used to give bottles to my babies, so they gradually left my breast.

Breastmilk could dry up if the frequency is minimized. For working mothers, especially for domestic household servants, it becomes very tough to breastfeed their children. In this way, the habit and behavior of breastfeeding are ultimately reduced due to poor income. The culture and practices of mothers are determined by the financial circumstances in which they spend their lives. Economic inequalities force lactating mothers to quit giving breastmilk so that they could earn a little amount for their immediate survival needs. This kind of socio-cultural environment is not constructed deliberately, but the socio-economic system, which becomes a culture that marginalizes the poor from natural social practice.

She further said, ‘I used contraceptives after birthing twins for the second time. When I came for a check-up at DHQ, they prescribed that my baby needs special milk (75 and 100). This milk has had positive impacts on the health of my kid. Now my child is comparatively better than before.’ When asked about the effects of household income? She articulated, ‘when my husband used to earn money, it had a good effect on health; otherwise, it worried, and we felt sick because we could not eat enough food.’ When asked about diet, she explained:

> Parents should give eggs, potatoes, *khichri* (rice and pulses), *dallia* (porridge), and soft things to their babies along with good food for mothers. However, I eat whatever is cooked at home but not special because we are not wealthy people. We can't afford good food such as meat, milk, and others because of low income and inflation. Everything is under fire; we cannot even think to touch them.

Further, the mother explained that LHWs visited and gave them valuable information. It is clear that access to healthcare helped those bringing children and reaching a healthcare facility. When asked about birth spacing, she posited, 'I think contraception is right for females. My husband is not strict in this regard.’ It was inferred that working women had much autonomy in choosing birth spacing for them. Household income has a significant role in the welfare of the household. Employment has emerged as a powerful determinant of better nutritional status.

In this case, poverty, carelessness, unhygienic behaviors, fertility, insecure employment, workload, and a limited variety of diet are the significant to construct a socio-cultural configuration in which malnourishment is perpetuated. Maternal literacy alone, which is considered an excellent source of capital, remains insufficient to control the infections when other capitals do not support. Different forms of capital are required to consolidate each other, support each other, and strengthen each other (Sen, 2014).

## "Good diet and peace in-home make health better:" Balqees

Twenty-four years old mother, Balqees Mai, lived in a village near Rajanpur city. Her daughter Sidra of 7 months was suffering from diarrhea and severe acute malnutrition. Mother was extremely weak, but she still had a pregnancy of two months. Her husband

was a small farmer by profession, and she used to work in houses of better-off as a female domestic servant. The inflation was high and their monthly income (Rs. 8000) was too low to meet daily expenditures of the household. As she has never been to school, she could get no formal education. Although they owned a small piece of land, the tiny house was built with mud instead of concrete or bricks. Moreover, they also possessed a bit of land that helped them to survive. Along with this, they had three cows and three goats. They had a hand pump in their house for water. More importantly, they had a toilet in the housing unit.

When asked what was their daily diet? She recalled that she used milk almost daily but fruit, meat, and egg once in a week. Did you use any pre-lacteal? I asked. She said that they have been giving *Nounihal gripe* water, butter, and honey as pre-lacteal. When asked about the exclusive breastfeeding practices? It was informed that they always used *Junj* (butter) and introduced water to her during the first six months along with formula milk. Then they were asked about using colostrum? Mother replied, 'I had not given colostrum because it was bad for the health of the baby because it contained burned material in it.'

However, when hygiene was estimated, they brought forth that they always first boiled the bottle and then washed it with dish-wash soap. It was so new and amazing for me to know this. What was the benefit of boiling bottles if it has to be rewashed with raw water? It was not a good practice because washing comes before boiling. Nevertheless, those who recommend these mothers to use infant formula milk must be aware of these dynamics. Doctors, nurses, and other healthcare staff more often ignore these facts and seldom insist on the proper use of their prescription and quantity of formula milk due to lack of time and their daily routine matter.

The mother expressed that she breastfeed her baby for only two months, which caused morbidity and malnutrition. She has to go to work in better-off peoples' houses, and in the meanwhile, the grandmother takes care of my baby and prepares a bottle with formula milk powder. How you knew about this program, I asked. She replied that an LHV stationed at a BHU had once informed her about nutrition SC where special milk (75 and 100) was available. The access to this program ensured with the help of health staff and living closer to the district.

When asked about the impact of income on health? She revealed that her husband was able to provide only daily vegetables or ration. She said when her husband was not earning enough, they used to spend life in poverty and deprivation and, therefore, they could not eat diverse foods, which affected their health and nutrition. They added that when the basic needs of life were not available, and when daily diet got limited, it made health worse. She stated, 'good diet, as well as peace in-home, can make health better.'

In this case, it was evident that although they had a water source, latrine, cows, and house, however, mother was illiterate, and her access to knowledge about infant young child feeding practices was limited. They introduced pre-lacteal, and butter so exclusivity of breastfeeding was lost. The baby was deprived of breast milk in the second month, as she ought to have breastfed for a full two years of life. Besides, the mother wasted her colostrum. Furthermore, the diet of the mother was inadequate and limited owing to economic constraints. Thus, these factors ought to be considered the most relevant determinants of poor health and nutritional status.

Besides, the most conspicuous of this story was the improper way of washing the bottle. As they first boil it, then rewash it, and therefore make it unsafe for the small baby. Although advised to boil the feeders, the method of how to wash and boil has listened incorrectly; they performed the second task (boiling) before the first one (washing). At such a young age without breastmilk, the baby has a higher probability of infection, especially when formula milk is given within improperly washed bottles.

## The Case of Shazia

Thirty-two-years old father and twenty-eight-years old mother belonged to a low caste. They had six children, with a gap of approximately two years between every child. The two-year-old son was suffering from complicated severe acute malnutrition. He had anthropometric measurements of MUAC as 9 cm, and weight at 5.5 kg. In this age, this measurement of MUAC and weight was too low. Father had only one marriage. His occupation was manual construction labor, while the mother was a domestic household servant. With their combined labor, total monthly income made 13000 Rs. only. However, the illiterate poor had no option except this. Manual labor has no particular benefits and

privileges. They were illiterate with no formal and informal education, residing in a tiny mud house that was almost equal to the size of one Marla (372 feet). They had no livestock and hand pumps in the house, so they got water from neighbors. They had no toilet in the house, so they had to use a toilet in their neighborhood, built by an NGO.

When asked about the IYCF practices? It revealed that the diet in their household was not diverse, so they were able to afford only a limited variety of foods. Along with it, they did not comply with exclusive breastfeeding as they introduced water, *arq* (extract), *noushadar*, *ghutti* of "cow's raw milk." In addition, they did not use the early thick milk colostrum because of its "yellow color." In their opinion, vaccination was important for children, and they vaccinated their children too. When asked how hygiene of bottles was maintained, it revealed that the bottles were properly used. They also used to wash their hands before and after certain activities.

When asked did she use multivitamins tablets during pregnancy? She answered, 'I never used multivitamins, nor had consultations with *dai* or LHV about maternal child health.' She said that her sister took care when she was pregnant. When asked how they reached or accessed the Stabilization Centre? They informed me, 'we have reached here without any referral. It is a good program as we are being given special milk here. Lady Health Worker visits us sometimes, however, vaccinators come more often, our children mostly suffer from fever, flu, and asthma.'

When asked about the role of income, she replied, 'income has a good impact on health. When we have no money, we borrow it from someone for subsistence and survival.' Both parents had low and risky employment status, and they were illiterate. They had poor IYCF knowledge and could not practice exclusive and complementary feeding, as they used cow's milk without boiling it for a pre-lacteal, and the household's daily food was limited. Also, the mother never used multivitamins and contraception. They thought there was a religious obligation behind high fertility, and more children were vital because they could earn and support them in the future. It implied how they supplied religious justification because of economic constraints, as mother was a house cleaner and father as a construction laborer by occupations. They earned little to meet daily food and other budgets. Along with it, even water, which is a fundamental necessity, and a toilet were

missing in the household. These basic factors determined ill health and severe acute malnutrition with complications.

As already discussed, manual labor is unable to provide adequate food, clean water, proper care, and other vital accessories, the government must target this group of daily wage workers to protect their social security rights if the problem of malnourishment is to tackle sustainably. It would be insufficient to rely only upon the "nutrition-specific interventions." Government programs on "nutrition-sensitive interventions" such as social safety nets must incorporate such vulnerable people as their most prioritized beneficiaries.

### 5.2.1. Breastfeeding Immediacy

Most of the mothers could not breastfeed immediately. The immediacy was restrained owing to some kind of delays and difficulties related to a medical condition such as the low quantity of milk, C-section operation, painful delivery, advice by elders and health professionals for formula milk, and so on.

**Major Themes from the Pre-lacteal:**

| | | |
|---|---|---|
| Gendered construction of practice | Setting the scene | Combined with the holy proclamation |
| Transferring qualities and characteristics | Introducing sweet foods as pre-lacteal | Purification from pollution |
| Religious and cultural approval | Protection from illness and hot/cold | Sacred and profane |
| Bad faith and misconceptions | Behavior change for grandmothers | Digestive herbs as *ghutti* |

**Setting the Scene:** When a child is born, there are some preparations for the child and mother (Laroia & Sharma, 2006). The child's umbilical cord is cut to stop food supply from the mother and is often taken a bath. The cord-cutting practice is reported mostly without following the protocols of hygiene. Locals start preparing to practice the ritual of pre-lacteal first. They begin finding resemblance with someone close to their family member, either from the maternal side or paternal side. Both sides from mother and father try to relate new-born with them, especially if the baby is healthy and beautiful.

**Pre-lacteal and Holy Proclamation:** As soon as this act has been done, *azzaan* is proclaimed in the right ear of a child to make her/him a Muslim by birth. The reason to find a noble person for the performance of this ritual is that the first food would transmit the good qualities in the baby by the index (*shahadata that means to witness*) finger of the right hand. One grandmother stated, "*Ghutti* is a centuries-old tradition, and every child in their family was given *ghutti* with honey by a person who used to pray five times a day regularly was invited to proclaim *azzaan* in baby's ears."

**Transferring Qualities:** Someone considered very noble and respectful from their family, and the community is invited to give *ghutti* to their infant. The person deemed suitable and ideal should be aged having a long white beard, with a good reputation in religious matters. The person should fulfill the standards required for Islamic piety and ethical conduct. Also, some females like an aunt, grandmother, and some close relatives are considered eligible for this practice and custom soon after the birth of a baby. Also, in some tribes, the donkey milk is introduced with the belief that the donkey's trait of being obstinate will transcend into their new-born baby. They also keep some metal, mainly iron rod, lock, and a knife near the pillow of new-born, as it is perceived to save them from evil spirits and wicked eyes, in their opinion. These ceremonial and customary practices are performed as a requirement of the local system. Also, donkey milk is considered medically beneficial for illness.

**Gendered Construction of Practice:** This practice is the introduction of pre-lacteal, which is locally called *ghutti*. The word *"ghutti"* is believed to be derived from the Seraiki language word "*ghutt,*" which means a "*sip*" of a liquid. The term "g*hutt"* is a male-gendered construction in the local language while "*ghutti"* is a female-gendered word that means very little in quantity, or "minimal" the thing even to a "*ghutt."* Bio-medically, this practice is forbidden because a child's little stomach cannot absorb dense foods.

**Introducing Sweet Foods:** A vast majority of participants have the tradition of giving some sweet, solid, or fluid food before formally starting breastfeeding. It was explored that some mothers used different non-sweet food items for this cultural practice. Most of the mothers (80%) informed that they used sweet things, honey, *gur* (jaggery) and *arq* (extract). Lady Health Workers also confirmed that most of the mothers used *maakhi* (honey) and *gur* (solid brown sugar) as *ghutti.* "I gave water and *ghutti* to

both of my babies," one mother stated. However, some mothers offered "raw goat milk" without boiling it with the perception that it would clean the fluids inside infants' belly and intestines.

**Protection from illness and hot/cold model:** Respondents believed, "honey is not harmful to the health of infants and elders alike, and treats the infection." One mother informed, "We give *ghutti* of honey because its essence is warm, and new-born should not be given cold foods at the time of birth as the baby has just come out mother's warm belly."

Honey is an antiseptic natural product prepared with bee's saliva. It has a sweet taste; it is thick and sticky and possesses cohesive chemical properties. It is believed that it is suitable for health. In winters, it is supposed to provide the human body a specific warmth to fight against cold weather. It is also consumed for the cure and treatment of many illnesses such as asthma, bronchitis, stomach pain, and infection.

**Purification from dirt and pollution:** Some mothers stated that it keeps babies safe from harmful fluids absorbed during the time of birth. Others claimed that they used cola (charcoal), *turanjbeen* (this word is used as a translation of "*manna and quail*" in the Quran, Bible, and Book of Exodus but herb known as Alhagi Camelorum or simply camel thorn) and *huqqa* (smoked) water. It is believed holy and containing heavenly properties. One mother said, "We gave *turanjbeen*, it is black, and we mix it in water. We provide a mixture of *turanjbeen,* honey, and egg so that the child is safe from cold."

Some mothers gave charcoal as *ghutti* to their infants. When asked why they used such a thing, they uttered that it had positive effects on the infant's health. It is used for the excretion of *daasa* (first excreta of the new-born baby). It cleans the belly and flushes all the dirty and harmful liquids out, taken inside by the infant during the stay in the uterus, and the process of delivery. They pointed out that *daasa* was a black colored first defecation of an infant because the baby excreted all filth out of his/her body.

**Sacred/Profane:** Traditional birth attendants believed that early milk is thick, yellow, and causes vomiting. According to a *dai* (traditional birth attendant), purity and impurity should be separated, "The mother should take great care of her body's purity. The mother should first give her saliva before initiating breastfeeding during the menstrual cycle and after intercourse. *Ghutti* with honey is compulsory. In the first three days, the baby is unable to suck breastmilk, therefore, fresh goat-milk must be given with a spoon

as an alternative. First, it causes loose stools, then the baby accepts it and becomes used to it. First milk has *cheeron* (gumminess) inside this, so it should be wasted for a smooth flow and initiation of breastmilk. We waste it because it is exactly similar to the first yellow thick milk of buffaloes and cows (*mal da naara*). If it is given, the baby vomits a yellow color material."

One traditional birth attendant opined that pre-lacteal is not harmful, and late initiation of breastmilk is justified. She stated, "mother should avoid breastfeeding when the body is in impure states, colostrum is thick and yellow, goatmilk is a good alternative meanwhile."

**Bad faith and misconceptions:** Medical professionals believed that this was a dangerous custom and one of the major causes of infections. One child specialist discouraged its use because of the local's perception in the following words:

> It is a local practice after the birth of the baby, and elders are unaware that the child's digestive system is not well equipped to absorb things, most often solid and liquid things. The little baby needs breastmilk, which is natural and absolutely and exclusively made for an infant. When people prefer cultural tips and skip the natural mode of feeding, they become worried and believe that there is some problem with the breastmilk.

**Religious and Cultural Approval:** Some locals had the firm belief that 'the Holy Prophet himself practiced this ritual.' Mothers and grandmothers had the common belief that the practice of giving first food to new-born was socially acceptable, and there was no reprimand from family and community for this practice. One mother repented as she could not provide pre-lacteal to her baby due to C-section when asked if she gave it or not. She complained, *'kithaan, bay riwaji jai hay'* (Alas! Baby was born without traditions) as no *ghutti* could be given; in her opinion, pre-lacteal was a good ritual and honorable practice. It must be done in honor of a newly born baby who comes to the world for the first time, so we must welcome the newborn first by giving some sweet thing or honey in the mouth.

**Behavior change in grandmothers:** *Ghutti,* whether it is of honey or anything else, was discouraged bio-medically by LHWs and doctors; however, people still practiced it frequently. Some mothers already knew that it is not a healthy practice because they were informed by the health department staff, particularly lady health workers.

One mother delivered a baby in the hospital, and the grandmother was already forbidden to give any *ghutti* to the infant. But she did not restrict, she went to a nearby tea shop and brought a cup of black tea prepared with buffalo milk, and sugar. She gave it to the child without anybody's notice, but later she was caught red-handed by a hospital nurse. She was reprimanded on this act. She was warned but she has had her work. No advice could convince her to avoid this harmful practice because it was dangerous to the health of the baby. The methods to persuade mothers and grandmothers were often ineffective and sheer fulfillment of formality by the health community due to weak will but blaming the poor, illiterate locals for not being prompt to accept biomedical recommendations (Aziz et al., 2015).

**Modes of applying *ghutti*:** One mother stated, 'our elders give *gur*, we place it under the tongue of the infant. Another mother articulated almost in the same manner, '*gur baal day taloon koon chipka daindoon*,' which means that jaggery (*gur*) is first melted and converted into powder (*shakar*) and finally pasted under the palate of the infant. Generally, rural respondents were not much conscious about hygiene and hand-washing practices, as is advocated by the scientific community. They believed that hands were not dirty until they have not done some dirty activity. They used their hands and fingers to give the infants something sweet and readily available to perform this ritual of *ghutti.* They did not wash hands with soap and then gave pre-lacteal. Also, the timing of this occasion is essential when all family members were gathered there to see the baby. In this hustle-bustle, everyone expects to perform the rituals as soon as possible without even considering the optimal hygienic methods. In some Baloch tribes, small *sippi* (empty seashell) is usually used as a spoon to give a little *ghutti* to new-born babies.

In a few families, however, hand washing is ensured before introducing some pre-lacteal. I asked respondents why they used honey. They replied it is prophetic practice (*Sunnah*), and it is suitable for health. However, one father opined, 'it is just a *savwan'* (symbolic value just a so-called norm of doing something to show as an important ritual), as only a meager amount and quantity of *ghutti* is given. Just a sweet finger and not a spoon is slightly touched with the tongue of the new-born, and it has no risk at all.

**Use of digestive herbs as *ghutti:*** Besides pre-lacteal, *ghutti* also is used for digestion, but not as the first given feed. Therefore, there are two types of "*ghutti*," one is the first food provided immediately after birth, while the other is that which goes consistently with the newborn. These *ghutti* include mostly company made (g*ripe-water*, *arq-e-shireen*, and *nou-nehal*) used for digestion every time mothers nursed the baby or bottle-fed their infants as well as young babies. Thus *Ghutti* is used in two meanings: 1) pre-lacteal and 2) thing for digestion (like *hamdard, arq-e-sheeren* , or gripe water). *Sonf, noushadar, paneer,* black pepper*, huqqa* water, and two other items, 7 in total are boiled in water and used as *ghutti* for infant and young children, one respondent retorted. A mother said instantly that they just let the child suck breast for the first three days and give just *hamdard ghutti* during this period. When asked by a herbalist if *ghutti* was good or bad? He uttered, 'who says *ghutti* is bad, if prepared with pure things like honey, fruit, rose flowers leaves, mint, cardamom and fennel.' With no artificial flavor, it is suitable for child digestion, and many mothers use it for newborn babies. They give it after breastfeeding, which helps in the proper absorption of milk. I questioned why biomedical doctors do not prescribe it if it is good. He replied doctors prescribe formula milk, which is bad. We never prescribe because we know it is not suitable for the stomach of a little child; *ghutti* or *arq-e-sheerin* (sweet fruit extract/nectar) is excellent.

### 5.2.2. Colostrum Wasting

Participants were asked what they think about colostrum (first thick and yellow-colored milk of a mother). Is it good or bad? What is its benefit or disadvantage? The local word *naar* means a woman, and *naara* means a thing belonging to a female. *Naara* is perceived as a male-gendered word. Gendered construction of the name *naara* shows how something of women is considered as male, perhaps due to having protection power inside this matter.

Only a few females perceived it should not be wasted. After all, it possessed high energy in it, whereas others believed it unsuitable for the newborn's stomach because it was thick, sticky, and yellowish. Those who wasted it were of the view that it was not good for the infant's health. The reasons were compelling, which exposed the participant's

beliefs and conceptions of mothers based on the physical and chemical properties of the matter, such as color, odor, smell, viscosity, stickiness, gumminess, and so on. The situation showed that people who lacked scientific knowledge were often trapped into this misconception because they simply went for outlook, color, and smell, and gluiness— so-called physical properties.

**Gumminess:** Many of these mothers supposed that there was gumminess (*cheerhon*) in its configuration. One Lady Health Worker stated, "most mothers waste colostrum as they believe that colostrum is thick and heavy, and causes constipation and stops first excreta (*daasa*)." They stated that it was adhesive and sticky to the fingers just like edible oil, so it is much heavier to the intestines of a little child.

**Indigestible due to Thickness:** It was painfully difficult to digest this condensed matter, and it caused swelling in the mother's breasts some months before delivering a baby. One mother and father informed me, 'they do not use colostrum as old women of our area believed it causes *aarra* (difficult to swallow due to gluiness and thickness) and causes swelling in the intestines as well as constipation in infants.' Another mother similarly informed, 'they avoid this because it sticks to food pipes (esophagus) of child and causes infection: no, senior women of our side advise this (colostrum) is *aarra* (thick, sticky) and causes swelling in intestines and constipation.'

**Lousy Odor:** Some mothers stated that bad scent in early milk due to prolonged stay inside the breast is the primary reason they wasted it. One mother stated:

> The smell of old milk is of acidic sour (*sandhan*) because of its nine-month-long stay inside the mother's breast, let it be ousted so that regular milk could start pouring out from the nipples. The standard liquid does not flow unless this decayed milk oozes out by squeezing and pumping the mother's breasts.

**Looks like Infection or spilled Milk:** Mothers guessed that the essence of first thick milk was hot and risky for an infant. One mother worded, "we don't give because it is very warm in essence, and it makes baby ill." Another mother informed, "We don't use *naara* because it is *phaita* (spilled milk)." When asked by the district coordinator of IRMNCH and Nutrition Program 'why people think colostrum is terrible, what are cultural reasons in these beliefs, in your opinion?' He replied that people consider, "*hik arsay da ganda katha thiya hoya mawad honday, rang wi peela hay, peep wali kar; sakoon karreer*

*andi hay, asan adhonn bal kon phus na wanjay* (it is expired and old material collected due to longer stay. Also, it's color is yellow, and it looks like infection and pus; it gives the feeling of contemptuous and abomination, and it can't pass through the baby's throat)."

**Grandmothers' advice/Intergenerational practice:** These things are common in society and are being transferred from generation to generation. This practice of wasting colostrum is transferred through generation to generation and grandmothers to mothers. Of mothers who wasted colostrum did it on someone's advice, especially grandmother or mother or mother-in-law. One mother stated:

> I lost my colostrum on the suggestion and guidance of my mother; I was not able to feed my infant due to unhealed stitches after C-section. My breasts were exceptionally pulled up; I used to feel much pain in my breasts as well as underarms. My mother helped me in massaging my breast with sesame oil and water, then I excreted milk through a hand pump, it was almost half cup of yellow, thick and glue type of milk, and then I added it into the mug of water which also became thick and yellow.

**Color dichotomy:** One mother argued: "its color has turned yellow now, and it is not good for baby's blood [of red color]. It can spoil a baby's blood and may also cause diarrhea if given in high quantities." One mother justified,

> This old milk was not good for new-born because it was stored in the mother's breasts for several months. It had expired and, therefore, turned yellow and pale, which shows that its original color has faded away now. We believe that it has become toxic now and should be urgently wasted. The breasts swell because they contain deadly substances like an infection and are unsafe to keep in the breasts for a long time.

**Impact of interventions:** Currently, mothers are slowly becoming aware of colostrum's use, as their access to lady health workers, doctors, and media is gradually improving. I met with some mothers who showed their knowledge on this vital issue. They also advised new mothers from their village that the use of colostrum is beneficial for both mothers and infants. One mother exclaimed: "milk is milk; we do not waste it."

One advertisement: *maan ka doodh, sonay ki boond* (means mother's milk, the droplet of gold) sensitize mothers about the importance of yellow-colored colostrum. The government's advertisement related the yellow drop of mother's first thick milk to the precious metal gold. Both gold and colostrum are yellow, and both are equally valuable.

**Novice motherhood:** Novice mothers need help and guidance during pregnancy and lactation and most of the mothers often depend on prevailing customs, therefore, the social environment plays a very positive role if provided by the family, hospital staff, nurses, husbands, mothers, and grandmothers. One mother explained, "On the third day of delivery, we came home; still, my milk was not secreting due to tensions that troubled my mind. But my family advised me to nurse your baby because it protects a woman from diseases; therefore, I tried again and again, and ultimately my breasts engorged with milk." A 36 years old mother asserted that she breastfed her baby improperly for a long time until one of her relatives noticed her breastfeeding in the wrong way and taught her the correct method.

> Worried, she said your baby is not sucking your milk, do you know that, is this the sucking sound? You don't know how to feed a baby. If you permit me, I can help you breastfeed properly. I gave her permission. She then cupped my breast from the bottom and entered the nipple in the baby's mouth, and the baby started giving *nukh/chabb* (milk sucking from the chest), and plenty of milk went into baby's stomach through mouth this way. I soon realized that I had wrongly breastfed since "Day One." I became aware of this sad fact very late and lamented how, due to my lack of experience, my baby used to remain hungry while I was breastfeeding. The baby was living on the formula milk feed. Now I repent that I could not correctly feed my baby due to ignorance of our elders of the family.

The educated and urban mothers fell prey easily and quickly to formula feeding because of their better access to the market and due to the recommendation of the biomedical community. It was evident that poor rural mothers relied on breastfeeding instead of formula milk [along with extra foods, loaf, butter, biscuits] because they had little knowledge and exposure to formula milk producers. Educated mothers can indeed have better access to preventive and treatment benefits, but as far as cultural practices are concerned, education is not all the time relevant to contradict such harmful nutritional habits.

**Difficulties in breastfeeding after cesarean:** "Delivery" is a difficult time for a mother. Some mothers who even delivered babies without C-section could not breastfeed timely. One mother remarked, "I could not initiate it early because the delivery was so horrific, stressful, and painful that I didn't even want to see my baby's face so soon after birth." Caesarean is more painful than a simple delivery. It is almost impossible to

breastfeed immediately. Due to C-section, some mothers initiated breastfeeding after three to four days, and during the initial days, infants drank only formula milk in bottles.

> I breastfed my baby after four days of delivery as it was tough to feed the baby within one hour." Due to this, the baby was given infant formula milk as the first feed.

One mother expressed that she was admitted to the intensive care unit after C-section, and her baby could not be breastfed timely. She stated that she felt there was no milk at the time of delivery. Her baby tried to suck breast but could obtain only a drop. In a few cases, doctors advised to drink plenty of water after C-section operation, and after some days, the breasts would start producing milk, and the baby would start taking her feed very late. During the non-breastfeeding days, the baby was given bottle milk. In many cases, medical doctors and *dais* did not advise mothers and attendants to initiate timely breastfeeding. In a few instances, lady doctors reportedly restricted mothers to drink enough water, despite the fact new mothers had to breastfeed babies and to take strong antibiotics after C-sections.

As few mothers highlighted cesarean was becoming popular among urban and educated mothers, and doctors seemed to carry it out unnecessarily sometimes, it was common after the operation that medical doctors were automatically prescribing some formula milk to the baby. In this way, breastfeeding was skipped, and dependence on the company milk was started. One mother illuminated that at her first pregnancy, she was sick and used high potency antibiotics, she was coughing continuously and had difficulty in breathing, and one doctor recommended high potency antibiotics. She argued:

> The doctor did not recommend mother's milk but prescribed *Celia*, a formula milk substitute available at the pharmacy of her private clinic. In my cesarean case, I had to bear a lot of pain. In this situation, I was unable to breastfeed. Also, breasts were swelling because of thick milk in it, but nobody guided me to give early milk to the baby; in the first three days my baby could not drink breastmilk even though I was discharged from the hospital. I discussed this breast swelling condition with my mom, who advised me to waste the colostrum because it has become very old now, and therefore, harmful to the health of the baby. But, later, I was told that what I did was totally wrong. I was unaware of the vitality of this thick golden matter, which is believed to be very important as initial feed for an infant.

Novice mothers usually trust old age experienced ladies, especially mothers and grandmothers, who easily convince young and newlywed women to follow their instructions. Mother stated:

> It was my strong faith in my mother’s experience that she was right if she had suggested wasting colostrum. My daughter was born underweight; I was so worried about her rare condition. So, I wasted my yellow, thick, glossy milk by a pumping instrument that was already present in my grandmother's house. She used to lend it to everyone in such a situation. My mother also helped me in massaging my breast with sesame oil, after the massage I fitted that pump to my breasts’ nipples, then I pumped the plastic balloon which was able to suck the milk. At this time, I could have given my milk to my infant with a spoon, but I was not aware of this precious God gifted thick milk, so I wasted it when I poured down the liquid into a cup, water got dense with the thickness of early milk. It was the first-time my kid's health and nutrition was destroyed. After that, I started to breastmilk. But she could not drink properly. She is now five years old but still weak and thin.

**Methods to excrete colostrum:** Mothers used some techniques to discharge this condensed matter from their breasts. They explained that they wasted by pressing and squeezing simply with the help of their hands or with the help of a machine or tool, available in the market. Birth attendants also were reported to help mothers to pour this thick and sticky material out of their swollen breasts. When asked a mother if she excreted colostrum or not? She expressed, “my husband’s sister paid money to a *dai* who emptied her breasts; neither I had the money, nor could I waste it.” It indicates how colostrum wasting has been developed into a profession.

**Stigma and negative outcomes:** The consequences are sometimes severe. Children who have missed colostrum and optimal breastfeeding bear a heavy loss and irreversible repercussions, stigma, and social stigmatization in the future. Mother further illustrated:

> Parents of malnourished children are blamed as people generally comment that ‘you eat everything but do not give food to your weaker baby.’ My malnourished baby often listens to rude comments. Family members meet and taunt ‘you did not improve and still look the same as you were born.’ People do not take care of the feelings of children. She can eat fruit and drink some milk, but she does not like a loaf. I still think that being a mother, it was my

> fault that I wasted my vital substance (colostrum) at the early stage of her growing age.
>
> We must not trust our elders, my mother, as well as my grandmother, did not inform me about the importance of first mother milk. It was their responsibility to make me aware of first milk; they should not have wasted my colostrum. Now I advise every pregnant and lactating woman to be mindful of this very first yellow-colored colostrum milk and ensure that the baby takes it compulsorily. My baby is still thin and has a poor appetite and wants to be healthy, knowing that more youthful children look more beautiful than weaker ones. My kid compares herself to other children and feels inferior. I wish I hadn't wasted my thick milk and given her that milk by spoon if breastfeeding this dense matter was complicated.

**Positive effects of breastfeeding:** Mothers who did not waste colostrum opined that the first early milk was beneficial for the child's health and protected them from illness and infections. One mother reported that her mother-in-law had advised her to 'give colostrum even if many oppose it because it cures stomach swelling and *tabkheer*' (acidity; vaporization of contaminated food).

Psychological and cognitive development can be associated with breastfeeding. Lactation was found to be a cure from fear and build the confidence of infants and children.

> Lactation is a reasonable period because a mother spends enough time with her baby and sleeps for a long time. The child doesn't feel alone but feels secure and confident when sleeping with the mother. A beautiful attachment is developed between mother and child during the lactation process.

It was revealed that low weight babies could not be breastfed in full because much energy is required for sucking milk from the breast. One mother posited:

> As against my weaker baby, my healthy baby sucked more milk. He used to produce sounds while drinking breastmilk. When his speed of sucking breastmilk fastened then, I used to feel that he was sucking a lot as I was listening when milk was passing through his mouth to the belly. The child's head-top is sweetened during suckling because he exerts energy. It informs that the baby has drunk a lot and will sleep now. I breastfed for two years, and the baby remained healthy and didn't become sick in this duration.

Mothers explained multiple advantages associated with the behavior of breastfeeding. Benefits of breastfeeding for mother were mentioned in the following words:

> Several benefits of breastfeeding were observed in my body. For example, I didn't become obese; it stopped pregnancy, belly did not enlarge, aging delayed, and better psychological impacts emerged. But most important of all is the mother should be happy because a healthy child requires a happy mother. I used solid food after five or six months. Solid food is comprised of many types of *halwa* (sweet dish) made up of apple, banana, potatoes and desi egg yolk, *cerelac*[13], rice pudding in the dairy-based diet. I fixed time for food, but at night I just used my breast milk. I stopped my breast milk after he was two years old. He became weaker like my first daughter. He also does not feel much appetite.

Weaning was found to be a difficult task for mothers, and they had to try different techniques for this. One mother remarked:

> When a tooth erupts, it becomes difficult to breastfeed because babies frequently bite and injure the mother's breast-nipple. Weaning becomes very tough when a young child has become so habitual. Mothers try multiple methods of weaning such as *musabbir* (a bitter substance) salt, and tooth-paste so that the child may feel irritation.

### 5.2.3. Breastfeeding Exclusivity

When asked a mother what foods you used for six months for a child. She said, 'We give biscuits, tea, and milk 5 to 6 times daily.' Some mothers were observed giving tea, water, biscuits, butter, rice, fruit, yogurt, and Nestlé's *cerelac* to their children, even at the age of three, four, and five months. Many mothers realized that 'water in summer is necessary because the child feels thirst.' They believed that some drops of water were compulsory before the sixth month because infants' lips become dry. It was not abnormal for mothers to give their infants water, rice and butter, and biscuits during this time. However, some mothers introduced other than these like *sabodana* and egg to infants. One experienced mother reported:

> I have produced four daughters consecutively, but it was the fifth time I gave birth to a male child. He was born in winters; we gave formula milk (*Lactogen 1* of Nestle's company) but was infected with pneumonia. Mothers can't

[13] *Cerelac* is Nestlé's processed food product, mostly mothers in urban settings give their babies above 4 months as complementary food. It has multiple flavor and types, like rice, wheat, fruit, yogurt

> diagnose this disease quickly. Now I have realized that if you want to save babies from illness, give your breastmilk.

*Junj* is a local practice of introducing a baby with soft and sweet home-made-butter at the age of one and a half months (*Challia*-40 days). Mother and child are forbidden to drink water after eating butter as it may cause respiratory and throat problems. Their babies were frequently observed with conditions such as chest wheezing and nose flu. Some mothers mixed different things into butter to make it more delicious so that the baby can eat as much as he likes. Several times this practice has been reported with diarrhea, but not all cases were reported severe with the introduction of butter. Some mothers introduced *khoya* or *halva*, (sweet cream made with prolonged boiling of milk's water evaporating), having faith that there was power in this dairy product which can make the baby healthy irrespective of his/her age and situation. One mother was even observed in a hospital, giving this dense food to her baby already suffering from diarrhea.

**Giving *Junj* (butter) and massaging the body (*aadhana*):** Some mothers used different things like butter, water, biscuit, rusk, and rice to their babies before the age of six months. The grandmothers and mothers-in-law advised young mothers to introduce some things. The customs of their in-laws also influence the educated mothers as one mother revealed:

> I gave water and *ghutti* and *chaata* to both babies. From a very early age, I have been giving my babies a chunk of butter. This butter is mixed with *noushadar* and *misri* (crystalized salt and sugar) and it becomes very delicious and thin. Baby does not eat it well and weeps first, and it can come out of the baby's nose. As butter is soft, so if you press the baby's nostrils it goes into the belly. After giving enough quantity of this *Junj*, *aadhana* (body massage) is performed with the butter and wheat flour because the baby takes a deep sleep, and hair on the body is removed. And when the baby wakes up from sleep, he or she is given a bath. I don't drink water while breastfeeding because it may cause flu to the child. I gave the breast to the first child for six months only.

### 5.2.4. Complementary Feeding

After the third or fourth months of birth, economically well-off people usually gave infants an egg, yogurt, fruit, and *cerelac.* In contrast, poor parents managed to give milk of

buffalo, cow, or goat along with potatoes. It was found that in majority cases, cow, buffalo, or goat milk could not be absorbed by the infants and caused severe diarrhea. Pediatricians at CMAM program informed that the outer milk of buffalo and cow is one of the significant causes of severe acute malnutrition.

When a young child is enabled to crawl (*baambro*) on the floor, s/he puts everything in the mouth, whatever is found, such as shoes, mud, or lime. For these reasons, a child needs more care from parents and caregivers, and working mothers are often unable to do so. When a child grows up, it experiences new things. At this age, some children initiate eating mud scratched from the walls, and due to this, mothers become fed up with their habits. Mothers often throw "red chili" water on the mud walls so that the sour taste could kill their addiction. These mud-eating children also most frequently suffer from worm infestation and hence get less amount of food than needed and become anemic and malnourished because of this dirty and unhygienic activity.

It was surprising to know that the amount spent on food was much trivial in households, as it was the low priority area. Thus they spent very little on the diet of children and mothers. The effect was the loss of food diversity. The most common food used was wheat, potatoes, and peas. The milk, meat, and fruits were unavailable. Many of the respondents wished for beef, dairy, and fruit because they had low capacity to buy these items from markets. They often had to eat the same food daily. When asked what impact of income on the diet and health of the family. Most respondents informed that they felt energetic when they earned well. And when their earnings were low, they were under stress in the struggle to save money, so they spent less on food. One mother narrated:

> I had already produced two daughters. In my third pregnancy, I was expecting a male child, but an ultrasound report made me so depressed when it exposed that the growing baby was not a boy but a female once again. Because of this disappointment, I quit food and did not care much about myself. My third daughter was born very weak, and she was sucking her thumb at the time of birth. She even got a habit of sucking her two fingers later, and her fingers got contracted because of persistent sucking habits. She could not be breastfed properly. She was once infected with diarrhea and then left this habit. She is still stunted and low-weight. Our family often insisted on her eating adequate food; but she takes an interest in *baazari* (market junk food) and spicy things. She is often singled out because of her weak body.

The mother further advised to only rely on healthy and natural foods both for child and mother. She suggested, 'after six months never give *cerelac* (A product of Nestle` company for complementary feeding), although it is easy to prepare, and moms feel free in this way, children get deprived of several natural nutrients so ultimately get sick. Despite this, mom should prepare hand-made complementary foods such as meat, soup, and rice. Mother should also avoid low quality open (*baazaari*) things.' Mother also highlighted that rural women were selling milk. Previously, these rural communities used to drink milk or *lassi*, but now they sell it because it gives them few earnings.

Some mothers described that young children's diet included cow or goat milk and potatoes. Most of the complicated severely malnourished children reported diarrhea when a cow and goat milk was initiated because formula milk was too expensive, and they did not have enough money to buy that. One mother replied, 'her child of two years eats biscuit, cake, sabudana (Tapioca Pearls), *halwa* (a sweet), rice, along with breastfeeding.'

Children's daily diet comprised loaf and milk, a poor mother articulated. Young children were also frequently observed, eating many unhygienic, uncovered, and low-quality, market-based products. Even malnourished children were given *papur*, *samosas and pakoras* (local foods) sometimes roasted in a low-quality oil, but available at lower prices. In poor households, ' little amount of milk is mixed with water and distributed among all household children on an equal basis, more frequently goat milk is given to children. Off and on, fruits were available, but could not eat meat, nor milk, egg once in a blue moon. Children eat *bhatt* (rice), *sewayan* (vermicelli), however, they can only eat eggs in winter, but cow's milk is more common. Eggs, potatoes, *khichri* (rice and pulses mixture), *dallia* (porridge), and soft things should be given to babies along with good food for mothers. There is no exceptional food arranged in the households but whatever such as pulses, peas, potatoes, eggs, and whatever available and cooked at home.

It was observed that in many households, there was a culture of eating ***chai papay*** (rusk with tea) at breakfast. The use of this type of food that contains carbohydrates only is unable to meet the dietary and nutrients requirements of mothers and their young children. On many occasions, this feed was offered to small infants because every time the mother was not ready to breastfeed. On several occasions, grandmothers gave biscuits and

rusks to infants and young babies with unwashed hands along with water and compromised exclusive breastfeeding.

### 5.2.5. Breastfeeding Duration and Frequency

The total period of breastfeeding (duration) and the number of times (frequency) a baby is breastfed has vital importance for a growing child. Even low birthweight baby reportedly recovered with breastmilk frequency as one mother reported:

> My first baby was born weak, but she started to grow up rapidly as soon as she was breastfed on a regular basis. The frequency of breastfeeding was so high that she used to be breastfed every 20-30 minutes. In very little time, she gained weight.

Most of the mothers could not breastfeed their babies owing to pregnancy and high fertility. The first two years of a child's life are imperative for the full growth and development and that of young children. Working mothers complained that the frequency of breastfeeding was interrupted, and they could not satisfy their children's quest for breastfeeding because of their work burden that includes fieldwork. Low breastfeeding can make babies sick, and working mothers have no alternative; they skip breastfeeding frequency and duration is lowered, and the chances of getting pregnant increases. One mother stated:

> My second child is a daughter who is one and a half years old who often gets sick. I have breastfed her for just eight months and stopped breastfeeding because I had to go to school. When I used to return from work, I was too exhausted to feed her. I have given her tablets [antibiotics] for 10-11 times so far.

Then their babies were taken care of by grandmother, siblings, or other close family members. They used to prepare formula milk in their absence. Mothers further stated that bottle-feeding needed extra care, but no one cared much in their absence. They just fulfilled a formality and gave prepared feeders that were improperly washed with the result that germs were not removed. One mother working in public sector schools suggested that maternity leave should be increased further up to six months so that they could exclusively and continually breastfeed without work pressure. Also, it was revealed that many mothers

did not know about washing bottles or feeders. They first boiled baby-bottles and afterward washed mostly with detergents. In their opinion, detergent was more effective than merely washing with a soap bar. Washing bottles after boiling was useless. Mothers were advised to wash bottles, but the proper way of doing was confusing for illiterate mothers.

During FGD, mothers explained that their men rarely felt that females had an extra burden on them. They more often did their work without household support. Poor mothers were found exceedingly helpless on these issues. They had to work both for income and for the household. They said that they had to care for children, livestock, besides house and fieldwork.

**Breastfeeding demands energy from mothers:** One mother informed, "When a baby inserts foot's toe in her or his mouth, the baby is believed to have so far drunk almost 40-kilogram breastmilk of her mother." It implies growth depends on a large quantity of breastmilk. One grandmother highlighted the significance of breastfeeding in the following words: "***sona pighalday taan baal palday***" which means that the child grows after challenging activity of breastfeeding, especially golden thick colostrum. This shows the grandmother's awareness about the importance of the vitality of mothers' first milk. However, due to specific social and cultural reasons, beliefs, behaviors, and practices, breastfeeding is undermined. One mother believed:

> When I get up in the morning, my face looks very healthy. I start breastfeeding after breakfast and continue till evening with several intervals. In the evening, my face looks shrunken and squeezed. Breastfeeding is not a joke but takes enough energy from the mother.

As mothers feel dehydration and hypoglycemia without drinking and eating, therefore, regular diet maintenance, especially during illness, is strongly advised. This might be a strong rationale that most of the mothers quit breastfeeding during disease because they feel low on energy and, therefore, an excuse that breast milk is polluted and not safe for the lactating baby. She further explained, 'Now I don't want to be pregnant again, I feel exhausted, and I have no energy left in my body. All my babies were normally delivered, but last time I had requested the lady doctor to operate because I was so weak, lazy, and sloth that I could not normally deliver a baby during labor pains.'

Mother expressed that giving birth necessitates much energy; delivering five times has made her so malnourished and weak, and she has no more strength. Maternal malnutrition is considered responsible for reduced child breastfeeding. As she further continued:

> My third daughter and last son are weak. My third daughter was not optimally breastfed because I was so feeble. Her weight and height are less than the rest of the siblings. As I am a teacher, I go to school daily, and I had to leave my children in the custody of the grandmother. My son gets sick very often because of bottle milk, most of the time, due to an un-cleaned feeder by his grandmother in my absence. The immunity of my son is deficient as is he often sick.

**Breastfeeding barriers:** Many mothers leave infants and young children behind. But few bring babies to the workplace in the fields during the harvesting season, put the child in a *ghanguti* (hand-made cradle made of a large cloth) so that the baby can sleep well. The baby is checked off and on if she or he is sleeping. Some mothers reported that they did not breastfeed after the first trimester of their pregnancy. Some lactating mothers opined, 'they quit breastfeeding babies as this milk may cause diarrhea during pregnancy.' Some mothers expressed, 'if a mother is pregnant with a male sex child and she breastfeeds a boy child, it will not affect suckling baby. They believe that the same-sex of babies will not react, but the opposite sex of baby inside and baby outside might be harmful. Some mothers also stated that they breastfed boys longer than female children because of social construct "***dhee praya mal hay putar apna bal hay***" (the daughter is property of husband after marriage, but the son is our child).

Illness makes mothers reluctant to breastfeed their babies, as in their opinion, milk becomes polluted and unhealthy that may cause morbidity among babies. Some mothers try their contaminated and poisonous milk tested by a so-called experiment. They collect a small sample of liquid from an ill mother in a spoon or small cup and insert an ant or honey bee into this. If the ant dies inside milk, they believe that it was due to poisonous milk of the sick mother and therefore had become non-drinkable, and if an ant or bee remains alive, the milk is perceived as healthy and drinkable.

Some of the participants believed that when a mother is sick and taking medication, milk becomes stale and unhealthy because medicine is mixed in this milk.

These mothers expressed that their milk got bitter after taking bitter pills during illness, and the habit of breastfeeding gradually reduced. However, some mothers showed, 'a child must be given breast milk during sickness, women who do not give milk they do wrong; it is a sin and doing *Shirk* (equating with God).' Some mothers postulated, 'mother milk is not good when the mother is sick it should not be given.

Everything vital and vigorous in local wisdom might be harmed by the bad-eye; this concept guides their behaviors. It is supposed that breastfeeding can be interrupted due to jealousy and the evil intentions of others by spirits. One mother stated, "our elders say the mother should never give *bubba* (breast) with wet hair in the mouth of her suckling unless she tightly controls her black hair-curl in her mouth while breastfeeding." Also, the mother is forbidden to make a cat frightened and run away while breastfeeding; if a cat crosses mother, care is necessary for forty days. One young mother informed me that breastfeeding should not be preferred on inauspicious events:

> On one occasion, when I returned home from attending the death ceremony, my child was at home, in fact, waiting for my arrival, and I immediately started breastfeeding my baby. My mother stopped me from breastfeeding and asked first to wash your breasts because I was coming from an ill-omened ceremony, which might bring misfortunes for your small baby. I obeyed my mother and acted upon her advice, as it seemed appropriate to me.

It is noteworthy how religious beliefs and the role of grandmothers are significant and influential for infant and young child feeding. More interestingly, one mother reported that her mother advised her not to drink water "during as well as before" breastfeeding because it may pass into the breasts directly and make breastmilk diluted and thin. She, therefore, suggested:

> If a mother is exceptionally thirsty, she can hold or raise her breasts upward lest water goes directly into breasts; then she can drink the water.

**Breastmilk and sex:** Some mothers believed that if a woman does intercourse with her husband and breastfeeds her baby afterward without taking a bath, the child gets *haram* (illegitimate) food, and therefore is believed to be an illegitimate baby (*harami*). They also reasoned that pregnant women should not continue intercourse after

the sixth month; otherwise, the child might become a *Jurmi* (criminal), and tend to commit illegal acts and moral crimes in the future. It indicates that breastfeeding may be affected by intercourse if it is done without a proper gap and after cleaning and intercourse, even in the trimester, when the baby has sufficiently grown up to indicate duration and timing. The concept of liminality fits here. It should be deconstructed in the way that breastfeeding is a cultural act of sacred nature, whereas intercourse is a sinful activity, a profane action, and religiously un-sanctified.

There must be a gap, and their closer intersection envisages a violation of God made natural rules and regulations. It indicates that the practice of breastfeeding is restricted in certain circumstances because the timing and occurrence of two opposite phenomena do not look suitable and appropriate. Restricted breastfeeding has a strong reason behind the low energy intake that can consequently develop malnourishment. In literal meaning, *harami* is a child who is born as a result of an extramarital affair between a male and a female without a socially and culturally approved marital relationship. It is considered a taboo in the Islamic society. But society derives meanings from socio-cultural acts. Few mothers believed that breastmilk should be restricted soon after having intercourse because the child drinks milk from the profane (*paleet*) body of a mother. Milk is a sacred thing, but sex is lewd; therefore, a gap is imperative. Hence, taking a bath is highly appreciated before resuming breastfeeding to the baby. It has consequences such as deviance of the child in later life if the child is grown up with immoral sin. Low frequency and extended intermissions in breastfeeding are, however, believed harmful.

**Breast hiding at public places:** If a mother has no milk, another woman might breastfeed. Breastfeeding is not much restricted in the presence of close relatives in rural areas unless there are so many people. Income, education, and surroundings also influence breastfeeding. Bottle feeding is more prevalent among educated and urban families because breast-exposing is a taboo there. One LHW stated, “it is challenging to breastfeed openly in the presence of males. One mother expressed an interesting fact, “an educated and well-dressed lady cannot breastfeed than a woman hailing from the lower class and who is illiterate.”

On the contrary, poorer females seldom felt shy while breastfeeding in comparison with literate and better-off women. Breastfeeding behavior of women from the uneducated

class was a natural and casual phenomenon. I observed many places and instances where rural mothers who did not bother much about the surroundings if babies demanded breast, they started feeding the baby without any shame. However, such behavior was immoral and unethical, especially among urban educated mothers; therefore, they avoided exposing their breasts in front of the public. The practice of breastfeeding among females is closely related to the concept of *purdah* (veil). There are specific roles and responsibilities assigned to various types of women. One educated mother stated, 'it is a source of shame for her to show breast in public.' In contrast, an illiterate mother contended, 'breastfeeding at any public place is not awkward for me; it is rather compulsory to breastfeed a crying baby.' One mother asked, "how can a lady breastfeed in front of males who even don't spare gazing at you all the time, who see your naked face, hands, and feet, will they not see your breast? It's better to avoid it in public places."

## 5.3. Discussion

This chapter analyzes beliefs, knowledge, and practices about IYCF. It starts with the practice of prelacteal (*ghutti*). The question arises why the word "*ghutti*" is a female-gendered construction. The reason behind is this construction is that its quantity is minimal and the smallest. Culturally female is considered minimal, lower, and inferior to the male. This custom is traced back to centuries, as expressed by respondents. The findings revealed that *ghutti* is a widespread phenomenon, as given in multiple settings and contexts by the majority population. A study by Raina, Mengi, and Singh (2012) similarly found that 88% of Muslim mothers gave pre-lacteal in Indian Kashmir. Previous studies in the same context (Zakar et al., 2018) also showed the universal prevalence of pre-lacteal. However, their study lacked some deeper analysis as Rajanpur is predominantly a Seraiki area, and locals use the word *ghutti,* not *ghurruti ,* as has been employed by in their finding. The Seraiki does not articulate the name "*Ghurruti*," it is, in fact, a word from the Punjabi language, which is derived from the word "*gur*" (jaggery) that means a piece of *gur.*

Other studies also demonstrated pasting sweet (a drop of brown sugar) on the upper palate of new-born as very popular among Muslim communities around the globe (Mckenna & Shankar, 2009). These practices keep a symbolic value, which is thought necessary to inculcate religious ideology along with food. Symbolic importance is much

higher than first the food itself. The ritual is so crucial at birth that it has a reason to value. Some studies also have highlighted the elders chewing date or something with their saliva, and giving it to new-born has positive impacts on their health because saliva chemically contains enzymes and some antiseptic properties in it. Giving spit is symbolized as love and emotional attachment, along with transferring of qualities of giver into the receiver.

Studies also found that mothers' breastfeeding practices improved with social capital (Anderson et al., 2004). Social capital also plays a significant role in making mothers aware of those factors that possibly control and prevent ill health and malnutrition. The overall national literacy rate in Pakistan is low and gender-biased. In Rajanpur, the district literacy rate for both genders is lowest in the whole province. Similarly, progress in the maternal, newborn, and child health and nutrition is lower than in other low- and middle-income countries (Pakistan Demographic & Health Survey, 2012). Literate parents have a very low probability of having malnourished children (Hackett, 2015; Semba et al., 2008) because their education improves their access, care, and opportunities and low investment on a health-related budget (Alderman, Behrman & Hoddinott, 2007). Beliefs and behaviors also vary depending upon the social and economic capital, entitlements, and political-economic context. Good and bad feeding has strong roots in poverty and illiteracy. The cultural knowledge and behavior of mothers influence immediacy, exclusivity, duration, and frequency of breastfeeding (Butte, Lopez-Alarcon & Garza, 2002).

The custom of pre-lacteal is quite meaningful for the community members because certain beliefs exist behind its application and prevalence. Medical knowledge perceives this meaningless and ignores this socially and culturally constructed expertise and tries to ignore the traditional pragmatism. Before changing local's behaviors, bio-medical professionals must be mindful of the sociocultural "realities." The local's beliefs in religious ideals of "profane" and "sacred" must be acknowledged. The medicinal use of pre-lacteal of a warm thing to excrete dirt and pollution from the body and prevent infections is also relevant. The identity construction through transferring the noble qualities of a pious person is significant too. Biology is shaped through cultural knowledge. Medical knowledge, therefore, first needs to deconstruct the cultural formation before the biological intervention. For effective interventions, other necessary structural inequalities need to be minimized, and a positive social environment comprising income, education, social capital,

(Kawachi & Berkman, 2000) as well as cultural capital (Boudieu, 1994) ought to prevail in society. Otherwise, chances for desired changes in locals behaviors are not as high.

The activity of breastfeeding and infant young child feeding were affected by several ways and routes. The immediacy was impacted because locals introduced pre-lacteal. Breastfeeding early thick, yellow, sticky, and smelly colostrum is often painful and challenging, especially for young mothers. Mothers reduced breastfeeding when work or fertility burden was high. Some women became indifferent when they knew through ultrasound that the female sex was growing in the belly, and did not breastfeed adequately after birth.

When cow milk was introduced to infants, it caused allergic reactions and diarrhea in the majority of the cases. Feeding a baby in better-off households was also influenced by the marketization and formula milk recommendation because they afforded to buy it. Exclusive breastfeeding was not followed, and water, tea, biscuits, butter, cow milk, and loaf were used. Factors including gender norms, fertility, illiteracy, and players like grandmothers, mothers, biomedical community, and traditional birth attendants were found as the most influential in the socio-cultural milieu.

The immediate breastfeeding was avoided by the mothers owing to multiple reasons such as delivery was horrific; early milk causes constipation; it stops the first excreta; it is difficult to swallow due to gluiness and thickness, and it causes swelling in the intestines. Mothers limited diet and hidden hunger also influenced breastmilk production. Stress and lack of peace at homemade breastmilk dried. Household domestic female servants suffered from this. During illness, mothers preferred bottle-feeding because they might transfer her disease to the baby, in their opinion. Also, breastfeeding got difficult when a mother was stressed.

Local's explanatory models were simply analytical to categorize linguistic realities. Indigenous knowledge showed that their understanding was based on binary opposite constructs. Often magic uses contradictory laws. Spiritual etiology of diseases and the concept of transfer of nobility and qualities seem the same. People believed that disease and malnutrition transfer from one body to another through spiritual means. The medium is unknown in this transfer except for a magical and spiritual body. The model of spiritual etiologies works here.

The mothers believed breastfeeding after intercourse may make a child sick. The mothers also quit breastfeeding during illness. They constructed that polluted breastmilk makes a baby sick. Supernatural means of treating ailments through amulets, magico-religious, covenant, and spiritual healing methods were used. A unique socio-cultural environment constructed by dichotomous constructions [sweet-sour (*meetha-khata*), hot-cold (*thanda-garam*), sacred-profane, purity-impurity (*paki-paleeti*), dirt or pollution, spiritual and magical etiology of illness] dominated the local social psychology. Such ideologies further trickled down deep into their attitudes, beliefs, and behaviors, which ultimately influenced their care, cure, and feeding practices (Anderson, 1987; Farmer, 1988; Hurtado, 1989).

Anderson (1987) stated that hot/cold medical belief systems codify human experiences of hypothermia, heatstroke, and fevers, so the coding of foods as hot and cold can be related to a system of sensory cues. Literature from Guatemala (Hurtado, 1989) also found breastmilk's role in the etiology of diarrheal diseases in the lactating child. He observed diarrhea was either due to indigestion or evil eye, or when the milk becomes very cold or hot, or when hot-cold balance disturbed. So after birth, specific diet, activity, and personal care are advised. Lactation is perceived as a warm state, while postpartum as cold; therefore, lactating women should avoid hot foods. Also, mother milk may be affected by anger or fright. Thus treatments vary as per supposed causes, bringing changes in diet, remedies, and even complete weaning.

The biomedical community often gives mothers a lot of instruction about exclusive breast-feeding without recognition of the constraints. Encouraging exclusive breast-feeding also can tend towards deprioritizing a mother's health when she is malnourished. Using labels of good/bad and proper/improper when it comes to feeding practices reveals a public health lens by most of the researchers. One may apply the same to writing about myths, misconceptions, and beliefs; work by Good (1993) about the distinction between Knowledge and Beliefs, which scholars so often apply to those we study. Biomedical training is deemed knowledge. Those with a different epistemology, or perhaps a religious model of health, might see everything that biomedicine has studied as "belief." Both dwell in distinctive worlds of meaning and experience.

Literature indicated that the introduction to the first food is recognized with a formal ritual, much like naming ceremonies, and circumcision. The caregiver's feeding behaviors impact the nutritional and psychological outcomes of infants and children. *Junj* is given to the child in the current study before the age of six months, which more frequently caused multiple infections related to the stomach and lungs. Previously, some studies (Kapur, Sharma & Agarwal, 2005), also indicated that child growth is stopped due to the early introduction of foods. Studies similarly found that breastfeeding was initiated late because of labor pain, cesarean, the introduction of newborn to pre-lacteal, and lack of mothers' milk or wasting colostrum (Zakar et al., 2018). Delays in the early initiation and cessation of breastfeeding are owing to local belief patterns (Raheem et al., 2014; Ludvigsson, 2003).

Mothers wasted colostrum as a preventive strategy because it was considered difficult to pass through the baby's narrow throat. If the mother is ill, they stop breastfeeding. According to many women, colostrum was smelly, thick, gluey, sticky, yellow, spoiled, poisonous, expired, burned, warm, and the result of some infection. Therefore, it was wasted. In a related thread, colostrum is understood as per local and cultural interpretations (Lingam et al., 2014). Spilled milk can cause illness. Gluiness, stickiness, thickness, pale yellowish color, and pain to excrete this matter make this stale milk disapproved and rejected. But the introduction to alternatives such as formula milk is considered safe because it is prescribed by a nurse or a doctor (Wright, 1993).

Early introducing of foods reduced breastfeeding frequency (Menon, Bamezai, Subandoro, Ayoya, & Aguayo, 2015), offering complimentary commercial foods like tea rusks (*papay*) (Mohsin, Shaikh, Shaikh, Haider & Parkash, 2014) expressed mothers' knowledge, attitude, and practices about exclusive and complementary feeding. In Afghanistan too, diets were limited in diversity, mostly commercial, like bread and tea, rice, wheat biscuits, Nestlé's instant cereal, *Cerelac*, and other non-healthy commercial products as against traditional ones (Pelto, Armar-Klemesu, Siekmann & Schofield, 2013). However, this study showed breastfeeding was very common, everywhere, with no indication of breastfeeding's early cessation.

This research observed and investigated breastfeeding behaviors in mothers, barriers they faced in the smooth practice of breastfeeding, excuses for a late start, alternatives to breastmilk, and reasons for breastfeeding cessation. The present research

findings, much similar to Ahluwalia, Morrow, and Hsia (2005), suggested breastfeeding supported soon after delivery because women had to face difficulties in optimal breastfeeding. Novice mothers were more likely to halt breastfeeding in the first four weeks due to sore nipples, insufficient milk supply, babies showing difficulties, and the belief that the infant was unsatiated.

However, the most willing lactating mothers who struggled through these difficulties successfully breastfed. Good relations with the husband and in a peaceful environment in the household were found very encouraging for breastfeeding. Mothers busy at work, worried due to income or employment, water fetching, and other economic issues were unable to respond appropriately to the lactational need of infants and young children. As Farmer (1988) observes illnesses speak louder than words, etiologies predominantly biologic, but culturally sanctioned causes of illness, and somatization of distress as a form of women's protest. Likewise, Obeyesekere (1985, p. 148) stresses that the "work of culture is the process whereby painful motives and affects such as those occurring in depression are transformed into publicly accepted sets of meanings and symbols."

Mothers informed they stopped breastfeeding after intercourse. Breastmilk is considered as a holy activity while sex and semen as profane one, therefore, both must be separated. Similar dichotomy and separation are evident in other ethnographies, such as in the African context, where intercourse during breastfeeding is supposed to cause kwashiorkor and malnutrition (Douglas, 2003; Howard & Millard, 1997). Formula-fed babies were observed more vulnerable to mortality, morbidity, and malnutrition. (Stuebe, 2009). Good maternal diet can only guarantee proper breastfeeding to babies

This research assessed how mothers knew and adopted feeding practices and revealed that breastfeeding behavior was influenced by health professionals, mother-in-law, husband, and relatives. This study observed that feeding, fertility, and breastfeeding must be considered in multiple social, economic, political, and cultural contexts, not only as an individual or household practice or behavior (MacDonald, 2005; Van Esterik, 2002). For breastfeeding practice, not only of the 'bottom-up' approach but also a 'top-down' approach is needed. Focusing only on the 'bottom-up' approach means to blame the victim.

MacDonald (2005) concludes that the 'top-down' approach is the global struggle against violations by formula milk companies.

Findings showed that infant formula milk was prescribed on the recommendation and prescription of healthcare professionals. Mothers were attracted to advertisements for formula milk companies. One mother perceived her baby was weeping owing to breastmilk's bad quality and insufficient quantity (*meda doodh kharaab hy patla hy, bal merday doodh naal shar karenday, dhikay dendaay*). Therefore, company-milk was a suitable option: 'why should I prefer breastmilk, which is no thicker than formula milk, it looks like muddy water (*mela pani*), which has no power to make my baby fat? Why should I not give formula milk, which is thicker, tasty, and looks like pure milk?' Mothers in another context similarly perceived Insufficient Milk Syndrome (IMS) that the child was still hungry as breasts were empty and breastmilk was insufficient to complete the child's requirements; meanwhile formula was prepared until breasts were filled and became hard with milk again (Tully & Dewey, 1985). The negative impact of the promotion of structural adjustment policies proved harmful to the infant's health and nutrition (Mcdonald, 2005). The presence of companies in local hospitals and SC showed their deeper influence on the biomedical community and mothers. Efforts of breastfeeding promotion were undermined at macro politico-economic levels owing to a huge business investment of multinationals companies. Evidence showed that companies disobeyed codes and label their artificial milk as an exact alternative to human milk (MacDonald, 2005; Rosenberg, Eastham, Kasehagen, & Sandoval, 2008; Van Esterick, 2002). Esterick (2002) critically described the political economy of breastfeeding as to how political and global factors like formula milk producers constructed the practices of breastfeeding around the globe.

Why should a better-off mother necessarily lactate when alternatives and substitutes to breastmilk are readily available in the market and especially the medical community is encouraging and prescribing it to parents soon after delivering babies. The gradual reduction in the frequency of breastfeeding might develop an adaptation to the formula milk. The obvious result is early weaning, but mothers sometimes blame their milk as being the cause of a child's outcry when they tried to breastfeed. They consider their milk inferior to formula milk and opine it is thin and without energy, vitalities, and power.

Other studies showed similarities in South Asian countries such as Bangladesh and Pakistan (Maira, Salman & Sarmad, 2018; Parveen, Sareena & Dahiya, 2012). The study found that the socio-cultural environment in which breastfeeding and fertility existed, there were exceptional circumstances that made this particular act of human behavior deviant because social and cultural powers were exercised. Mother's poor health, low variety in food, and low energy intake motivate several lactating mothers to find alternatives to breasts such as bottles, *junj*, early introduction to solid foods, and premature weaning practices which become the cause of sub-optimal feeding, protein deficit, low immunity, and infection.

Likewise, the duration of breastfeeding a boy-child was longer than that of a girl-child. Social construct "***dhee praya mal hay putar apna bal hay***" (daughter is their [of husband family] property, but the son is ours) showed gender inequities. These are constructed due to women's subordination in a patriarchal society and strengthened through several common daily used signs, symbols, and language (Bourdieu, 2001). Cultural choice theory influenced breastfeeding behaviors.

Gender inequity influences natural and benevolent breastfeeding behavior. Domestic servants, and agricultural laborers, were reportedly affected because of their low socio-economic status. Some qualitative studies found that the decision to quit exclusive breastfeeding was associated with paid work outside the home (Seidel 2004). Milk is insufficient and poisonous, and the use of powdered milk has links in the workload on mothers. Some mothers even tested to justify their constructs (Mull, 1992; Zakar et al., 2018).

Mahmood et al. (2017) found that the policy environment of IYCF in Pakistan lacks ownership, sustainability (as only UNICEF and WHO only support this objective) multi-sectoral collaboration, and effective advocacy and BCC. They emphasized on more clarity on roles and responsibilities, better multisectoral coordination, and effective training for health workers. However, in reality, LHWs in several remote areas are either untrained, missing or absent. Moreover, IYCF is not the responsibility of the health sector only but other sectors such as education, population, and women welfare must come forward to contribute to this agenda along with structural reforms.

## Conclusion

This chapter suggests that factors like low literacy levels especially among females, low dietary diversity in households, work burden on poor mothers, and doctors' prescription of formula milk affected optimal feeding behaviors. Poverty, fertility, and illiteracy make a web in which a lactating mother stops breastfeeding by presenting excuses such as low quantity and quality of her milk. Perceptions of milk pollution have dangerous ramifications for infants and young children. It is the frequency and balanced diet of mothers that determine to breastfeed. Doctors need to know cultural constructions, which encourage and discourage these circumstance-oriented human feeding behaviors. However, health professionals who recommend breastfeeding blamed grandmothers for sub-optimal feeding ignoring broader contexts of breastfeeding behavior. Even the poor are stigmatized that they do not respect biomedical treatment and prioritize flawed traditional and spiritual methods of treating infections through unskilled health professionals, herbalists, and others.

This chapter has deconstructed the sociocultural rationale behind the practice of pre-lacteal. The ritual and practice are highly prevalent because of its medicinal functions, and social, cultural and religious acceptance and importance. Warm and sweet foods are generally given as pre-lacteal to purify the body from dirt and transfer faith, ideology, and good characteristics through a socially ideal and fit person before starting the sacred act of breastfeeding. However, the practice is sometimes followed without having sensitivity to cleanliness and harmful pathological probabilities by the careless natives. The social and cultural functions make this tradition real and common among the locals. The scientific and cultural perspectives need a deeper understanding of each other for better and more effective solutions in the future. Only human capital might throng the widening schism between science and culture. This chapter discussed in great detail how IYCF practices caused malnutrition. The next chapter will focus on how malnourishment is treated and what inequalities and barriers poor with lower social capital face while accessing nutrition related programs.

# 6. SOCIOCULTURAL BARRIERS, STRUCTURAL INEQUALITIES, AND SOCIAL CAPITAL: ACCESSING NUTRITION RELATED PROGRAMS

## 6.1. Background and Introduction

This Chapter aims to discover mothers' interactions with the biomedical treatment and therapeutic system of Community Management of Acute Malnutrition (CMAM) and Nutrition Stabilization Centre (SC), particularly and the nutrition-sensitive program generally. It specifically explores how poor, illiterate, and rural women are often unable to navigate the therapeutic and treatment system and institutional politics. These difficulties are perilous for women, mainly from remote and secluded areas, who are illiterate and lacking the required minimum social skills and cultural assets to negotiate the complex and unfamiliar environment (Chary, 2015a). Women's communications with the health and nutrition staff illuminate how institutional administration strengthens health and nutrition inequities. The legacies of underdevelopment, stigma, and discrimination, along with insufficient public health care systems influence poorer health outcomes for rural poor and ethnically marginalized Seraiki households today.

Barriers related to geography, income, and fears of maltreatment and discrimination, emerge as most striking and significant for rural and poor people struggling to access therapeutic care through the government's public health system (Chary et al., 2013; Chary, 2015b). Many families cannot access the CMAM program owing to multiple socio-cultural and logistical reasons (Guerrero et al., 2009). The staff of development programs often secludes poor mothers and children due to power dynamics (Aziz et al., 2015; Kawachi et al., 1999; Kwiatkowski, 1998). Analysis of qualitative socio-cultural and structural barriers in becoming beneficiaries revealed multiple insecurities. All these factors subsequently constituted normalization of childhood disease and severe malnutrition among poor, remote, and rural residents. Lack of healthcare facilities and poverty, construct a risky environment and contribute to everyday violence and multiple un-freedoms (Farmer, 2009; Galtung, 1990; Scheper-Hughes, 1992).

## 6.2. History and Political-economy of Nutrition Programs

The government lacks a concrete strategy to combat malnutrition. Short-term projects funded by the United Nations (UN) agencies and bilateral funding through International Non-Governmental Organizations (INGOs) shows a lack of strategic ownership and a cohesive framework of nutrition by the state (Zaidi et al, 2013). In the post-devolution[14] context, there is a need to understand resources and barriers and challenges pertaining to nutrition, horizontal coordination across sectors, vertical integration of existing and past nutrition initiatives, funding, monitoring and evaluation, and identify several emerging strategic opportunities. The provincial government lacks horizontal coordination among its various departments and insufficient relationships between programs, beneficiaries, and sectors. The Punjab Health Department only monitors and treats programs, but other departments do not share their due responsibilities, which require them to develop a separate nutrition Department at the district level.

Historically, strategies including food distribution, card-based rationing, wheat subsidy and distribution especially to flood victims in Punjab, and lately federally led cash transfer programs specially designed for poor women through BISP show that there were inconsistent national policies and lack of research and evaluation (Zaidi et al., 2013). The UN Agencies (UNICEF, WFP, FAO & WHO) have been leading various nutritional programs by engaging Health Departments in the past. These nutrition programs included Baby-Friendly Hospitals; Nutrition Corners were established at hospitals to provide nutrition-related advice. The Safe Motherhood Program to provide edible oil to pregnant mothers at government health facilities during and after pregnancy was started. Next, they started Community-Based Management of Acute Malnutrition (CMAM) to treat Severe Acute Malnutrition (SAM) and Moderate Acute Malnutrition (MAM) in flood disaster-affected areas after 2010 floods. At the same time, the Lady Health Workers Program and the World Health Organization facilitated the Expanded Programme on Immunization (EPI), and the Maternal, Neonatal, and Child Health Programme (MNCH) remained functional. In 2010, UNICEF and the World Food Programme implemented a Vitamin-A

[14] After the 18th constitutional amendment federal powers devolved to provincial departments.

supplementation program that supplied capsules every six months through the EPI program to combat blindness. Further deworming during 'mother and child health weeks' sponsored by Lady Health Worker (LHW), salt iodization in all districts of Punjab by an INGO, Micronutrient Initiative (MI), which provided training, equipment, and commodities and more recently wheat flour fortification with the help of UK Aid (Zaidi et al., 2013).

## 6.3. Background of CMAM Program in district Rajanpur

The development of the CMAM program started soon after the floods of 2008 and 2010 in Rajanpur. For the implementation of the CMAM program, UNICEF and WFP hired female Nutrition Assistants in more than 30 union councils of district Rajanpur. LHWs were supposed to visit house to house to screen mothers and children for moderate and severe acute malnutrition and to refer them to the health facility or BHU where Nutrition Assistant was appointed. LHWs typically screened mothers and children once in 6 months. After referral, a Nutrition Assistant appointed at BHU used to confirm screening results of the LHW and ensure the supply of therapeutic food and ration to the deserving mothers and children. However, there were reports some Nutrition Assistants misused the food and ration. Food distribution among mothers was reportedly unfair. The healthy siblings used the therapeutic foods that were for malnourished children, and malnourished children could not eat the required quantity of foods. Results of case registration were comparatively satisfactory where there were skilled Nutrition Assistants appointed.

**Nutrition Stabilization Center for Complicated SAM Cases:** In severe acute malnourished children with complications, lower household income was the primary determinant of child malnutrition. The majority of these SAM cases belonged to poor households, geographically isolated, and from flood-affected areas. Children with complicated SAM were brought to the nutrition Stabilization Center to be admitted for some days until recovered after treatment with antibiotics and formula milk 75 or 100. Mother, father, or grandmother also had to stay at SC to look after their severely sick and malnourished children. Before admitting to SC, most children had been treated without any improvement by the clinicians. The families also had been using local cultural remedies before the biomedical treatment. As observed as well as informed that mothers were mostly absent because they were busy in domestic work.

**Photo 6.1: A Grandmother accompanies a Malnourished Child at SC**

**Source:** Author, 2017

The registration of cases in SC increased over time, as at the start of the program, the registration trend seemed single digit, but after that year, registration was in double-digit. Some parents had to leave the Treatment against Medical Advice (LAMA) due to time poverty and the work burden of mothers. There were nearly five LAMA cases per month and nearly two cases of death at SC in two months. A program "Cape-Enamor" after the '2010 Flood' in Rajanpur with the help of German funding offered therapeutic food and some economic incentives to parents of severely malnourished children. Parents were attracted to this program because of economic incentives and, therefore, stayed longer for treating SAM children.

**Social Capital and Access to Program:** Although access to CMAM somewhat improved, it still needed much more focus on the remote areas. The District Coordinator Integrated Maternal Neonatal Child Health and Nutrition (IRMNCH) and Nutrition Program informed that people from remote areas were in great need because of the weak and poor referral system to the Stabilization Centre. Some parents from remote areas pointed out that concerned doctors, LHWs, and active community members helped to refer them to the CMAM program and SC, for therapeutic 75 milk for the severely malnourished baby. Some mothers informed that people from urban centers made them aware of this

program; they suggested visiting the nutrition Stabilization Centre at DHQ to get special milk (75/100) for malnourished babies. In their opinion, the specialized medical milk (75/100) and Ready to Use Therapeutic Food (RUTF) brought a positive impact on their severely sick children. One mother maintained, 'LHWs visit our area and tell us to bring milk from CMAM staff; vaccinators also visit and inform us about the program.' A few mothers reported that DHQ health staff informed me that their babies need to have special milk (75 and 100). The majority of the enrolled mothers in CMAM showed how their children were recovering significantly.

Only a few parents reached SC without any referral, which concludes how social capital (*jan-pehchan, tauluq, safarish, waqfiyat*) helped many of the families near urban towns to become beneficiaries and isolate and seclude the majority of the most deserving rural low-income families with lower social capital. When asked by a mother how she came to know about the treatment of severely malnourished children at stabilization center, and CMAM program? A mother Nusrat informed me that "people from Rajanpur city told her about this program, they suggested we visit Stabilization Centre because milk (75/100) is distributed here." When asked, "What were the impacts of this treatment? Does the health field staff visit your area or household?" respondents agreed that the milk provided at the stabilization center, and RUTF had a good impact on the sick child. One mother remarked that LHWs do not visit in their area, but the vaccinators had visited one year ago, however. We bring our children to the hospital for immunization.

**Intra-Staff Politics:** After the screening, LHWs usually referred malnourished mothers and children to Basic Health Units and Rural Health Centers, where Lady Health Supervisors (LHS) reportedly kept them waiting unduly for long hours. Poor and illiterate mothers had to leave health centers because they felt they were being ignored, unattended, and devalued by the LHS. The indifference and deliberate neglect due to that intra-hospital politics were illustrated by some LHWs and District Coordinator IRMNCH and Nutrition Program.

District Coordinator of IRMNCH and Nutrition program provided relevant information about different issues regarding access to program, and LHWs. I started enquiring about the treatment of complicated, severely malnourished children at the stabilization center at DHQ. He informed, "every month LAMA (who quit treatment) cases

are increasing; 4-5 SAM cases are admitted on a daily basis, totaling approximately 120-150 in one month. Most of these cases are located at the BHU level. The cases which reach at DHQ level without a referral are admitted right away, thus SAM referral is constrained and slow. For the treatment of SAM, it is very difficult to screen a child with a complication from the field by these LHWs through Mid Upper Arm Circumference (MUAC). LHW refers these SAM cases to Lady Health Visitor (LHV) who has to verify MUAC and complications, and forward complicated SAM cases to DHQ by an "1134 ambulance service." Convincing parents for the treatment at SC is a very complex task. Mental preparation of family and parents is essential for this because a mother or someone from the family has to stay for at least four days. They have to prepare their basket or bag. District Coordinator (DC) of IRMNCH and Nutrition Program revealed:

> LHW and LHV[15] are often not on good terms with each other. Sometimes LHV does not like an LHW (LHV *khaar khandi ay*) because of jealousy. One staff member often feels jealous and angry with other staff. There are generally 15 LHWs and 2 LHVs at a BHU. If a non-favorite LHW brings a case during LHV's duty timing and insists on checking it immediately. LHV is already burdened at BHU; she has to do antenatal, EPI, nutrition, and so on. So she automatically skips cases. Every LHW expects that she has hardly convinced and referred parents of SAM case (*minat or tarlay kar kay refer kitay*) to BHU, so now LHV should give priority so that it could be further referred to Stabilization Centre at DHQ. LHV disrespectfully asks LHW to "wait out in the yard" (***baho uthan bahroon***) of the BHU and does not attend the case even after two hours. This is where SAM cases leave hope for treatment and run away, and this is why referral of severely malnourished children with complications is minimum. However, as a child specialist and nutrition staff, specified for this work only, are readily available at SC; therefore, SAM cases are measured and admitted without trouble. However, people from only nearby areas can reach directly to SC, but cases from remote areas have to be ignored.

**Health Bureaucracy Deprioritized Nutrition Program:** Polio eradication Program was the most "favorite and concentrated work" of the Health Department. Department used most of its energies in this program only and set aside all other essential health programs.

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[15] LHV (Lady Health Visitor) stationed at hospital to deal with maternal child and neonatal health, whereas an LHW (Lady Health Worker) duties are in the field to visit households regarding maternal-child health.

Each time extra money was paid to everyone involved, but the least amount was given to these LHWs and other field-staff, whose task is most hard and dangerous in the Polio eradication program. District coordinator IRMNCH and Nutrition Program similarly remarked:

> Although the nutrition program is functional for long, the staff isn't free to run this at the district level. Chief Executive Officer [CEO] and District Health Officer [DHO] give so much importance to their routine matters and do not let this kind of vertical program to be implemented in full scale and strength. These are often less prioritized by involving LHWs in other programs, Polio. After working three to five days in the Polio campaign, one LHW would not go into the field because she is already tired. Similarly, in Measles, LHW is fully engaged for 12 days and becomes so fatigued and rarely visits the field for some days and demands rest. When the department asks working for such an overly and extensively, how can she fill the high gaps created in the nutrition program, this pressure is a regular, Polio and other activities are unfinishable.

**LHWs Vacancies and Work Burden:** The over-involvement of LHWs de-prioritized nutrition activities in the health department. In Southern Punjab, already less than half of the Basic Health Units still needed to appoint LHWs for vacant seats. District Health Information System Reports indicated that the total number of slots for LHWs were nine hundred, but six hundred and fifty LHWs were working. There were still two hundred and fifty slots vacant. It showed that the population of the district was covered up to only 44%. Ineffective coverage and managerial inefficiencies is clear from the evidence that up to 50% of the population in several rural districts are not covered by LHW, especially the most remote and the poorest areas (Bhutta & Hafeez, 2015; Hafeez, Mohamud, Shiekh, Shah, & Jooma, 2011).

LHWs coordinated between the community and health department; therefore, they were involved in almost every program, whether provincial or national. They were often seen complaining about their work burden. They frequently complained they faced extra work pressure and burden, particularly from the Polio eradication Program. One LHW had to cover almost 1500-2000 targets in her catchment area (Three Year Rolling Plan, 2010 as cited in Ahmed, 2014). Their primary duty was to cover and coordinate with more than two thousand pregnant and lactating females in their concerned outreach areas.

Over involvement reduced their concentration in their original work about child and mother work. LHWs felt low satisfaction with the salary packages and other allowances.

Logistical and cultural hurdles, along with extra workload, jointly restricted their will and motivation. On many occasions, many of them took this duty no more than a formality just because they could not merely refuse orders from the department. Resultantly, they ignored visiting assigned households regularly due to fewer salaries and low economic incentives. It was also observed that they were not well trained in anthropometric measurements of mothers and children for screening purposes. Unfortunately, these LHWs in the least developed areas were not appointed or even remained absent. UNICEF (2011) has highlighted the neonatal mortality rate reduced in low-caste groups where LHWs made weekly visits in rural Indian Punjab. Many of these LHWs reported that their performance was perfect, and they tried to justify their role. They always report that everything was going well. One doctor remarked:

> LHWs are called almost every week, sometimes for the meetings, or training, or some other task. She has to maintain and carry multiple registers. I mean, it's a serious matter that needs to be seen and fixed. Funding availability in the Polio eradication program was the leading cause of why the health department Punjab always engaged LHWs for only this at the stake of another important program because their funding was low or none. It was owing to this fact that LHWs always wandered for Polio drops and skipped nutritional screening and education. The patients from remote rural and tribal areas are missed; SAM cases are from remote areas, where there is a water problem, access is limited. So cases mostly come from rural areas.

A recent study by López-Ejeda, Charle-Cuellar, Vargas, and Guerrero (2019) similarly demonstrated that sufficient training, financial compensation, and close supervision of community health workers is imperative for the successful delivery of SAM treatment along with the adequate quantity of ready-to-use therapeutic food.

**Do nutrition supervisors supervise nutrition?:** In 2009, the Government of Punjab recruited School Health and Nutrition Supervisors (SH&NS) at BHU level to screen and train the community on common health diseases and nutritional issues. However, many of the remote BHUs missed them as there was no infrastructure. Since their creation, they have barely taken part in any significant nutrition intervention in the district. Their role in CMAM was never acknowledged until recently when MNSC had anticipated their future participation in the province of Punjab in a report in 2017. They were never well trained

on nutritional issues, and hence they had low relevant knowledge about the causes and treatment of malnutrition. Once Micronutrient Initiatives (MI) had trained them in their total tenure on the importance of micronutrient Iodine, for mothers and children. These supervisors were assigned monitoring duties for Polio, EPI, and dengue prevention programs instead of nutrition as they were rolling stone. They were lately trained on malnutrition for the first time in 2017 after 9 years of their recruitment that showed a lack of coordination and failure of the precise job description. This also showed a lack of vision and relevant policy failures. Also, Multisectoral Nutrition Centre (MSNC, 2018) has finally recognized their role in tackling the issue of malnutrition.

The supervisors and staff, appointed in remote basic health units, rarely performed duties because of insecure environments, lack of monitoring mechanism, dilapidated hospital buildings without boarding, damaged roads, and lack of transport facilities. These posts ought to be given to local people instead of appointing someone unable to attend duties. These isolated areas are the ones where more attention is needed. The problems regarding the construction of roads and flood damages need to be fixed on an urgent basis to improve the overall development of these areas. If all necessary facilities were provided, the health and nutrition conditions could have been improved. This requires mainstreaming these secluded human settings, which are mostly facing the brunt of underdevelopment. When questioned, "is there any coordination gap, as we see on one side is IRMNCH, then SH&NS, and MNSC?" replied DC IRMNCH & Nutrition Program:

> Yes, there are gaps as the district coordinator of the Malnutrition Addressing Committee has only one or two meetings with the Deputy Commissioner of Rajanpur. We were also there. Also, MSNC established by the Planning and Development Commission of Punjab province has recruited district coordinators, but they are new and have no significant work to do. Nutrition supervisors [SH&NS] are also not so trained and involved, nor can they measure and refer or treat malnutrition, but their involvement is limited to the polio program. Although all these have been appointed, they have no work to do. We, however, involve them when we organize special weeks. Recently, we called nutrition supervisors on nutrition week. They were assigned to distribute multi-nutrients sachet in their schools as area in-charges, but they are not really in much coordination.

**The presence of formula milk companies:** Although banned theoretically, the multinationals formula milk representatives were free to work in SC, BHU, and RHCs, which shows that the formula milk companies spare no chance to advertise and sell their formula milk to the poor parents of severely SAM children. Soon after recovering from complicated SAM with formula 75 or 100 and then RUTF, mothers are motivated by doctors and such representatives to use and try their products. The company trains its agent to remain alert and keep an eye on every person monitoring and conducting research. When I visited for the first time at SC, he hid his identity but later revealed he was working for a multinational. He was also well trained in rapport building with medical staff and patients' attendants for convincing them to use their products after the advertisement. Nobody ever restricted such active advertisement and sale. Formula milk companies ignore the laws and continue marketing their products inappropriately (Ebrahim, 2015).

Dr. Akram, a pediatrician at Health Education and Literacy Programme (Help) who provides primary healthcare to marginalized populations in Pakistan, once stated, "The baby food industry continues to misinform people about the wonders of the formula milk and infant cereal products." Illegal and unethical promotion of formula milk has resulted in a surge in the number of malnourished children as it deprives them of their mother's milk. "Breastfeeding: A roadmap to promotion and protection," a report by Save the Children, revealed that 84% of all mothers were advised to give formula milk by healthcare providers (Wasif, 2013). Dr. Baseer Achakzai Director Nutrition of Ministry of National Health Services Regulation and Coordination (MNHSRC) stated:

> It's unfortunate that despite a law that promotes breastfeeding, the practice goes unpunished and doctors continue to play with the lives of infants and get paid for it due to the absence of a board to address the issue at the federal level and sub-committees at the provincial level.

Although in theory, Punjab Food Authority (PFA) has got 16 laws approved from the Punjab Assembly and has imposed a ban on marketing and sampling of infant formula milk in hospitals after consultation with Formula Milk Association. It has banned all carbonated drinks in educational institutions. Nearly 700 PFA teams and 2,000 food technologists are working. It has restricted formula milk to approve formula milk ingredients and marketing from PFA scientific panel and labeling in the Urdu language on

all imported products (The News, 2017). However, in practice, the situation is quite disappointing. A journalist remarked in a similar thread:

> What basis is the Pakistan Medical Association giving ads against open milk? Is this the pain of the public or the funding of Multinational Companies (MNC)? The poor farmer sells cow or buffalo milk to the companies for 50-60 rupees, and then these companies make the products of ghee, butter, cheese, yogurt from this milk, and make a pack for children by mixing the powder in the rest of the milk. We used to use open milk in the village; all of them were healthy. Now even if we use the pack, the children are not the same. And what is the guarantee that the box with the box is packaged according to the principles of hygiene? Remember that after closing open milk, this MNC will sell the same milk in the name of the Mafia Organic Milk and will sell rupees, and our poor farmer (the majority of the country's part is connected to indirect or non-related Agriculture) will sink in the swamp.... the need is that fresh milk should be packed on the farmer's dairy farm through the government plant or public-private partner's packing system at the level of every city and villages. All in one day period. To deliver to the cities that are available to every citizen without any delays and at a reasonable price. The MNC will do their business, and our farmers will be destroyed. The Government should take notice of this ad and cover the hidden mafias behind it with the help of Punjab food authority to make the delivery of open milk transparent and easy.

**Therapeutic food for sale:** Therapeutic food was reported to be sold out at the hands of some LHWs. It was informed by some community members that the *Plumpy-Nuts* were being sold out by LHWs at some places at the price of Rs. 20 per sachet. These packets of therapeutic food are not for sale. A mother indicated that she threatened one such LHW who used to sell it by saying, "give some sachets for my son or else I would complain against you that you sell off the therapeutic food illegally." Never were any actions taken against such complaints by the concerned authorities.

Some respondents revealed therapeutic food was being sold off by LHWs, and representatives of multinationals were free to move in hospital settings. This indicates a corrupt structure in the health department. Literature from Pakistan and India shows that corruption within medical settings restricts government services (Gupta, 1995; Gupta, 2012; Gupta, Nugent & Sreenath, 2015; Qureshi, 2014; 2015). While drawing on the anthropology of the state along with an understanding of structural violence Gupta found that funds hardly reach their anticipated beneficiaries but mostly to people with political connections, cultural capital, and financial clout. Inaccurate systems of information based

on statistics, conflict, and wide-scale corruption in Indian bureaucracy systematically isolate and ignore the poor. Also in the Pakistani context, the government exists on papers (Hull, 2012). While examining the "Government of Papers, in Pakistan" Hull (2012, p. 12) analyzed how the bureaucratic processes and management of records crafted partnerships among people 'as the main mechanism and dominant emblem of the formal dimension of bureaucracy.' For him, papers should be seen 'as mediators that shape the significance of the linguistic signs inscribed on them' (p. 13) that shows how postcolonial bureaucratic records are materialized under the colonial policy of keeping government and society isolated.

## 6.4. Stigmatization of Patients and Attendants

Another critical factor of low coverage of the therapeutic program was the stigma, respect, and dignity. Many poor parents felt stigmatized and complained of being unattended at the hands of the hospital and nutrition staff. Illiterate people with low socio-economic backgrounds lacked basic confidence and were often found afraid of doctors and hospital staff because they felt a vast difference and social gap between doctors and their selves. They used to enter a government building with a fear of being insulted. As the fear of being insulted by the doctor and staff, they avoided visiting hospitals for treatment. Hence, carrying a child to the hospital at the critical stage was the last resort. The behavior of the staff was not supportive but indifferent. Sometimes staff felt irritation from the poor with dirty clothes, unwashed and unbathed people. Many times doctors stated, "don't you have a mind, why are you dirty; don't you take a bath; why don't you always come on time, you want to have your child die from this disease." Even once, a doctor at BHU refused to check a patient and asked, "First go and take a bath then come to me. I cannot bear this stinky smell."

CMAM staff was often observed being rude to mothers of severely malnourished children. Once a nutrition assistant vocalized to a mother, "you are always here for the greed of medical formula milk, 75 or 100 (*har waqat dodh leney a jatay hain yeh log*)." Once I noticed that a female nutrition staff threw the packets of formula milk 75 in a very disgusting and angry mood towards a mother and uttered, 'take this and go away' and mother got much ashamed of this embarrassing situation. On one occasion, an assistant

responded to one mother whose son was admitted to the Stabilization Center, 'take your dirty luggage from here.' In a study in the Kenyan context, analogous Shame, stigmas, and discomfort at health clinics related to malnutrition and fear of mistreatment at the hands of the biomedical staff were noted as the most significant barriers to treatment for childhood acute malnutrition (Bliss, Njenga, Stoltzfus, & Pelletier, 2016) that potentially constrained their access to CMAM program.

### 6.4.1. "Not being Attended" Perveen

Parveen, a 35 years old mother and 50 years old father were interviewed. Their son, Abid of 5 months, was admitted at Stabilization Centre, with extremely low readings of 7.2 MUAC and 2.7 kg weight. The doctor was not present, and the nutrition assistant (CMAM staff) prescribed milk 75. Mother has seven children in total. The first four babies were delivered with "lowest birth gaps" of one year; however, the fifth child was born after the gap of 5 years. Sixth and last child was born after 3.5 years. She never used contraception because it was the "will of God" as the mother posited. The mother was anemic and got "blood drips" for treatment. The last child, after Abid, was born with "breathing deficiency" and remained on oxygen.

Father of the babies married twice. After retirement, the father was working as a "security guard" in a private bank. His monthly income was only 11 thousand rupees that were not enough to afford the daily expenditures. Mother was "uneducated." They had a house built with mud. They had one goat, a hand pump, and a toilet in the house.

They used to boil bottles in saltwater. They differed in the treatment of boys from girls. When asked, 'where do you get boys and girls checked? She claimed, 'girls never get sick, but boys are more probable to become ill.' When I asked, 'do you breastfeed during illnesses. She believed, 'if the mother is ill, she "should not breastfeed" because it makes the child sick.' When we asked what diet is good for health, she guessed that "fruit" was good. Husbands wanted to have more babies because it was the prophet's saying to expand

the *Ummah*[16]. However, at the same time, they wanted birth spacing. They were confused about what method could be safe that did not disturb the menstrual cycle. She whispered that she would think about birth spacing after her husband's permission. She never used multivitamins. She never breastfed during pregnancy as she believed that the baby quit it. Although she initiated breastfeeding early, the sick baby was breastfed for only two months.

Mother explained, 'my children mostly suffered "diarrhea," but this baby was born low weight and never gained weight.' Mother's daily diet includes pulses or rice (*dal-chawal*), vegetables; chicken after one month, but meat and mutton was almost impossible. Children's daily diet comprised "loaf and milk." Mother noted, 'my children eat poppadom, *samosa*, and *pakoras*[17]. Only one-liter milk is mixed with water and divided into all children equally. Children also use goat milk.

When asked if they gave water or other things to children before the age of six months? Mother believed water was compulsory before the sixth month because the child's "lips were dry." When they were enquired about immunization. Mother thought vaccination was important, but the last two babies had not followed routine immunization and missed doses on time. Her husband informed, 'we are now living in Dera Ghazi Khan, and EPI cards remained in Rajanpur district. They left the Rajanpur district because treatment was not satisfactory, and the staff behavior was very bad. Father reported, Stabilization center's staff used to give no milk to our child, and our baby used to cry all night:

> We waited all day and night, but no one attended a little. Our child had taken nothing to eat and drink. We were worried when the doctor and staff would pay attention to our child. Leaving such treatment [of indifference and disgust] would be better than just wasting time [in wait] here."

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[16] *Ummah* means the followers of the holy prophet and high fertility is suggested by the religious clergy to increase it.

[17] Very low-quality oil used for frying basin flour products (*samosas, pakoras,* poppadom), which are locally available. Children insist parents they want to buy when they go in the market, or a hawker comes in the street to sell them. These unhealthy products often make children sick and infect them with stomach and lung problems.

The complaint of "not being attended" increased their disappointment with the services at Stabilization Centre. Chary et al. (2013) argued that childhood diseases are treated incompletely because of the perception that the child is not being attended. She linked the phenomenon of "not being attended" with health care inadequacies.

One night a fight broke out between a Nutrition Assistant and father on this issue, when father himself boiled cow's milk in home, prepared it in the bottle and reached the Stabilization Centre. Nurse forbade, it was restricted, it was not allowed. He objected, 'my child is hungry, and you pay no attention. I do not want to leave him [sick child] as hungry all night.' However, the father was not permitted to feed his baby. Nurses complained about this man to the doctor. The doctor called him in his private clinic, where he was abused and insulted by the doctor. He got disheartened and finally decided to quit the treatment from this center, where he was insulted terribly. He was very angry about the rude behavior of the doctor who threatened and abused him.

The doctor knew that he was now merely a retired person and was not in the position to give any harm. Therefore, he insulted the father at his private clinic. It has become a normal trend that doctors attend their private hospitals in duty timings. This case highlights that the anemic mother gave birth to a low birth weight baby. High fertility was the obvious factor behind maternal-child malnutrition. The low-income level was the main reason for using an unhealthy diet. Children were eating oily, spicy, junk foods. The low birth-gap curtailed optimum breastfeeding. They also had religious minds and disliked birth spacing. When one of her sons was admitted to the Stabilization Centre, she was pregnant with the seventh baby, who was also later born with complications. Although the mother seemed fed up with frequent pregnancies, she was still happy to be a good and obedient wife of her husband. Women complied with the husband because it was considered a great virtue or a good wife phenomenon. There comes a social appreciation for such behavior.

**Photo 6.2: A Severely Acute Malnourished Child with Anemic Mother**

**Source:** Author, 2017

The poor people are taken for granted by the biomedical community, without much value and importance. The reason is that the medical staff's treatment with these people is not very strange for the local people. They have become used to it and feel not much surprised. The treatment of citizens from the hand of a government official is not much surprising. The reason is that in every government office these people are not given priority because their faces are pale, their dresses are dirty, having many stains, they look illiterate, and they have poor communication skills. They cannot explain their condition in the right way. These people are not offered to sit in chairs unless they dare to be seated themselves without an offer from the office staff and if the chairs are empty. One mother even explained that once her baby was ill. She accompanied her mother to a doctor. When the mother started to explain what happened to the baby, the grandmother also tried to help in explaining, but the doctor did not like and abruptly forbade grandmother to stop. He asked, 'are you, grandmother? You are the people who restrict your daughters and create hindrance in smooth breastfeeding activity, I know.'

During fieldwork, a few ladies reported about the ill-treatment at the hands of lady doctors. They implied that lady doctors generally spoiled their cases, and they had to pay

a heavy price for their bad experiences. It was revealed that untrained lady doctors started practicing without much experience, and poor and naive females often became victims of their inexperience. One pregnant mother stated that during her routine checkup, she knew it was her eighth month, but she regularly went to work. One day early morning, she fell-down unconscious, and her uterus was spouting a large quantity of water. She was rushed to the doctor, who guessed it was her eight-month, and it was not possible to deliver the baby, so she recommended some injections that would help stop the vaginal fluids and save the baby. However, the situation remained the same even late at night, but the pregnant lady revealed her mother that her condition was severe, and they must be quick now as there was no male at home. When they reached, the lady doctor supposed: 'your delivery date seems late, let's wait for normal delivery instead of C-Section.' On the third day, labor pain started, and she went to the lady doctor for consultation. The doctor remarked, "You are looking weak and pale, you need hemoglobin, you already wasted much water, and now go to a tertiary hospital where all the necessary gynecological facilities would be available." She reported to the larger hospital where she delivered the baby safely through C-Section. The doctor reported:

> Your water was just 5%, and for the life of baby and mother, there must be 20% water. Your water bag was ruptured, and water was smelly that caused the infection to the baby. Had it been a bit late, the baby wouldn't have survived. Moreover, it was your 9th month of pregnancy, not the 8th month.

It was realized that the lady doctor in the smaller hospital had wrongly predicted the month of delivery.

## 6.5. Sociocultural Assessment of Therapeutic Coverage

**Gender Differentiation:** The majority of poor participants admitted that they differentiated child genders in treating their babies due to low income or extreme poverty. Their parents preferred male children. They admitted that they treated male children in good, pretty expensive, and private hospitals, whereas female children were brought to public or government hospitals where treatment quality was low, with less care by the staff. In their opinion, male children were more important than female children. They opined that girl was to go to another's house after marriage while boys were to stay with parents.

Therefore, they should give priority to those only who could payback. Girls leave their parents' homes and live with another family; therefore, there is no particular need to spend money and energy on them. In addition, females usually do not earn money in a local setting, so it is unnecessary to invest in them. The treatment of females was also initiated late as compared to male children. One mother stated, "I get treatment for our sons from the city, a private clinic, but we bring the daughter to the village. We go to DHQ Rajanpur for the treatment of our children. However, we consult a doctor from a private clinic for the treatment of boys. We prefer boys over girls and bring girls late for treatment in hospitals."

As already discussed, in some mothers' opinion female children rarely become ill whereas boys suffer more often. It was interesting to know that the females perceived that, because of her natural resistance, a female child has more resistance to fight against diseases than that of boys. Women believed that since boys are more vulnerable against disease, therefore boys ought to be preferred for treatment as well as for nutritional outcomes. Women informed that it was a male child who was served first during meals. Always a significant and good portion of food was reserved for a male child or head of the household. It was also observed that female children had more restrictions in the home than male children, and intra-household competition for food quantity and quality was found to be an essential dimension of gender inequities.

**Economic Loss:** The second strong reason for low therapeutic coverage was economic loss if the mother and father got busy in the treatment of one complicated, severely malnourished child and ignored the rest of 3-5 children. This factor made them indifferent to proper and complete treatment methodology (Chary, 2015b; Hughes, 1992). In most such cases, illiterate and old grandmothers were staying at the stabilization center. Mothers could not stay longer because no one was to care for other children at home. In crop season, rarely poor rural mothers can afford to give proper time for treatment and health-seeking. Some domestic servants also complained that they could not escape from duty so that they could have a check-up of their malnourished children and stay for some days with complicated and severely malnourished children.

**Geographic Seclusion:** Geography was found to be one of the main determinants of health and nutrition inequities. The distance was observed as a substantial barrier to

coverage and access to health and nutrition programs. The poorest of the poor generally live in risky, far, and underdeveloped areas. Female gender is also less empowered in these settings due to the lowest access to healthcare and literacy and employment opportunities. Logistical problems emerged as the most significant reasons for low access. The poor system of transport, long travel times, damaged roads, and long-distance to the site were the major determinants of little coverage.

**Male's Attitude:** Male's negative attitude toward treatment and husband's refusal were potential causes of low coverage. They were reluctant to permit their wives to spend time at therapeutic centers. One mother voiced that the father was not much interested in treatment because he has been dramatically disappointed because of failure. From an area adjacent to Indus River (*Kacha*), an anemic, tired, meek, and weak grandmother and a mother visited the Stabilization Center at District Headquarter Rajanpur with her sick son of the age of 8 months who was suffering from severe acute malnutrition with complications. The child had chronic diarrhea and a condition of wasting or Marasmus. He was born underweight to this severely malnourished mother. Mother and grandmother seemed so gloomy and melancholic.

### 6.5.1. "We are tired and we still have to travel:" Mother from *Kacha*

When asked the mother why no male had accompanied them? The mother stated that it was not the first time they were visiting any hospital. Before this visit, they visited almost every private clinic for a check-up. They spent plenty of money on these private clinics. Doctors had been treating the baby with powerful antibiotics along with prescribing several types of infant formula milk. All clinicians claimed that the baby would be perfect after their treatments, but it never happened. They also visited spiritual healers, but without any improvement ever.

The father of the child was not interested now in the treatment because of disappointment. They belonged to an ethnic group considered rigid and conservative. Mother exposed: "my husband does not want me to leave the house often, but I periodically manage to leave when my husband is gone." We, the females, are carrying this unfortunate child without any help from other family members. Mother stated:

> I am a mother, how can I leave him alone in this condition, only my heart knows how much disturbed I am. No one can realize the state of my heart; I cannot see my child suffer. I am in profound psychological distress. When will my child feel normal and healthy, I don't know. I have tried my best to make him healthy and nourished. We have wandered everywhere, here and there, to find if someone could suggest us in a better way. Recently a person from our neighborhood informed us about this [program and stabilization center], I requested my mother to test this place too, and we are here at this place.

I asked the child's mother if the physical condition of her son ever improved and if he ever had an increase in his weight. She answered:

> We never saw any significant improvement since his birth except only once when he got a slight improvement in his body, but he again became sick. Dysentery (*paychas*) is killing him, and he weeps too much, especially in the night. I am unable to rest because he wakes all night. I keep on changing her diapers (*potray*) every time and washing her body. Nothing is absorbed in his body, and all come out without absorption whenever given something.

Two things were noteworthy: the negative role of medical practitioners and males' attitudes towards treatment. Clinicians continued admitting the baby, charging massive fees from the low-income family even though they had shallow confidence to improve the wasted conditions. Instead of referring the child to the proper place [Stabilization Center], they continued exploiting economically and trying antibiotic therapies several times without analyzing the potential to be cured.

Mother got only informal religious education. Household income was too low to afford the treatment from private clinics. Mother had even to sell her jewelry once when nobody agreed to give them a loan for a short period. She complained that infant formula milk prescribed by doctors was costly, but they managed somehow buying from the medical stores. When asked 'why didn't you breastfeed your baby?' She posited:

> I have no milk. I breastfed just two months, and then my milk dried up because I was already much weak, and my diet wasn't very energetic. We can only avail of wheat, potato, and onion. I have often asked my husband to bring some meat and fruit. He buys some fruit from the market on an occasional basis. I sometimes use eggs, but mostly we have *lassi* [yogurt drink] and wheat in my diet.

Tully and Dewey (1985) discussed that the logic behind mothers' perception of insufficient milk syndrome was that their diet was not balanced. Low income hindered

them from getting a variety of food. The mother lacked food diversity throughout her life. She was anemic and low weight since her childhood. Accompanying grandmother disclosed that the life of her daughter was very disturbed. The husband teased, abused, or beat her, and blamed her wife that she was responsible for the bad health of the child. The grandmother stated, 'how long I can support, I am also poor. What else I can do, I pray to God for a better life.'

Grandmother's age did not permit her to travel from riverside (*bait* or *kacha*) to SC at DHQ. It took almost three hours to get there. Geographic isolation and the absence of road infrastructure made it too hard to reach in less time. Mother informed that they reached stabilization center after much difficulty and running errands:

> The [stabilization] center is very far from our village, and it took hours to get there. We had to catch several types of transport; the first motorcycle from our community to another town, then an auto-rickshaw to the main highway. After it, we had to catch a bus from the road to reach the district bus-stand. From the bus stand to the hospital, we had to hire an auto again. After wandering here and there madly in the hospital building, we reached the stabilization center by asking addresses from so many people. We got tired when we arrived here, and we still have to travel, we'll have to go back home as it is not allowed to stay without permission.

Evidence in Guatemala similarly showed how poor females suffered from running errands (Chary, 2015a). Further, they insisted on hospital staff that they want to treat the child at home. SC staff had objections to this idea because the condition of the severely malnourished child was unstable, and they were required to stay until their child became stable in the center. This story might recall a very empathetic poem by the local Seraiki poet Malik Ghulam Rasul Dadda (2019), entitled "Being Mother of a Poor" in which he movingly narrated the tragic story of a sick child being carried away with a poor mother in search of treatment facing stigma and indifference. The poem starts as: "So many paintings of poverty, one may find...Strange interpretations of the scripture of deprivation one may encounter......" The below given picture of child, mother, and grandmother can better depict intergenerational and chronic undernutrition.

Although the government previously claimed to set up SC at the sub-district-level, it might plan to set up SC at the BHU level instead of the district-level. Even at the district level, the therapeutic activities at SC are being limited.  The program may come to an end

at any time. UNICEF in Pakistan has recently intended to study the bottlenecks in CMAM, which indicated that development programs are still under the control of UN agencies.

**Photo 6.3: Child, Mother, and Grandmother Left Against Medical Advice (LAMA)**

**Source:** Author, 2017

## 6.5.2. The whole family has to come along

Mothers had to bring all of their kids, along with them, at the Nutrition Stabilization Center at district headquarters hospital. I observed that many of such children were unaware of cross-infections at the sites. They were playing in the hospital's wards, keeping their hands on the floor, and eating foods there without handwashing. This fact seemed weird because healthy children accompanying sick ones were also much susceptible to multiple infections, even without any fear or knowledge. Also, parents had so many kids that they were unable to take care of only one [sick] child. If they admitted one baby to the stabilization center, they also had three or four more left behind in the house.

Similar evidence showed that therapeutic programs in five African countries failed because of low awareness about the program, long-distance, and handling of rejection at

sites (Guerrero et al., 2009; Guerrero & Rogers, 2013) and centralization of the program (Ciliberto et al., 2005). Almost exact finding corroborated that distant communities remained potentially disadvantageous to be covered by therapeutic programs particularly for the treatment of complicated severe acute malnutrition because caregivers have to stay for many days at the therapeutic center (Myatt & Collins, 2009), more often adjacent to the children hospital. Evidence (Puett & Guerrero, 2015) from another province of Pakistan, Sindh, also showed that remote areas were less exposed to the therapeutic program and the common barriers included long distances, high opportunity costs, less knowledge of services and malnutrition, and the children's refusal of ready-to-use foods. This study also found that remaining in the program until full recovery was difficult.

### 6.5.3. Nosocomial Infection in the Stabilization Centre: Safya

Safia, 33 years old mother has seven children in total, with the birth gaps of 1-2 years in each. She was from *Pachadh*, high water, insecure area. Her son Irfan suffered from diarrhea and fever and was admitted to the Stabilization Centre at Rajanpur DHQ. Parents were illiterate. They have no land for cultivation. Father was an auto-Rickshaw (an extension of a motor bicycle) driver in the semi-urban town for earning a daily income. The mother was a manual laborer and used to perform duties such as the spinning of date's tree leaves, cleaning the house, cutting crops, and other trivial tasks. They have no other collateral or property other than a mud house where they were dwelling. Sofia's total monthly income was meager, approximately Rs.15000. They have a hand pump in the house for boring water although the quality of water was not good. Her husband barely earned RS. 400-500 (~$2-3) daily, which was not adequate to fulfill daily needs. She stated, "husband's income is significant, everything comes with money, food, medicine, travel, and happiness are attained with money." Although the mother gave pre-lacteal, she wasted her colostrum. As the child was admitted to the Stabilization Center for the treatment of complicated severe acute malnutrition, she stayed some days at the Stabilization Center with all her children.

The small children were observed playing in the hospital. The mother had little knowledge that the floors were hazardous for the health of her children. The children might

acquire infections as they were lying, sleeping, eating, and sitting on the hospital bed, tables, floor, and washrooms. A healthy environment is a prerequisite for health and recovery. Hospitals are notorious for several infections due to the unhealthy environment of most of the government hospitals. At the same time, I observed that many staff, mothers, and children were not adequately aware of the spread of infections. It was observed on several occasions that nutrition staff often did not wash hands before eating. They usually inserted fingers and pencils inside the mouth during duty. Patients were spitting and sneezing, but they were not wearing masks. The case of a female staff better represents how unhealthy the environment at DHQ was.

"How is your condition?" asked a Nutrition Assistant. The reply was "I am feeling better than before and improving; however, it affected my kidneys and weakened my eye-sight due to using drugs." "But how did that happen?" I questioned in the meanwhile. She, then, shortly narrated her story of how she caught the infection:

> I used to work as a nurse in the District Headquarter Hospital in D. G. Khan [an adjacent district] and was transferred to Rajanpur hospital. When I came here, I had no residence; I couldn't find a suitable place near the DHQ hospital. I settled in a room in the hospital. Things were perfect until one-day unexplained fever and coughing started, and later I was diagnosed with Tuberculosis. Though I began treatment on time and felt much better than before, it impacted my life.

She lived in the hospital because her salary did not permit her to take a house on rent. She ultimately decided to live in the hospital and caught this infection. Hospitals are notorious for several infections, but Safya's children were playing, but no one knew its cost. Treatment for one child might be a cause of diseases in the rest of the other siblings.

The local politicians have historically and deliberately ignored this area, which also has some tribal influences due to its closeness with the tribal area. Many of the poor had to be manual daily wage workers because crops were destroyed. Many had to migrate to Middle-Eastern countries as manual laborers. When it was hard to collect wheat grains, how could food diversity be ensured? The quality of water is brackish, along with flood disasters. The government always remained passive in developing areas adjacent to the Suleiman mountain range. This kind of socio-cultural environment jointly caused ill health and malnutrition in mothers and children.

## 6.6. Nutrition-Sensitive Interventions

Seeking help from the social safety net falls under the umbrella of "Nutrition-Sensitive interventions." However, national and provincial institutions in Pakistan have a reputation of being so indifferent and violent to poor people because they often demand monetary incentives or something that can mobilize their file or case. Institutions, whether belonging to health, development, and social welfare, are often criticized for their being ignorant of the socio-cultural realities. There are several ways poor women are unable to be covered due to the politics of social safety nets. This case highlights how structural inequalities deprive poor widows to become beneficiaries of the income support program because of the lack of cultural capital (Bourdieu, 1994). Benazir Income Support Programme as a social safety net was initiated with the loan from the World Bank by the government of Pakistan People's Party (PPP) in 2010.

Although the government of that time claimed to make this program transparent and impartial, many of the households were selected after the Poverty Scorecard Survey (PSC). The recruitment in the program could not be altogether unbiased but was based on the close personal links and relations, generally known as social capital. After the survey, the process of distributing funds to poor households was much more complex and cumbersome. Many destitute women were thus ignored due to complications in the administrative procedures. They tried several times to contact tehsil and district offices for correction but in vain. Many of them thought of leaving their struggle because it was tiresome and merely a waste of time. I have a few cases of low-income families who were never given funds even if their names were included in the eligible people. Here is a case of two widows in one household.

### 6.6.1. "Rushing errands have made us tired now:" Haneefan

Haneefan was a poor and illiterate widow with two daughters and only one son. Recently, her only son died due to an unexplained headache and fever, leaving the second widow under the same roof. She got her daughters married. After a few months, both were

divorced from their husbands because they brought no articles of dowry with them due to poverty. One of Haneefan's daughter, Talat, has one kid, while the other, Sarwat, does not have any child because of her physically shrunk and stunted body, as reported by herself. Currently, the grandmother is living with three orphans after the death of her son. In total, four women now live in an old-time built a narrow space house of almost 400 square feet without any male head of the household. Haneefan and her two malnourished daughters have to go to homes of better-off people for cleaning toilets, washing clothes, and utensils (*jharoo, bartan, kapray*), as well as caretaking of older women as nannies.

When in 2010, survey teams of BISP (Nutrition sensitive intervention) conducted a socio-economic or poverty scorecard survey of every household in the Rajanpur District, their household was also surveyed, and poverty score went below the minimum eligibility score (16.17 through Proxy Means Test) required for BISP registry system and household became eligible for cash transfer program. The widow was missing some documentation, therefore, faced exclusion from the program. When they went to register a complaint, they met such a rush of women at the office gate, and they could not even enter. Once she managed to enter the office, they were sent from one department to the next. They went to that office repeatedly and showed their record to get money; the officer said: "I cannot help you, you can go and talk to another officer; I don't have enough time, so come next month." She was asked to produce multiple documents from multiple government offices. "Our legs have tired now because of rushing between this office and that office," one day she tacitly cursed running errands along with the passive and selfish attitude of bureaucracy, "for poor it takes years, and for rich just minutes, we don't have money." Unfortunately, even after several years, both of the poor widows failed to get any cash from the respective office. On Pakistani bureaucracy, file, agency, and authority Hull (2003, p. 310) has concluded that:

> A powerful person can move a 'stuck up' file. Those without influence have to 'put wheels on it,' as an Urdu idiom for bribing puts it. Other clients face the opposite problem of not being able to stop their file from moving because no official has an interest in deciding the case. As a senior official remarked to me, 'If you don't pay someone, they just send you up the chain.' Money or political influence can affect not only the speed but the path as well, diverting a file from its normal trajectory."

The widow came back empty-handed, finally. In short, to this day, their case could not be solved because of the so-called bureaucratic structure and red-tapism. They were, however, mostly deserving because of poverty, malnutrition, and there was no male household member to earn. Development interventions necessitate a fair resource distribution. Evidence showed that the poorest of the poor and low caste families with the lowest social capital in Punjab were excluded from the cash transfers program at the will of local political leaders. Some of the literature found similar results that only people with approaches and links to local politicians could be successful in becoming BISP's beneficiaries in Pakistan (Mumtaz et al., 2014). Families with lower socio-cultural capital bear the brunt and violence because of the lack of transparent and impartial social protection policies and social safety nets (Mumtaz et al., 2014) and become alienated and deprioritized health and nutrition (Chary et al., 2013).

Literature from other contexts on so-called bureaucratic hurdles has highlighted such misery of poor women facing structural inequalities and indifference of bureaucracy with the poor people who have no relationships with influential notables (Chary, 2015a). The lack of social and cultural capital deprives the poor of their due rights, although, and otherwise, they do deserve it. On the other hand, people with such capitals were witnessed on several occasions, becoming beneficiaries even if they did not deserve it well.

She mourned: "how we can fulfill our needs as neither there is any source of income, nor any male in our household who could earn some money." She repented that her son's wife is also a widow like me, my two daughters are divorced, and children are very young when a mother does not eat well how she could feed her baby. In this way, the baby often feels hungry, and breastfeeding is skipped frequently. When the mother is weak, the infant is automatically feeble.

> We often feel ashamed of working as domestic workers in other people's houses because our relatives dislike this, and remuneration is also not enough for us, there are so many necessities of life. We are hardly managing our necessities, only we know. We make *pakoras* and give it to our younger kids who sell it in the street to earn a little money with it. We want to eat meat,

> which is very costly. We can eat the meat during Eid-ul-azha[18] one time only in a year. We have no power to purchase fruit; we can only eat roti [loaf], potatoes, curry, and pulses. There is no enough diet for both elders and children in the house.

The cheap labor is the only source of household income, and that is certainly unable to ensure food diversity, essential to be safe from hidden hunger and stunting. In these circumstances, as literature (Chary, Messor, Dasgupta, & Rohloff, 2011; Chary, 2015b) suggests that the liability of sustaining the family falls upon mothers (or unmarried daughters) who exhaust their bodily reserves through starvation along with prolonged breastfeeding. They also sell their possessions in times of misery or initiate small home businesses, make and sell food, and often assign childcare duties to other kins in order to work for wages outside of the home.

Haneefan is unable to make her case understandable to anybody due to illiteracy. Their family does not have any proper communication and interpersonal skills. According to Bourdieu (1994), cultural capital plays a vital role in taking benefits from society. When they are guided to adopt specific procedures, she cannot remember the steps and names of officers. The poverty eradication or development programs preferably targeted the better-off, ignoring many poor of the poorest who have never been taken seriously by the bureaucratic structure of the development programs.

When resources are limited, competition is high; therefore, the humanitarian apparatus has to be narrow in its scope, leaving many deserving and potential beneficiaries far behind (Asad, 2003; Chary, 2015b). In Pakistan, poverty is so extensive. The poorest are deprived because they lack links and relationships with people in power. Pakistan is not a place where resources are equitably distributed and where the population is also under control. The World Bank's proposed program for income support for Pakistani society is not, therefore, well suited to the local's socio-cultural realities. There are obstacles in the form of structural and cultural inequalities in the national socio-economic registry process, especially for poor, widows, and disables that need some kind of power to break it. Therefore, this social safety program might better serve those well-off who have some

[18] Eid-ul-Azha is celebrated on the 10th of Islamic month Zilhaj. Meat is divided into portions, one part for the poor. Poor collect meat from those who scarify sheep, goats, cows, buffaloes, bulls, and camels.

social capital. This bureaucratic structure does not let the poor and weaker enter their offices unless an officer, lawyer, politician, or any other notable accompanies them.

Single female-headed households suffered from the feminization of food insecurity (Hoynes et al., 2006). She was failed by this system to be selected even after several efforts. After Haneefan, Raheela, his mother, and his brother's wife, too, could not get income cards despite a great struggle. Police even beat Raheela's mother at the gate of BISP sub-office Rajanpur due to heavy rush. These are examples of everyday violence of states' institutions against women in Pakistan. Police' beating of poor ladies is usual and a routine matter outside the main BISP offices in the district.

There targeting beneficiaries for cash transfer was flawed, as evidence showed that deserving widows and domestic female servants were secluded (Arif, 2006; Bashir, 2012; Mumtaz et al., 2014). Evidence shows that power dynamics control development and poverty alleviation programs (Aziz et al., 2015; Kwiatkowski, 1998; Gazdar & Mohmand, 2007). Findings are in line with the fact that links to local politicians were crucial for becoming BISP's beneficiaries in Pakistan (Mumtaz et al., 2014). In comparison to resources, competition is very high; therefore, the scope of the humanitarian apparatus is narrow, which neglects many potential beneficiaries far behind (Asad 2003; Chary, 2015b). South Asian poor often endure social and structural difficulties in the process of being beneficiaries, so knowledge about social exclusion is fundamental to advice program objectives, eligibility criteria of clients, and selection process (Aziz et al., 2015).

The advocates of the program claimed to uplift the poor through cash grants of Rs. 5,000 per month to millions of households, but previous governments blatantly misused tax-payers' money (annual budget of Rs100 billion for 5.2 million poorest women) for political supporters and deprived genuinely deserving of their share. Although rumors of widespread corruption in BISP beneficiaries' selection based on political influence are old, it becomes evident first time, on December 19, 2019, in Pakistan when data analytics exposed institutionalized corruption when the BISP Board requested National Database and Registration Authority (NADRA) to conduct profiling of BISP beneficiaries. It revealed startling facts that 142,556 beneficiaries of BISP were government employees; 2,543 were government officers of grades 17 to 21; 153,302 of the recipients traveled abroad once, while 10,476 had undertaken foreign travels more than once; 692 BISP

beneficiaries had one or more vehicles registered against their names; 43,746 spouses were owners of one or more vehicles (Agencies, 2020; Maqbool, 2020).

Also, Community Management of Acute Malnutrition (CMAM) is a short-term curative measure, especially in emergency contexts. However, the permanent, long term, sustainable solution of maternal child undernutrition lies in social and economic empowerment and education of women (El-Arifeen, 2013; Chowdhury et al., 2013). There is evidence that multisectoral solution strategy seems less successful practically; therefore, social safety nets for poor females necessitates micro-level nutrition sensitive and specific interventions, especially after devolution (Di-Cesare et al., 2015). However, remote areas are still uncovered, and the government department ignores them except the better-off so these are practically failed as poor and rural population's access from remote areas is already restricted, which shows a deep gulf between theory and practice.

## Conclusion

Families who have some links within local power circles (social and cultural capital) can get better chances of coverage. To combat the problem of malnutrition, the government needs to change priorities, as suggested by the local child specialist. At the primary level, the deprioritization of nutrition programs in comparison with the Polio eradication program because of heavy international funding suggests that the government needs to increase more funds for this too. Further, burden and pressure on the LHWs must be curtailed by focusing their attention only on maternal-child health and nutrition programs. In remote areas, seats to the LHWs should be urgently allocated. Also, the illegal sale of therapeutic food must be monitored and stopped. Nevertheless, all these require also road construction and infrastructure provisionings at basic health facilities. Human development infrastructure at the local level is also required in the district Rajanpur, which has chronically suffered from regional inequalities.

The poor rely on traditional treatment methods because of low income. Stigmatization and trust deficit of poor's in government departments is the strong indicator of low biomedical service utilization along with expensive and uncontrolled private clinicians' prevalence that need urgent policy decisions. This chapter shows that the medical staff does not care about these marginalized victims of social stigma and ignores

the poor's feelings (Bennett, 2009). The future design and implementation of government programs must be made more socio-culturally sensitive. Plumpy nets are effective only in emergency context but not in chronically poor settings and also such programs create a dependency of low-income states on international companies, which prepares such foods. Also, therapeutic food is not available in usual and regular circumstances, even though people need it. The permanent solution, therefore, lies not in treating the individual body but searching for a cure for a social body through political-economic means of social justice and equity. This chapter has explored barriers and inequalities poor face in accessing programs while in the next chapter I discuss how they respond to illnesses and malnutrition.

# 7. RESPONSES TO ILLNESS AND INDIGENOUS SURVIVAL STRATEGIES: ETHNOMEDICINE AND HEALTH SEEKING BEHAVIORS

## Introduction

The knowledge, belief, and practice about medicine, treatment, and health-seeking are social and cultural. The chapter finds that there is an articulation of mode of treatment. The power of magic and religion at the local level and weak economy at the global level determine this articulation and influence the way people seek health, nutrition, and well-being. The poor households generally deprioritized modern biomedical health-seeking practices because of poverty and lower access to healthcare. The social circumstances and cultural constructs guide local diagnosis, etiologies, and health-seeking behaviors. According to natives, a mixture of physical and metaphysical entities, including spirits, evil-eye, envy, magic, cause illness, and malnutrition. People treated these medical conditions with spitting, burning, blowing, herbs, milk, sacred verses, and strong antibiotics. Data unveiled that indigenous and local analysis of morbidity and malnutrition was based on superstition, magico-religious, mythical, and folk models.

## 7.1. Diagnostic Beliefs and Practices

**Local Expressions for Malnutrition:** People used different local terminologies and linguistic expressions of their culture to mean different medical conditions. They generally associated illness with physical or metaphysical beliefs prevailing in that society such as color, weight, height, spirit, and so on. An extreme poor is called as hungry and naked (*bhukha nanga*), whose condition is so pathetic, and who has nothing to eat and cover the body. This term is similarly used for abusing someone, which indicates how much the condition of being malnourished or hungry is a source of disrespect, stigma, and hatred. Some responses expressed malnourishment in local words such as weak (*kamzor*), thinness (*sukaypa*), severely malnourished (*sokra*). Green color symbolizes life: the child has gone dry (*bal suk gay*—an expression for the weak, thin and sick body); *safraa* (yellow color for anemia or iron deficiency); and baby is being green (*bal saava theenda pay*).

**Metaphysical Etiology of Illness:** The locals seldom take empirical evidence of illness but mostly believe in the spiritual nature of sickness, particularly when they seem very afraid of showing *davwa* (giving a reflection of the mirror to a child), which in their opinion, causes *paychas* (diarrhea). Generally, in grandmothers' view, there is something supernatural, which produces medical complications such as flu, asthma, respiratory infection, and diarrhea in children. Their explanation is based on non-experimental knowledge as they firmly believe in the relationship between religion, magic, or superstitions that cause infectious diseases, implying that females' knowledge about the diagnosis of diseases is highly hypothetical, non-empirically, and non-pathological. Also, older women forbid drying baby clothes on the suspended wire because the suspension on wire might make the baby's head spinning and dizzy.

The family elders fear that an evil eye may harm a child with fair complexion wearing a black shirt outside. Also, older ladies commonly restrict exposure of a small baby after sunset (*nimashan*). Some women perceived that malnutrition was a contagious disease. They thought the spirit of a weak or malnourished child might transfer to another child (*sookha bal mathay lag gay)*. Also, the mother of a malnourished child may harm a healthy baby by casting an evil-eye (*nazar-e-bad*). Some mothers also showed their belief that long hair on the child's head will restrict growth (*baal wadhay keh waal wadhay?*). According to them, long hair needs an extra amount of blood and energy; thus, having a haircut on time is essential for faster growth and development potential of a young child. In rural areas, they usually discourage growing long hair among small children.

One illiterate mother explained she always treated her children from spiritual healers. For the children who died with unknown reasons, the religious healers (*pir*) reveal that someone envious within the family has cast the black magic. Some mothers believed that ***taweez phuldhaga*** (amulet) could make the child's health better. When treatment beliefs were inquired from parents belong to *Pachadh*, they affirmed:

> We believe in *nazar* (evil eye), *jadu* (magic), and *sawan* (folk treatment). After birth, a *nazarwatoo* (black thread) is tied around the neck of the newborn for protection. After delivery, bringing a child openly in public is considered dangerous. A *taweez* (amulet) is tied to treat abrasions. Animals eat clay, and if they do not stop geophagy, animal dung is applied, then they hate eating earth and ultimately stop. If an animal is moving in a circle and not going to stop, give a *thumb*, as local people of that area believe. Also, tree leaves are dropped

upon the animal's body to reduce fever. Ash and salt (*khaap*) tied with the animal as it makes her stop circling.

The low-income people differentiate in treating boys and girls and go to spiritual healers for amulet (*phul taweez*). Even diarrhea is treated with local tips.

**Protection and Prevention from Pollution and Dirt:** Women in pregnancy must not be exposed (*purdah*) to the lady who recently has given birth. In their opinion, when pregnant ladies come in front of a newly born baby and his/her mother, then all the sickness, harmful effects, dirt, and pollution of delivery negatively impact the pregnant lady and her baby growing inside the belly. The expectant mother, therefore, ought to hide from one lunar date to the next similar lunar year of another month (***hik chandr toon bay chandr tak***). It is advised that every mother must follow this for the safety of her child; otherwise, the baby will probably become sick or even die. One pregnant lady did not expose herself to even her brother's wife.

**Prioritization of Treatment in Poverty:** During fieldwork, I came across several instances where treatment was not preferred; for example, in a newborn, the child had to be permanently disabled because of reaching late at the health facility. Also, one younger child caught Tetanus infection because his uncle had injured him while beating with a shoe, suspected polluted with the horse dung. Then, the baby and young mother died because the mother's belly struck the road in a motorbike accident. Still, the indifferent and poor husband did not bother to rush her wife towards the hospital, even after her insistence because she had pain. Poison ultimately circulated through her body that resulted in the sudden death of the baby and her mother in the first trimester of pregnancy. The inhabitants of remote areas, especially mothers, have to suffer while being carried on some donkey cart, most of them die en-route to the nearest health facility. In the case of a severe ailment, many of the poor preferred treating their girls at the abode of spiritual saints (*Pirs*). The common belief was that if a family consisted of four girls and no boy, then it was advisable to consult the spiritual healer.

Ignoring the treatment of minor illness was normal among low-income manual daily wage workers. If they developed some minor injury, they tried to treat it on the spot, mostly with dirty things such as mortar or muddy water, with the belief of a healing essence

in the “dirt.” They do not usually inquire “much” about the causes of disease and death and often become silent, conceiving that worries have come with “God’s will” and, therefore, rarely think to revolt against the structural violence and social sufferings which contributed a lot to their illness.

More often, locals report illness from low-quality local-made contaminated and junk foods. For several days rural poor resist diseases and illnesses. Having been reliant so far on mystical methods, when they become energy less and unable to fight more, their medical condition becomes exceptionally critical, and they decide to rush to the nearest hospital for the treatment as a last resort. Often “mobile healers” can be observed selling medicine in public transport for problems of teeth and eyes. When buses at stations stop, freelance mobile medicine-sellers enter and sell off their self-made medical products to the rural and illiterate people, with the consent of bus drivers. Jugglers show tricks and sell various medicines without any license from the government. It is yet to see if it is a matter of choice or limited access to modern health centers.

**Limited Access/Traditional Birth Attendants:** When access to health and nutrition resources of pregnant and lactating mothers becomes scarce, *dais*[19] is the only option available in these circumstances. Sometimes their practices and behaviors may cause complications in the life of both mother and children. Lack of healthcare facilities at village levels, gender inequities, community awareness, and household poverty influence may lead rural mothers to be consulted and treated by these *dais.* Another reason people prefer a *dai* is that they are available in every village at very cheap rates and there is no fear of C-section. Usually, women in rural areas give birth at the hands of the traditional *dais.* These *dais* do not always use safe methods of deliveries — most of the BHUs in union councils of remote areas miss LHWs. The staff appointed at remote basic health units remained absent from their health centers. There were several quakes reported doing practice in villages. Many people consult them for the treatment of common health problems. Besides, a vast majority also visit spiritual healers.

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[19] In South-Asia a *dai* is considered as a midwife (Jeffery & Jeffery, 1993: 17), however, Pinto argued *dai* is “a separate category of practitioner whose work is necessary to bring a baby into the world and manage its vulnerability through both body and trash work” (2008:71).

## 7.2. Treatment Methods

A brief discussion of each health-seeking method in the community is given below.

**Magical Treatment:** Gold paper and tree leaves are put in *poutli* (small bag), every Sunday this *poutli* is spun, seven times around, from front to back of a malnourished child, and thrown into a well and this is repeated seven times a week. When it is opening in water, the child is perceived to recover. One mother informed me that she once used Eggplant or Brinjal for this ailment. If it shrinks and becomes dry, the child will get nourished. Hugging the bitter *uqq* plant (milkweed)[20] is also prescribed by several women as a medicine so that when the child grows, the plant bows down. One grandmother elaborated a similar method for treating malnutrition:

> My grandson was once suffering from *sokra* (Kwashiorkor), swelling belly, weak legs, and an enlarged head. He was treated with injection and given a bath on "Jasmine Plant." Someone advised to provide him with a bath on a snake. We did that too, but the baby could not be cured. Then some other person suggested that *tawaeez* (amulet) be written on an egg's shell and buried under the bed of the baby. This method worked, and the baby grew up and recovered as the egg shrank. In one month, the baby started to walk and run and became perfect and healthy.

When asked how people treat *sokra* (low-weight for age and wasting), one traditionally prescribed treatment of this condition was that with a magical law of contradiction as it was caused due to black magic and evil-eyed. Also, wearing a metal ring is believed to be useful, along with treatment. The mother's physical closeness to a child can protect her/him from fear, according to a *dai*.

They advise to keep *uqq* plants near the malnourished child and spin a tori (a vegetable like brinjal) all around the sick and weak baby and throw it on the roof. These will become dry, and the child will become fat (***aqq sokay taan baal wadhay***). Besides this, a child must wear gold in hand and black color thread in the foot for forty days. If the mother has to leave her baby for some time, she should keep her shirt with him; otherwise,

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[20] Milkweeds plant excrete milk-like substances when injured as a defense mechanism against herbivory. Due to this white fluid, it is supposedly considered as a curative essence when hugged.

the baby will be frightened. Mother can also sprinkle her breastmilk on the bed. "What mother eats, it affects the child" is another local concept that prevails in the locale. Traditional birth attendant argued, "***khoo safa hosi tan khada saf theesi***,"

> If a child is suffering from diarrhea, the mothers should become preventive in this regard. Mother is the chief source [of infection] and should avoid eating harmful foods.

**Burning:** The villagers usually treat dog bite injuries with red chili, as formaldehyde in it was supposed to burn and kill Rabies virus [as told by a veterinarian during fieldwork]. Moreover, the crow's blood is recommended for treating baldness, and buffalo dung for skin problems like ringworm. I saw a child plunged in buffalo dung by an old age healer because he was suffering from ringworms for a long time. Burning wheat or wood and its hot juicy liquid oozing out of wood's reverse is prescribed for the treatment of ringworm. If someone has Asthma or any related issue, a *Thumb* (burning scar resembling a thumb) is given behind the neck or on the forehead.

**Milk Sprinkle:** Some ladies, possessing spiritual powers, are famous for treating different illnesses through praying *salwaat*, including several throats and skin infections locally known as *mallay, mai rani, khasra* (measles), *pani watera* (chickenpox). When a baby is suffering from chickenpox, old ladies advise to keep the infected child away from others because it is contagious, there is no need to take a bath until the seventh day because it is still wet. Every third day of chickenpox, the child is given a milk sprinkle (***kheer da chanda***), and on day seven, the baby takes a bath. Their semi-religious belief in "milk as sacred" brings fortune to the sufferer. A variety of spiritual healers (*Tasbi wali bibi, Zara bibi, Maiji, Hajani*) are famous there.

**Spitting:** Some older women express that they know the treatment of every kind of disease because they have never got their hair grey under sunlight, but it is their experience that has made them so keen to take pragmatic decisions. They prescribe younger people to use *paroothi lub* (early morning spit) on their injuries, pimples, and sores. Because it is considered an antiseptic that might kill the germ from inside, perceiving that dirt has healing effects or formulae of 'iron cuts iron' or the 'opposite of opposite,' and 'contradiction of contradiction.' As well as they recommend glycerin swab (cotton stick

dipped into glycerin) and apply it all around the throat, glycerin is an antiseptic that helps to get sputum out right away because of its very sweetness and heat essence. Every person, child, woman, and older can use this healing remedy. So many rural mothers felt no need for high potency antibiotics.

**Recantation and Blowing:** To cure a weeping and disturbed child, *Dum or Salwaat* is often recited. Dum is recantation of either religious, magical, or sacred text, sometimes from the Quran. People bring their child to any devoutly religious person in the village for *salwaat*. Locals believed that someone's bad-eye (*nazar*) had made the baby sick. One mother stated, '*salwaat* is the perfect cure (*hik-tick*) of the evil eye.' Children suffering from sores on skin (*mallay*) were treated with *salwaat.* During the recitation of *salwaat*, blowing air through the mouth is done continually coupled with spitting on the lesions. Many of the educated people also believed in the efficacy of the *salwaat.*

The woman-with-prayer-beads (*Tasbi-wali-bibi*) claims she knows about almost every disease, and her *salwaat* is very powerful in healing. There is often a long queue of followers (*mureed)* who usually reach from different far-flung villages for *salwaat* and for *dua* (pray). Many believe that her power of prayer and *salwat* is a perfect cure (*hik-tick*). She claims that Allah listens to her pray for every person who comes for s*alwat*, and she pleads before the Almighty to provide the cure. When these sufferers heal through prayer, they come again for paying their gratitude and thanksgiving, often with substantial gifts including a goat, sheep, hen, and even gold jewelry, which is called *mokha* (paying back) in their native language.

The Quranic teacher (*Maiji*) *has* an impressive personality. *Maiji* gives treatment to a boy who supposedly had chickenpox but claims that this is not a disease; instead, it resulted due to the boy's body becoming hot, mainly when a lactating mother ate spicy and hot food. She was of the view that *salwaat* was very effective in treating this. When asked what sentences she recited for *salwat*, she replied, "it's a secret and cannot be revealed to everyone," but upon the insistence of a key informant, she agreed to share the "holy words." So she asked to first recite the sacred *darood* (say God bestow peace on Prophet) seven times before recitation, then move "right hand's index finger" around and over the infected area of children carefully, and then one more time read the same *darood*. She then exposed

some rhymes that are given below, and the bold words have power in local context owing to their religious context. She talks to the illness: God is great; you are not; you will die as your master has died.

> Bar baroori, kar karoori, karnay **shah**, **Allah** medha waddha hay, tu na waadhi hoo*,* peer tedha bafat pa gay, tu vi bafat pa.

Then, she recites and blows an Arabic Quranic verse "*am abramou amran fa inna mubre moon*" on the baby's face. As people have a strong belief and trust in Verses of Throne (*aayat-tul-kursi*) for multi-purpose security as well as for the safety of children. The Qur'anic *Surah* first describes the qualities contained therein:

> **Aayat-Tul-Kursi** purbi kalam, Aayat-Tul-Kursi deen Quran, Sat asman hik deewaan, Charh nabi ker sawari, Lohay da coat, Tarameh di bari, Satar balla wanje oodari

These lines mean that the powers of the "throne verses" of the Quran and prophetic journey to skies (miracle) is coming to annihilate 70 sufferings. In this method are read these sentences seven times, then reread Aayat-ul-kursi seven times, and it would become a *purdah* (shield) all around the child to protect from danger, black eye, and other crises. Another belief of this area is to cure the baby's tonsils with the help of cotton attached with a small stick dipped in glycerin and applying this cotton swab into the mouth of a baby by reading these sentences:

> Hud hud pakhi Khuda oopaya, **Ali** maar baadam khawaya, Charh mai sanghri ith sohnra **nabi kareem** aaya

The reciter gives intercession (*wasta)* of holy personalities to disease such as the sore throat. The beliefs in metaphysics is a natural psychological product of the human mind which struggles to deal with the limited economic resources without going far away from the power of savings and minimum holdings. The cultural behaviors and beliefs have a justification in themselves that it is better to try the impossible with some magical and metaphysical power of miracles. Treating illnesses by supernatural and magical methods is a source of income, respect, and power to control the minds and gain trust of people. The reciter reads *Salwaat* for the treatment of various skin infections (*mallay, dadhri, angari, dumbal, chambhal, chaala)* in the following words:

> Satar baroori Kashmirun aaey, kithan tera peew, kithan teri mai, dharti mar moi, kithun mileen kithun challeen, kithun di dadhri, kithun di anghari, ghand khool malla, huth phord malla, sheemad malla, sarrh wanj, sukk wanj, daroohi hai hazrat **Suleiman** peighamber di

Seventy types of sores are questioned and requested, where your origin is, may you get dry for the sake of the prophet Suleiman. It seems like a magical style but with religious and prophetic intercession for treating skin infection. A *Salwaat* for the breaking black magic (*kale jadu k toor k liay*), is recited daily 21 times and 21 days in total. It is as follows:

> Bajri bajri bajri, kiwaar bajri, baandhun, dhassun bahaar bajri, aae bajri, jae bajri,her jaha samaey bajri, jo tona jadu pher ker ae, **oullat phulat** ker wahan per jae, Jo jo kare so so mare.

She recites these lines poetically, which means that black magic would return to the original place from where it originated. So diseases are perceived as more spiritual rather than empirical. According to this perspective, locals prefer treatment with religious or magical symbols, names, personalities (*Ali mushkil kusha*-Ali as Problem Solver) who are considered authoritative, sacred, and supernatural in theology. They also mix religious texts, especially showing any power or protection and read as in magical recantations. So it can be concluded that the magico-religious treatment is still a dominant way to treat illness among the rural populations.

**Herbal Treatment:** Children are treated domestically at first. Rural grandmothers and mothers usually treated diarrhea at home according to their experience and knowledge. There were other reasons too that compelled mothers to treat them at home first. Absence of metalled roads, the least interest of males in treatment, and low social, cultural, and economic capital were the most prominent reasons. When asked how did they treat diarrhea? Mother's responded that they treated this infection with local traditional tips. Some mothers described that they gave *pakka pani* [water boiled with *ilaichi, jangli podina* (mint)].

A few respondents reported that they roasted *suhaga* (tankan borax or calcined borax) in a frying pan, which would swell after a while and rise. They would grind it and mix it with *Tabasheer* (Bamboo exudate or vanshlochan) and water, and give a spoon full to the sick baby twice or thrice a day. The ill baby would fully recover. *Tabasheer* is also used to treat the baby's infected mouth along with a jet of fresh milk of a goat. One

grandmother revealed that her grandson was once introduced to cow's milk in the early six months, which had caused a severe diarrhoeal infection. Grandmother also countered that they used to grind *ajwain* (trachyspermum ammi or bishop's weed or carom) and *sounf* (fennel) to treat baby's belly pain.

A few mothers narrated they treated diarrhea with castor oil. It resulted in the watery stool for the first time and cleaned all dirty materials from the child's body. She believed that this was a safe treatment proven several times for the treatment of this infection. She shared this practice had sound effects. Low excreta are considered a sign of that child becoming normalized. One traditional birth attendant suggested:

> I use "*Sehat,*" a homemade syrup made up of mixture of some pure and natural things, for example, bees' honey, *paneer* (*withania coagulans* or Indian rennet), *sounf* (fennel), *musag* (bitter wood), *malathi* (sweet wood) and jaggery) if the child is suffering from pneumonia.

One mother described how she treated her children at home:

> We also give babies potatoes cooked on the fire, and some salt sprinkled onto it. We cure children in our home in case they have a stomach problem by mixing *Paneer* and *noushadar* in the milk and giving some light heat. Milk will spilled, separate yogurt from golden water, and then put some *roghan-e-badam* (almond oil) in it. Another cure is to mix rose flower and *sounf* with *arq-e-gulab* (rose water) and give heat, gas passes within seconds, and it cures pain in the belly. I have never given colic (allopathic medicine to control treat pain in children) to my son. He often feels pain in the stomach. It is a proven treatment. It is the best cure ever, as the baby stops crying at once.

**Allopathic Methods:** Modern biomedicine is the most common method of treating sickness in the district. According to the people, it has both positive and negative effects on the human body. Better-off mostly prefer this method of treatment as it suits only those who can easily afford it. At government hospitals, however, the majority of low-income populations are more often discriminated against and stigmatized. Many criticized biomedical practices, expressing their bad experiences. They stated that the use of antibiotics was widespread among medical practitioners without tests. There was no

difference in age while administering different types of medicines by doctors who prescribed various antibiotics simultaneously. One mother expressed:

> For the treatment, we often go to a doctor who runs the clinic near our home. He gives strong antibiotics. Last time my son got sick very seriously, so he was treated with multiple medications at the same time. Not sure what the ailment was, the doctor prescribed two or three antibiotics because he thought it might be either malaria or pneumonia. Last year my son was infected, and I took him to three doctors one after the other because he was not showing any signs of recovery. He was given three types of antibiotics for Malaria, Pneumonia, and Typhoid at the same time. Though he is back to normal, my son is not as active as the rest of my children because of the excessive use of these antibiotics prescribed by the medical doctors.

Doctors use antibiotics without fear because they have no check and balance from any higher authority. Explaining the high use of multiple antibiotics, one doctor admitted:

> Yes, we often put children on numerous medicines at the same time because the situation of the patient is much critical, and laboratories are not available everywhere that determine the cause of the disease, and the cost of tests is expensive, forcing people to forego them. Mothers come in a hurry and plead that they have no time and have to get back home soon. They insist upon injection and beg not to prescribe syrups, as they do not cure quickly. 'Children don't drink syrup easily; therefore, we give shots more frequently.

**Priorities for Government:** "Priorities of decision-makers must be changed," proposed the local pediatrician. He focused on the word "priorities" many times. He asserted that there were missed priorities, and the government should hit the right priorities, and there was a need to avoid wrong priorities such as megaprojects of buses. He informed the poor lacked the necessary facilities and the right living conditions. There was a lack of knowledge regarding treating infections. The health-seeking behavior of the illiterate and impoverished was not active, as they could not respond to any medical condition on time, which caused many casualties. The child specialist added, 'mothers are uneducated; we have to teach them a basic level of guidance, as what is to use, when and how much dose is necessary. Many mothers pick up at once, but several others fail to put it in mind.'

**Resistance as Health:** Sweeping dust is considered not harmful activity; this is observed when someone is carrying an infant while another person is sweeping. There is hardly a conception to cover the baby's face from dust. Some even believe that *dazak* (soot)

will make baby resistant to it, as they say, "***viswas karaysoon tan bal paka kewen theesi"*** (how will the baby become resistant and hard if we get extra-sensitive and over-conscious). Once parents from *Pachadh* argued, "only vaccination of Polio drops is acceptable here, but no other vaccination is usual, because we think injections will make them dependent and addicted (*hailak*)."

When asked by a doctor why some children did not suffer even if they did not wear proper warm clothing in cold winters. In contrast, others who lived in an elegant atmosphere got infected with a minute unhygienic atmosphere. He replied, you were accurate in thinking this, as this might be a question that still needs proof scientifically. These poor children are not properly wrapped up in summery dresses in winter and develop a resistance to an atmosphere while children not habitual and resistant have the probability of being prone to these infections quickly. Similarly, in areas where water is not clean, children suffer and slowly develop a cohabitation. Meanwhile, bad water has made them infected so many times that the loss is often irreversible, which results in stunting, a chronic form of malnutrition.

**Maternal Depletion:** There is a common perception that maternal malnutrition is a reason for giving birth to malnourished babies. In contrast, one often happens to see several healthy babies, but the mother is weak. The doctor viewed, 'babies extract full of her required energy from mother during a stay in the womb, which causes maternal deficiencies if not fulfilled by whole dietary intake. But some babies are born malnourished, I asked? The doctor replied, 'true; it may also be a possibility. Mothers need to keep a balanced diet for that. Stress is not good for pregnant ladies.'

**Management of Medical Conditions:** This was a matter of lifestyle and unfortunate circumstances to develop a roadmap to ill health and malnourishment. 'Gastrointestinal, lung and malarial infections are shared among the locals. Some mothers complained that doctors treated their children with multiple high-potency antibiotics. One mother told her son was given three antibiotics at the same time that caused unconsciousness. When asked by a child specialist, do you treat infections in such a way? He responded:

> With antibiotics, most of the time, we recommend medicine according to exact condition and based on the diagnosis. Sometimes the disease is severe; we

> prescribe multiple antibiotics with high potency. Sometimes syrups are suggested and sometimes shot, depending on the severity, mostly antibiotics, and anti-amoebic such as Metronidazole, Cefspan, or Cefixime, are used.

When asked a medical officer, what mothers should do for effective management of different medical conditions? He informed mothers must be given primary first aid education to cope with common illness onset so that they can do some sort of self-control mechanism. Mothers should know that acetaminophen and ibuprofen are for pain; the antiseptic solution is for injuries and cuts. In case of diarrhea, the mother should know water, salt, and sugar levels of the child body must be sustained, for this, she should use Oral Rehydration Salts (ORS), or she can make herself at home remedy if vomiting and motion are more than three times in a day. Mix one teaspoon of salt and two spoons of sugar in boiled water equal to 1 liter and use in 24 hours. Similarly, mothers must be knowledgeable about the symptoms of pneumonia if the ribs are moving faster than usual in 1 minute, the child should be taken to a doctor for treatment. The child's fever should be kept low with taking off warm clothes, making feet and armpits of the child wet with fresh water.

Poor are often stigmatized as they deliberately ignored biomedical treatment, thereby blaming the victims in simple ways. The social inequalities compel mothers to adopt alternative therapies (other than biomedical) because they are inexpensive, easily accessible, and psychologically naïve enough. The role of development and equity or access of the poor to it is crucial. For the success of health and nutrition intervention, the required level of education, especially of mothers who deal with children, and understanding of the causal link is fundamental to make the response sustainable. If the public is unaware of the mechanism and causal pathways, there are fewer chances to secure the expected results from a program that is conceived to make significant impacts.

### 7.2.1. "My *dewarani*[21] did *kala jadu* (Black Magic) on my son" Nusrat

An Anemic and low weight mother of 30 years, Nusrat, from Riverside, was interviewed. This village is far from the stabilization center for the treatment of severely acutely malnourished children. She had his son Khan, two years old, having MUAC 10 cm and weight 7kg. The birth interval was safe, nearly three years after every child. The mother expressed that:

> Her husband does *jatki* (cultivation) on the landlord's land and barely earns the 8th portion of sugarcane and other crops. He also loads crops and brings them to the factory. He just brings ration from the market but doesn't give pocket money, mostly I don't have money, and therefore, our children feel sick and weak.

Children have mostly experienced diarrhea, fever, and lung infection and gone to both doctors and *pirs* for treatment. Out of her three children, one has died for unknown reasons. She told me that he just suffered from fever and ultimately died. After the funeral, a priest (*pir or moulvi*) told them the child had died because someone within the family cast the black magic on him. I probed what caused her son's death. She elaborated:

> My *dewarani* did *kala jadu*[22] on my son. The main reason she used to cast it [black magic] on my deceased son was that she was jealous of my being as a mother of sons because she had daughters only. Because of this, "*jadu tona*," my seven years old son died.

Traditional healers already know sufferers' psychology and intrahousehold politics, so they deliberately construct the "treatment play" to fix the problem. Like breastfeeding, the birthing capacity of a mother, especially a male child, can be affected by "bad or evil eye." Previous studies conducted in Pakistan also indicate that rural mothers have a strong belief in the magical causes of illness (Qamar, 2015; Mull, 1991).

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[21] *Dewerani* is the wife of a *Dewer* (husband's brother). There is a hatred, disliking, or jealousy factor between two women. They often are at bad terms and fight with each other.

[22] *Kala jadu* means black magic to give someone (who is being considered an enemy even if a relative) a severe damage or disadvantage.

Mother is not educated and only contributes to his husband's work in the fields and does domestic duties; children care, sewing, knitting, and so on. They own the only land where they reside, having half *kacha* (mud) and half *pakka* (bricks). They also have two cows. The source of water includes a hand pump, and its quality is not so good; however, there is no toilet in the household. Parents revealed they go outside in the fields or in wheat crops to defecate openly.

When asked about diet? She said, "no egg, milk, and fruit, but mostly we use rice, wheat loaf, and *daal* (pulses). Our child of two years eats biscuits, my milk, and rice. My husband says, 'don't give anything lest he becomes ill.' What made it unhealthily, I asked. She responded, "cow and goat milk caused vomiting and cannot be absorbed, I just breastfeed him. Also, junk food like fried poppadom is responsible for adverse health when used, but *taweez phuldhaga* (amulet) can make the child's health better. It showed her strong faith in supernatural entities again.

Spiritual etiology of illness transcends further into other behaviors too. When asked what you used in pre-lacteal? She informed me that they gave "raw milk of a goat" without boiling it. Then, I wondered, do you provide early milk (colostrum)? She replied, 'we don't give because it is hot, and it makes the baby ill.' Further, she explained that the baby should not be given breastmilk in summer because it gets warm when we work during hot days of summer; therefore, the baby gets sick. She opined it might sometimes become milk's excuse to make the child ill. Perhaps it was perceived due to making an analogy [of hot-cold] that milk of a buffalo or cow becomes spilled in high temperature in hot weather.

Do you use anything other than breastmilk during the first six months, I asked? She replied that it was just "biscuit and water." Do you boil bottles and milk? Further, she disclosed that they used detergent to wash bottles and boiled milk "sometimes" but not "always." Who generally takes care of children in parents' absence, I enquired? She stated that when we go in the fields, cousins of my children help and take care of them. They give *roti*, *chai*, and *pani* (loaf, tea, and water). When asked what types of diet can be beneficial for the health of children and mothers, she reflected that the child should be given *lassi*, and fresh *bhaji* (curry or gravy) and what the baby wishes for eating instead of something undesired. It indicated that children were unable to eat preferred and fresh food. When food security is measured, the preferred food is a fundamental question. When asked about good

and bad foods, it was replied that the mother should eat rice and loaf for good health; both grains are carbohydrates. It shows a lack of knowledge and behavior about food diversity.

When asked whether breastmilk was important during sickness? The answer was entirely unexpected to me. She was of the view that the child must be given breast milk during illness; otherwise, the child can quit breasts and can leave the habit of breast-sucking in severe weakness. It is evident, in this case, that the mother was illiterate and had strong beliefs on the non-empirical, superstitious, and metaphysical ways of sickness. They treated their children from some magico-religious authority until some person from the urban city of the district informed them about the treatment of malnutrition with milk and RUTF. But mothers still had strong influences of religion and magic on the life of children. Literature (Qamar, 2015) has shown that people in the rural areas of South-Punjab had stringent beliefs on *tona* or *phul-dhaga* because of historical underdevelopment, poverty, and lack of intervention in the social development of rural areas.

## 7.3. Discussion

Women treated illness and malnutrition according to their social, economic, and cultural capital. Previous studies on health-seeking found a combination of modern and traditional health-seeking strategies in Pakistan, like other developing countries (Durr-e-Nayab, 2005). These showed that women's access to health care depends on the psychological, socio-economic, and demographic background. The causes of illness in other South-Asian countries, such as India and Bangladesh, are also perceived by both spiritual and pathological function. Therefore, a combination of modern and traditional modes of treatment is employed, where elders, religious and traditional healers influence gender and structural forces construct disease perception and the choice of treatment (Begum, 2012; Khan, Bhuiya & Chowdhury,1996). Another study from Pakistan found that symptoms of illness were generally taken very normally; therefore, there is no need to be sensitive about seeking care for treatment (Durr-e-Nayab, 2005). She concluded that health-seeking behavior was strongly dependent upon people’s belief systems relevant to their socioeconomic, demographic, physical, and psychological backgrounds.

Anwar, Green, and Norris (2012) reviewed the literature and found health-seeking behavior resembles a mosaic owing to socio-cultural and religious milieu inside the

country. According to them, private healthcare, self-cure, traditional healers, and superstitions and fallacies attached to health-seeking behavior were universal in Pakistan. Their study concludes that public healthcare infrastructures must be improved, and traditional healers need mainstreaming. In Nichter view, “therapy management invites analyses of transactions that are at once influenced by cultural values, social roles and institutions, power relations, and economic circumstances that influence the ways in which illness is responded to in context over time.” (2002, p. 82)

The local belief (***hik chandr toon bay chandr tak***) that a pregnant lady should not face or encounter a mother who recently delivered a baby because childbirth involves pollution. As women might be a target of attack by malicious spirits during such periods, ladies ought to maintain purity refraining from pregnancy and birth-related dirt. Hindus’ notion of purity and pollution has strongly influenced the perceptions of Muslims in South-Asia (Rozario and Samuel 2002, van Hollen 2002, Jeffery and Jeffery 1993, Pinto 2008; Blanchet 1984, Rozario 2001, Jorgensen 1983 as cited in Begum, 2012).

Literature (Qamar, 2015) has shown that people in the rural areas of South-Punjab had stringent beliefs on magico-religious beliefs (*tona* or *phul-dhaga*) because of historical underdevelopment, poverty and lack of intervention in the social development of rural areas. Magico-religious fusion-based healing practices in rural Punjab are standard (Qamar, 2015). Qamar’s (2015) study of magico-religious *tuna* in the context of South-Punjab shows how *tuna* is used to treat multiple illnesses, especially for the treatment of evil eye and *sokra* (marasmus). He wrote that people believed in the shrinking of *bengan* (brinjal), which people showed having turned dry and children with *sokra* having recovered and become healthier. People have strong beliefs in such types of magical treatments because of the low level of development and illiteracy and access to healthcare infrastructure.

Data revealed that many locals related malnutrition with getting dry, thin, and bony. Mull (1991) similarly revealed that mothers perceived malnutrition as being light and dry. Data also unveiled that indigenous and local analysis of morbidity and malnutrition was based upon superstition and folk models. Studies (Mull, 1991) highlighted that severe child malnutrition was perceived by the mothers as if it was a disease when a child becomes too thin and dry (*sookhay ki bimari*). In local opinion, this disease transmits through an evil

spirit, shadow, or influence (*saya*) by encountering either a woman having impurity or a marasmus child. Therefore most of the mothers believed only magico-religious therapies could work and treatment at a clinic or through good food was not useful; thus, hiding these acutely malnourished children due to social stigma was justified. Northwestern Pakistanis recognized this condition as *moordasip* owing to fright and spirit possession. People fear that a mother with impurity could catch a shadow (*saya)* and transfer it to the baby through her breastmilk (Mull, 1991).

A qualitative study from nearby Sindh province of Pakistan also brings forth very similar findings on how rural communities seek religious and spiritual ways of health (Qureshi et al., 2016). According to this study, the spiritual healer treats illness through chanting and blowing and through giving amulets to wear in rural areas. Rural areas of this district have been deliberately and chronically neglected by the political and executive leadership of Punjab province. Morsy (1996) concluded that the "culture at micro-level" was determined and constructed by the macro-political, economic power structure, and vertical links of macro determinants. Also, Sheper-Hughes (1992) similarly highlighted the social history of cultural practices. Evidence (Qureshi, Qureshi & Khawaja, 2017) in rural Punjab include local beliefs, even spiritual and home remedies are tried in critical cases. Similarly, Kwiatkowski (1998) has analyzed local's construction of illness and malnutrition in non- industrialized settings of the Philippines in these words:

> In these healing beliefs and perceptions, malnutrition was constructed either due to supernatural beings or natural causes....malnutrition or extreme thinness could be caused by a supernatural being due to personal and familial transgression of social and moral codes....healing beliefs lacked an understanding of malnutrition that would include a broader analysis of its macro-level political and social causes.

The traditional pharmacy was on the decline that illustrates how biopower's political control over the health and lives of the public (Focault, 1979) is maintained through commercial and the modern neoliberal economic influence (Harvey, 2005). Using traditional medicine by majority of the lowest income strata of the district shows that it is an alternative method of treatment which is not able to compete for modern medicine and related business due to its dominant hegemony. Therefore it has reduced to only those unable to pay the hefty price of private pharmaceutical companies products prescribed by

the benefited doctor. Studies have found the gradual reduction of herbal and other methods of treatment, even in rural settings in other areas of Pakistan (Qureshi et al., 2016).

## Conclusion

This study explores ethnomedical practices and perceptions about the disease, malnutrition, sickness, and the locals' and community's responses to it. The methods for treating health problems are plural, such as spiritual, traditional, herbal, and biomedical, where elders, religious, and traditional healers influence gender, and structural forces construct disease perception and the choice of treatment. It reveals that many respondents related malnutrition with getting dry, think and bony. Data unveils that indigenous and local analysis of morbidity and malnutrition was based upon superstitions, traditional, mythical, and folk models. Kwiatkowski (1998) similarly analyzed local's construction of illness and malnutrition caused by the supernatural being due to transgression of social and moral codes; healing beliefs lacked an understanding of malnutrition that would include a broader analysis of its macro-level political and social causes. Medical anthropology needs to link the local ills to the larger systems of domination which influence them, therefore, psychological anthropology is vulnerable to the same critique (Farmer, 1988). In the 16th century there started a mixture of Unani and Ayurveda treatment methods to produce an indigenous and traditional medical system (Leslie 1976, Leslie 1974). The decline of this traditional pharmacy is the indication of globalization's political control over the health and well-being, and the lives of the public are maintained through commercial and the modern neoliberal economic influence. The business of these old traditional medicines, once widely practiced, has just reduced to a few diseases, which shows how society makes opportunities available for different people based on their socio-economic conditions, beliefs, and behaviors developed historically by the social structure of society. Western biomedicine became the empire's tool for social control, and it was the colonial rule that established biomedicine and the stigmatized indigenous healing system as quackery all over Indian Subcontinent (Forbs, 2005). This chapter presented locals knowledge, beliefs and treatment methods. The next and the last chapter gives synthesis, conclusion and recommendations.

# 8. CONCLUSION

Maternal child health and malnutrition have involved political, economic, social, and cultural factors. Drawing upon UNICEF's framework and anthropological syndemic, interpretive and structural violence approaches, this dissertation has deconstructed knowledge, beliefs, practices, and experiences of poor households in accessing adequate underlying resources required for functional nutritional status. The qualitative data was collected through ethnographic methods of participant-observation, focus group discussions, key-informants, in-depth interviews, and personal stories. The specific objectives of this study were to assess how women's experiences of water insecurity influence maternal-child health, and discover poor mothers' food insecurity experiences, dietary perceptions, and practices. Also, it navigates barriers mothers often face in accessing the nutrition-related programs, explores knowledge, belief, and practice about IYCF, and finds out the impact of time poverty, fertility, and intrahousehold politics on maternal care.

The research has revealed that the political economy at a larger level (defense budget, neoliberalism, post-colonial bureaucracy, regional inequalities, and feudalism) diminished vital resources especially water for Southern ethnically disenfranchised regions through a heinous nexus of inequalities, which culminated in the structural vulnerabilities. As the report by the United States Institute of Peace entitled "Contested Waters," (Mustafa, Gioli, Karner, & Khan, 2017, p. 54) has concluded:

> Here the role of the postcolonial Pakistani state has to be reoriented toward delivering services instead of practicing the science of the empire that is its legacy. A starting point for that reorientation could be modifying the enabling legislation for water management in Punjab and Sindh to make these laws more consonant with the expectations of a democratic society rather than the law-and-order imperatives of a colonial and postcolonial state.

Malnutrition is an issue of the developing world, specifically Africa and South-Asia, both were once colonized. The problem of malnutrition could be conceived as one of the major postcolonial and post-development predicaments. Social, cultural, and economic engineering during colonial and postcolonial times might be accountable for the current

high prevalence of malnutrition in Pakistan's low priority settings. The control of resources was planned and managed in such a way that it replaced indigenous knowledge and methods, strengthened the stratified structures of inequalities, and created a dependency on external help.

The previous research trends on malnutrition in Pakistan have obfuscated realities under the influence of these power structures and tried to use neoliberal or public health lense only, and blaming often local cultures without considering the broader perspectives. The aim of this research, however, was to analyze how the political economy influences local lives, therefore, this research deconstructs their knowledge, beliefs, and circumstances, wherefrom the impact is reflected in what they say, describe, and illustrate. I argued that sociocultural construction implied a combination of knowledge, belief, practices, experiences linked with the structures of powers.

Foucault (1980, p. 97) has suggested 'a study of power in its external visage, at the point where it is in direct and immediate relationship with.....its object, its field of application,......where it installs itself and produces its real effect.' In this sense, "knowledge is power" I mean is the power that translates and transforms most of the daily beliefs and social constructs. This power is expressed sometimes in the form of dominant religious beliefs locals are ready to accept, sometimes food and other commodities communities are inclined to use, sometimes in the norms of gender construct men and women forced to follow, and sometimes in methods of treatment and medical system sick and malnourished adopt. I also believe there is no absolute freedom but what Sen (2013) thought of "development as freedom" I want to reflect it as "development in freedom" is possible only when countries are free to apply what is suitable and acceptable according to their local context, without any global pressure and hegemonic design, either neocolonial and or neoliberal.

Critical researches generally tend to emphasize macro-level while behavioral approaches focus on the micro-scale causes of malnutrition. Both are partially correct. I argue that biocultural causes have roots in sociocultural causes and social and cultural determinants are influenced or shaped by political-economic reasons. In other words, human biology is impacted by local culture as human behaviors are closely linked to their social status, which is deeply influenced by structural causes: political economy, colonial,

neocolonial, and neoliberal economies. Thus, both cultural constructivists and critical scholars need to collaborate instead of being critical of each other. This study draws on the predicaments and ramifications of colonial and post-development policies and programs that contribute to the persistence and prevalence of malnutrition in the country's deprived regions.

All interventions exercised so far to combat malnutrition were irrespective and non-symbiotic of local socio-cultural realities, therefore, they failed to provide equitable access to basic resources. The influence of political economy has never been taken into account how colonial, neocolonial, neoliberal, and regional disparity has been linked with structural vulnerability. All actions and interventions in relation to nutrition, for example, water justice, food production, accessibility and price control, land reforms, gender equity, birth spacing, private healthcare, therapeutic program, social safety net, etc ignored the basic and underlying truth of caste and class structures, inequities and disparities, social and cultural capital, structural violence and vulnerabilities.

Water injustice through forming a syndemic relationship with food insecurity, sub-optimal WASH, and IYCF practices, maternal illness, and low breastfeeding has determined acute and chronic forms of malnutrition at the micro-levels. Low-income households have experienced low dietary diversity and a limited variety of food owing to chronic poverty and inflation. Not aligned well with local socio-cultural realities, the short-term global technical solution in the form of RUTFs and CMAM was implemented "under neoliberal governments and facilitated an increasingly inequitable economy with minimal state involvement in an increasingly individualistic social environment." (Nott, 2018, p. 16). MSNC at the provincial level is not a panacea. The developed world justifies development in the developing world. However, the results of the failed development inversely give rise to more bureaucracy, poverty, and incapacity, which in turn demand development apparatus, often contradictory to the historical and political facts of the local needs (Ferguson, 1990).

The CMAM program has become inferior to the "Polio eradication program" because of the vast "funding" that is consumed in it. Deliberate permission or no check on the free movement of Nestlé's representatives in hospitals exposed substantial control of formula milk companies over government institutions and bureaucracy. The work burden on the

LHWs must be curtailed by diverting their attention, particularly on the maternal-child health and nutrition. Remote areas demand allocation of vacant seats to the local LHWs, along with roads and infrastructure provisioning. Also, the corruption and unethical sale of therapeutic food need monitoring and fair dispensation. Poor's high reliance on risky treatment indicates stigmatization of the poor, their trust deficit on government departments, and biomedical service utilization as expensive, rude, and indifferent. It overall shows the influence of global care politics, exercised at micro-levels.

The policies and programs of the government to tackle malnutrition through inter-departmental and multisectoral intervention have been internally weak. Departments were already dysfunctional, corrupt, inefficient, and their performance was low. The task expected from them to complete according to the proposed plan seems to be unrealistic. The normalization of social exclusion has roots in the political system and structural violence. Social justice is prerequisite of development, as Escobar (1995) illustrated in the chapter 'The Dispersion of Power: Tales of Food and Hunger:'

> No aspect of development appears to be as straightforward as hunger. When people are hungry, is not the provision of food, the logical answer? The policy would be a matter of ensuring that enough food reaches those in need on a sustained basis. The symbolism of hunger, however, has proven powerful throughout the ages. From famine in prehistoric times to the food riots in Latin America during the 1980s and early 1990s, hunger has been a potent social and political force. (102)

Delivering a female baby was considered a stigma (I pray to God, do not give another daughter, as acknowledged by Rani). Also, the poor female body was culturally controlled in a patriarchal society often under the disguise of ethnic and religious appreciations, and their reproductive capability was exploited (Hajira, and barber's wife). Mothers had to deprioritize child health and normalized childhood mortality, morbidity, and malnutrition (especially of a female child) challenging the concept of ordinary motherhood as Chary et al. (2013) stated:

> Local power differentials, often taking the form of gender inequalities, as well as the competing priorities of quotidian subsistence struggles and systematic mistreatment at the level of the medical referral infrastructure reinforces the normalization of child malnutrition. This setting dampens the social

> imagination of caregivers and communities, who struggle to conceptualize and articulate a vision of child wellness. (95)

Despite the fact, high fertility caused maternal depletion and mothers perceived contraception sinful, anti-human, and unethical, the popular methods for contraception have been reported harmful for the women's body. Women were concerned about methods for contraception because usual methods disturbed their menstrual cycle, caused obesity, breathing problems, arthritis, weakness, headache, and dizziness. As against Malthusian demography, contraception is not the perfect solution to hunger and poverty but poverty is the leading cause of high fertility, thus, neoliberal technical solution for poor's high fertility seems less effective unless structural causes are improved and poverty is eradicated with social justice (Nott, 2018).

The research found a negative role in the biomedical community. Some mothers have sorrowfully complained that on birth occasions, the biomedical community did not bother to guide them (Zareena) for proper breastfeeding but even recommended breastmilk substitutes, overlooking the adverse consequences of powdered milk and maintaining bottles-hygiene. Strikingly many mothers have washed bottles with "detergents" instead of dish wash bars or "washed bottles after boiling," having severe implications for infants (Shahana, Nusrat, Zubaida). Thus, there is a high need to discourage mothers and lady doctors to promote and use formula milk. Mothers should be made aware of the negative consequences of formula milk feeding through community mobilization. Parents can also play the role of counselors to their children, and mothers must be informed about the best practices and curtailing difficulties in optimal IYCF practices (Bates, 1996). Studies have found that mothers' breastfeeding practices improved with their increased social capital level (Anderson et al., 2004).

Behavior change communication efforts must be competent enough to convince mothers and grandmothers about exclusive breastfeeding. Therefore adult education programs must incorporate nutrition intervention strategies. Other methods to convince these grandmothers must involve notables, religious, social, and political persons who are respected in traditional societies because they are considered wisest and most knowledgeable among the locals. They might influence on changing community behaviors

with their good communications skills. Behavior change strategies must also be akin to local's mindsets, which sometimes happens to be less recipient of biomedical logic. Unfortunately, the IYCF policy environment is still dependent on the technical expertise of donors and UN agencies only, without the government's lack of interest, ownership, and sustainability (Mahmood et al., 2017).

Breastfeeding immediacy and exclusivity were constrained owing to pre-lacteal practice, C-Section, delivery pain, the conception of low milk formation, and weakness in mothers. The complicated, severely malnourished children reported diarrhea when the weaker mother left breastfeeding and initiated the alternative cow and goat milk available. It revealed that almost all severely malnourished children with complications came from extremely poor and low-income households and mothers were either illiterate or rarely primary-passed facing high fertility with low birth-spacing. The majority of these mothers were domestic female servants or agricultural daily wage laborers. This finding is validated by the latest and current theme of the World Breastfeeding Week "Empower parents, enable breastfeeding" (WHO, 2019). Mothers have rightly accentuated that happiness within the household and good relations with their husbands had a vital importance for maternal child health.

Religion has been observed to fill the power gap through supernatural means of treating illnesses such as amulets, magico-religious, and spiritual healing methods. Religion, poverty, and illiteracy jointly constructed "unique socio-cultural environment" in which "dichotomous conceptual and explanatory frameworks" of "hot-cold (*thanda-garam*)," "sacred-profane/purity-impurity (*paki-paleeti*)," "dirt or pollution," dominated the local social psychology that trickled down deeper into their attitudes, beliefs, and behaviors that subsequently influence their "care, cure, and feeding practices."

An ant or a bee is inserted into mothers' milk to testify its toxicity and poison; the legitimacy of such tests is gained from reasons including work burden on the mother, low maternal diet during lactation, illiteracy, and high fertility. Some mothers quit breastfeeding during illness, believing that "polluted breastmilk" might harm the suckling baby (Rani). Farmer (1988) has observed that mothers perceived that when blood becomes a poison, it can mix with breast milk and climb into the head or descend to the uterus with mortal effect. The powerful metaphors act as a warning against the abuse of pregnant or

nursing mothers. The somatization serves as a moral barometer. The high incidence of malnutrition, therefore, cannot be understood apart from the economic pressures that make practices and behaviors so elusive. Metaphysical etiologies of illness such as an evil eye was also supposed to hurt child growth, pregnant mother fertility, and lactating mother's breastfeeding particularly. Farmer (1988) analyzed particularly pregnant and lactating women's body fluids (milk and blood) are perceived as especially sensitive to the malignant emotions and suggested that illness related to body fluids might be barometers of disturbances in the social field.

A system of inequalities has constructed hunger and malnutrition in weaker people from remote areas with lower social and cultural capital. There is a need to analyze the socio-cultural environment and sub-optimal beliefs and practices under the light of the political economy, the primary determinant of hunger and malnutrition. Hence it can be construed that equity is a key to justice and development, while malnutrition is a mere reflection of social injustices. The biomedical approach alone to tackle the problem of malnutrition is not enough. Farmer (1988, p. 41) has noted, "in a critique of methodologies grounded in an "empiricist theory of language," Good and Good suggest that an analysis of indigenous illness categories should include (1) an investigation of the socio-cultural construction of illness realities, and (2) the analysis of the "semantic networks" that link "key public symbols both to primary social values and to powerful personal effects" (Good & Good 1982, p.148)."

This research has found that not everyone in the district is equally affected by malnutrition but only the most vulnerable groups are its target. Malnutrition has particularly affected women and children from remote areas, especially water insecure residents, unemployed, low income and daily wage workers, domestic household servants, low-caste, illiterate, poor mothers, with high fertility and work burden. This suggests that ethnic-regional inequalities at the provincial level, rural-urban gap, and caste-class stratification at the district level, therefore, must be reduced by concrete measures. In this context, landless rural illiterate families, especially from *Pachadh* areas, need to be mainstreamed through sustainable water management. Agricultural labor and domestic female servants also need to be supported. Thus political, legislative, and structural reforms are imperative along with social and cultural corrections.

To fill the gap, the first time in Pakistan this ethnographic research has tried to analyze the impacts of household water insecurity in determining malnutrition caused by the ethnic-regional disparities at the macro level. Also, previous researches in Pakistan lacked a detailed and qualitative discussion on the anthropology of breastfeeding and infant young child feeding practices. It has found that the poor's access to important resources such as water, food, and treatment is restricted owing to the privatization and neoliberal policies of the state as public facilities are severely under-resourced and low quality, while privatized machinery is highly expensive and beyond the reach of the poor majority. The practice and policies of governments promote privatization and biomedical solutions. Instead of removing social stratification, the state has been following global remedies to solve the local problem; therefore, discovering the impact of structural problems was crucial to solving the riddle of malnutrition in Pakistan.

In the future, ethnographic researches might be conducted not only in other adjacent districts of South-Punjab, but also in the remote, impoverished, and undeveloped regions of Baluchistan and rural Sindh in Pakistan, which are severely and chronically hit by droughts, water insecurity, and intentional underdevelopment by the state. Relying only on the multi-sectoral strategies would not be enough to combat the riddle of malnutrition in Pakistan because institutional and power dynamics often ignore the poorest of the poor. The theories of social and cultural capital, along with structural violence, has dramatically helped to understand how the poor people, particularly illiterate women and mothers of remote regions are deprived of important resources required for better nutritional outcomes. Interpretivism under the light of the political-economy would help deconstruct local knowledge, beliefs, practices, and experiences in other analogous socio-cultural constellations.

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## APPENDIX

**Semi-structured Interview Guide**

**Socio-Demography**

How many children live in your household?

What is the age gap between each birthing of children?

What is the age of mother and father?

What is the caste of mother and father?

What is the type of house? Area, material,

What duties do the mother and father perform?

Can you please calculate the estimated daily or monthly or yearly income?

Do you own livestock? How many?

What are the levels of education of father and mother?

What is the daily amount of money consumed on food?

What is the impact of low or high income on the diet and health of the family, especially children?

Did you get any cash or any help from the government or NGO?

**Water Insecurity, Sanitation, Hygiene (WASH), Healthy Environment**

Quality, Quantity, Safety, impact on education, livestock, agriculture, Pathways Water Insecurity impact Mother and child health, hygiene, and well-being. Impact on sanitation and open defecation practices.

Background, coping strategies and Impact on gender, IYCF

**Food insecurity, Diet of Mothers and Children,**

What is the daily diet of the mother? Milk, Fruit, Meat, Egg, etc.?

What is the daily Diet of Children? Wheat, Rice, porridge, banana yogurt, egg, Halwa, *junj* or butter, etc.?

What kind of milk other than mothers do you give for infant? Buffalo, cow, formula milk?

What thing might cause ill or good health, in your opinion?

What type of foods might be beneficial for children as well as a mother?

**Care: Cultural Practices of Child Feeding and Breastfeeding**

What do you use as pre-lacteal?

Do you use early milk colostrum? Why yes, and why not?

What is used in the first six months, water, butter, biscuits?

Do you think vaccination is important? Did you vaccinate your children?

What kind of water and milk is given to the child?

Breastfeeding duration: how many months were children breastfed?

Did you breastfeed during pregnancy?

Do you think children should be breastfed during illness and after sex? If not, why?

Who cares about the child in the mother's absence? What is a child's diet, and who gives the food to the child when the mother goes out for work?

**Perceptions about Fertility, Birth Spacing, and Contraception**

Perception about Contraception: What do you know about contraception, is it good or bad for female?

Did you ever experience birth spacing?

In-laws Perception about Contraception: What is the opinion of mother in law, or husband about contraception?

Did you in-laws like contraception or not?

How many children do you like in your household? Is the number important? Why more?

What is the ratio, and reason for the birth gap?

Are you bound to deliver more babies against?

Do you think more children can be useful for income generation?

Would you like to tell me something else that you think is important?

**Morbidity, Malnutrition, Treatment, and Access to Health Care**

Does the mother have access to the health professional and use multivitamin tablets?

What are mothers' and child disease and malnutrition?

What is the anthropometric measurement, MUAC, weight, height?

How did you access the CMAM program?  Consequences and treatment?

Does your household have access to the health team, vaccinator, LHW, etc.?

What types of infection did the child face, and how was treated?

Do you visit *pir*, or a medical doctor? Why do you go there?

Where do you get treatment for your children to treat from?

Where do you get treatment for a daughter, and where do you get treatment for a son?

What is the role of gender, age, ethnicity in constructing malnutrition?

How far do caste, class, and gender construct health capacity, capability, and accessibility to health inequalities?

How does the female literacy rate influence health status?

What are the common diseases in your area? What diseases are produced after floods?

How do floods destry WASH infrastructure and cause malnutrition?

What is your source and quality of water and diseases related to it?

What are beliefs and practices about hygiene, fertility, and feeding?

What are the benefits of vaccination, health education, prevention, and how this benefits children and pregnant and lactating mothers?

What is the people's capability to the quality and type of health facility?

What awareness about pre-lacteal, colostrums, exclusive and complementary feeding micronutrients iodine, zinc, vitamins, iron, etc. and related merits and demerits?

Do companies play in controlling food markets?

## GLOSSARY

| Seraiki Terms | Meaning |
|---|---|
| *Aabiana* | Water tax |
| *Aadhna* | Infant's body massage |
| *Aarra* | A thing that can be stuck in a child's throat or intestines |
| *Arq* | Extract; Distillation; Nectar |
| *Baambdo* | Child crawling |
| *Baazari* | Low-quality foods often unpacked and unhygienic |
| *Bait* | Bait areas near the river |
| *Bhaji* | Curry or gravy |
| *Bhatt* | A local and simple rice dish |
| *Bhukha-nanga* | Hungry and naked |
| *Biradri* | Like tribe; Similar caste-men |
| *Bundhna* | Fastening |
| *Bubba* | Breast |
| *Chachar* | Name of a hill torrents |
| *Chai* | Black tea prepared with mostly cow or buffalo milk |
| *Chabb* | A child making a sound during milk sucking from the breast |
| *Chai papay* | Rusks and tea |
| *Challia* | Forty-days |
| *Chata* | Butter mixed with a sweet thing |
| *Cheeron* | Gumminess |
| *Chosni* | Pacifier or nipple |
| *Cola* | Charcoal |
| *Dai* | Birth attendant female |
| *Dajal* | A canal name |
| *Dabba* | Formula milk power |
| *Dal* | Peas |
| *Dal Chana* | Split chickpeas |
| *Dallia* | Porridge |
| *Darood* | Reciting that God bestow peace on the Holy Prophet |
| *Dassa* | Child's first excreta |
| *Desi-ghee* | Vernacular condensed oil extracted from household butter |
| *Dewarani* | Husband brother's wife |
| *Dawwa* | Mirror reflection |
| *Dua* | Pray |
| *Dum* | Blowing |
| *Eid-ul-azha* | Muslims festival after pilgrimage |
| *Gheesi* | Cleaning after defecation with rock |
| *Gur* | Jaggery |
| *Ghanghuti* | Locally made cradle with cloth |
| *Ghurruti* | Pre-lacteal a Punjabi language word |
| *Ghutti* | Pre-lacteal |
| *Hailak* | Dependent; addict |
| *Hakeem* | A herbalist or traditional pharmacist |
| *Haram* | Illegitimate; Profane |

| | |
|---|---|
| *Halal* | Legitimate; Religiously approved; Sacred |
| *Halwa* | A sweet made with boiled milk |
| *Hik-tik* | Perfect cure |
| *Hudkal* | Bony body without flesh |
| *Huqqa* | A smoking pipe attached with water base to filter smoke |
| *Jadu* | Magic |
| *Jatki* | Cultivation; Farming |
| *Joothay khanay* | Foods remained after someone's use often old; Residue food |
| *Julab* | Diarrhea |
| *Junj* | Butter giving practice to infant |
| *Jurmi* | Criminal |
| *Kaaha* | A name of hill torrent; flash flood |
| *Kacha* | Areas near a river; Mud-house |
| *Kadra* | A water canal |
| *Karhai* | Embroidery |
| *Kamai* | Earning; livelihood; remuneration |
| *kesar* | Saffron |
| *Kharcha* | Like pocket money for household ration |
| *Khasra* | Measles |
| *Khata* | Sour |
| *Khichri* | Rice and pulses mixed dish |
| *Khoya* | Sweet of milk cream |
| *Kurta* | Shirt |
| *Jhoola* | Locally made cradle |
| *Kalakali* | Honor killing of a girl |
| *kamzoor* | Weak |
| *Khaap* | Ash and salt tied with the animal to stop circling |
| *Lassi* | Yogurt drink, mostly used in summer days |
| *Mahawari* | Menstruation |
| *Maiji* | Quranic teacher in a village |
| *Makhi* | Honey |
| *Malathi* | Sweetwood |
| *Mallay* | Sores on the skin in summer |
| *Mannoti* | Votive offering |
| *Mazdoor* | Laborer |
| *Metha* | Sweet |
| *Mela* | Muddy |
| *Moga* | Water outlet/cut |
| *Mouza* | Revenue village |
| *Mun-dikhai* | Giving a gift on first sight to a newborn |
| *Munrakha* | Face adjuster for baby |
| *Musag* | Bitterwood |
| *Mushkil-kusha* | Problem-solver |
| *Mureed* | Followers |
| *Musabbir* | Bitter thing mothers use for weaning |
| *Nai* | A traditional occupation of performing circumcision, haircut |

| | |
|---|---|
| *Nada or Narra* | Colostrum |
| *Nazar* | Evil-eye |
| *Nazarwatoo* | Anti-evil-eye necklace |
| *Noushadar* | Crystal salt |
| *Nukh* | Milk sucking from the chest |
| *Paki-Paleeti* | Sacred-profane or dirt-pollution |
| *Pakka* | Areas near the mountain or made with bricks |
| *Pakoras* | Local fried food made with gram flour |
| *Pachad* | Western area or area |
| *Paroothi lub* | First spit used for treatment |
| *Paychas* | Loose motions; dysentery |
| *Pani-watra* | Chickenpox |
| *Pani* | Water |
| *Paneer* | Indian rennet |
| *Papur* | Poppadom |
| *Pir or Peer* | Spiritual healer |
| *Phul-dhaga* | Amulet |
| *Podina* | Mint |
| *Potray* | Local made pampers |
| *Poutli* | Small bag |
| *Purdah* | Veil, hiding, a religious concept; shield |
| *Pulao* | A local rice dish |
| *Rickshaw* | A van with three wheels |
| *Roti* | Loaf, not baked, prepared with wheat flour |
| *Run-mureed* | Woman-follower man; a derogatory term |
| *Sadka* | A kind of charity |
| *Safraa* | Yellowishness in jaundice, A disease |
| *Sattoo* | a drink considered cold made with boiled wheat grain |
| *Saag* | Spinach |
| *Salwat* | Recantation or blowing |
| *Samosa* | Local fried food made with gram flour and vegetable in it |
| *Sandhan* | Bad smell |
| *Sathee* | Removing first hair ritual |
| *Sawan* | Symbolic or ritualistic doing; folk treatment |
| *Sehat* | A home-made syrup |
| *Sewayn* | Vermicelli |
| *Shar* | Crying |
| *Shakkar* | Powdered sugar made with jaggery |
| *Shirk* | Equating something with God |
| *Sokra* | Being too thin |
| *Sounf* | Fennel |
| *Suhaga* | Borax |
| *Sukha-tukar* | Dry loaf |
| *Surf* | Detergent |
| *Surma* | Antimony |
| *Tabasheer* | Bamboo exudate |

| | |
|---|---|
| *Tahor* | Circumcision |
| *Tandoori* | Mud oven to prepare loaves |
| *Tabakhi* | Laborer for making loaves |
| *Tarang* | Mixture of goat-milk, jaggery, butter, and cumin seeds |
| *Thumb* | Burning skin practice for illness |
| *Thanda-garam* | Cold-hot |
| *Talai* | Pond of water; A water reservoir |
| *Tona* | Magico-religious practice for healing |
| *Turanjbeen* | Manna and quail |
| *Uqq* | Milkweed plant |
| *Veeyum* | Birth or delivery |
| *Waasta* | Intercession |
| *Wazifah* | Recite verses to seek favor from God |
| *Yakhni* | Soup made with meat |

**Note:** Long phrases and sentences of the local language are not given in this glossary but only in text and paragraphs of the chapters.