ADOLESCENT MATERNAL HEALTH CARE-SEEKING BEHAVIOUR IN URBAN SLUMS, RAWALPINDI PAKISTAN

SYEDA SITWAT HASAN

DEPARTMENT OF SOCIOLOGY

QUAID-I-AZAM UNIVERSITY, ISLAMABAD

2019

ADOLESCENT MATERNAL HEALTH CARE-SEEKING BEHAVIOUR IN URBAN SLUMS, RAWALPINDI PAKISTAN

“Thesis submitted to the Department of Sociology, Quaid-i-Azam University, Islamabad, for the partial fulfilment of the degree of Master of Philosophy in Sociology”

By

Syeda Sitwat Hasan

Department of Sociology

Quaid-i-Azam University, Islamabad

2019

Acknowledgement

I, acknowledge the support and leadership of my thesis supervisor, Dr. Sarfarz Khan, who guided and mentored throughout the research process. Coordination and support from the communities of the sample location, Pir Wadhai are highly appreciated, specifically, the support of Ms. Shaiza Azhar, director of a local community organization "Raise and Shine". This research thesis would not be completed smoothly, without the coordination of my fellow Ms. Ume-Hafsa, who dedicated her time, during data collection, analysis and editing of this thesis.

At last but not the least, I acknowledge the sacrifices of my family; including my sons Ali Mohammad and Hur Mohammad, who accompanied me during my field visit and my husband Gul Mohammad, for encouraging me to chase my dreams. I would like to acknowledge my late father, Syed Lakht-e-Hasan Rizvi, who believed in girl‟s education and advancement.

Syeda Sitwat Hasan

Abstract

Pakistan is among the countries with highest adolescent fertility rates with 44 of every 1000 live birth. The adverse pregnancy outcomes are more observed in Pakistani adolescent girls, unlike other fertility age group. Similarly, an urban-rural difference is significantly evident, as more adolescent pregnancies are observed in rural with poor availability of maternal health services. The intent of this study was to assess the adolescence girl"s (age 15-19) maternal health seeking behaviours during the pregnancy and childbirth in selected low-income, urban slum Pir-Wadhai, Rawalpindi, Pakistan, while analysing the four levels of Social Ecological Model (SEM). Two types of qualitative data were collected, (1) secondary data with qualitative Meta-Analysis and (2) primary data with in-depth interviews in sample area. Some interesting findings on adolescent"s behaviour for seeking maternal health care were captured in triangulation of both qualitative data sets. The unique aspect of this research is to explore the adolescents" maternal behaviour in urban slums, where accessibility of maternal health services is higher as compared to rural areas. Integrated findings are classified into three categories (1) confirming findings, (2) differences of findings, and (3) unique contributors of study. Socio-ecological model level 1 explored the individual level contributors for adolescents maternal health care seeking behaviour, which included; ill knowledge related to pregnancy, need of emotional support, empathy and respect, low decision-making power, various types of fear related to delivery. Level 2 captured the social capital of family and friends, where the critical role of husband, and in-laws captured, who also influence the utilization of maternal health services for adolescents. The 3rd level reflected the contribution of community in utilization of maternal health care in adolescents and level 4 analysed the contribution of organizations providing maternal health services, where availability, accessibility (i.e. distance, cost) and quality of maternal health services are identified important factors influence the behaviour of adolescents.

Table of Contents

CHAPTER 1 INTRODUCTION 1

1.1. Statement of the Problem 2

1.2. Research Objectives 3

1.3. Significance of the Study 3

CHAPTER 2 REVIEW OF LITERATURE 5

2.1. The Global Maternal Health Context 6

2.2. The Global Adolescent Maternal Health Context 6

2.3. Key Determinants of Adolescent Maternal Health 8

2.4. Human Rights and International Formwork for Adolescent Maternal Health 9

2.5. Adolescent"s Maternal Health Care in Urban Slum 10

2.6. Adolescent"s Maternal Health: The Case of Pakistan 11

CHAPTER 3 CONCEPTUAL FRAMEWORK 14

CHAPTER 4 CONCEPTUALIZATION AND OPERATIONALIZATION 17

4.1. Conceptualization: What is Adolescent? 18

CHAPTER 5 RESEARCH METHODOLOGY 20

5.1. Qualitative Meta-Analysis of Literature 21

5.1.1. Inclusion and Exclusion Criteria for Search 22

5.1.2. Search Strategy for Meta-Analysis Research Question 22

5.1.3. Sample databases for Qualitative Meta-Analysis 23

5.1.4. Data Evaluation for Qualitative Meta-Analysis 24

5.1.5. Quality Appraisal 24

5.1.6. Data Analysis/ Review for Qualitative Meta-Analysis 24

5.2. Primary Data Collection 25

5.2.1. Universe 25

5.2.2. Unit of Analysis (Target Population) 25

5.2.3. Sampling Design/ Sampling Technique 25

5.2.4. Sample Size 25

5.2.5. Tools for In-depth Interviews and Observations 26

5.2.6. Techniques for Data Collection 26

5.2.7. Pre-Testing 27
5.2.8. Data keeping for Primary collected data 27
5.2.9. Analysis of the Qualitative Data 27
5.3. Opportunities and Limitations of the Study 27
5.4. Ethical Approval and Considerations 28
CHAPTER 6 RESULTS 29
6.1. Results: Qualitative Meta-Analysis 30
6.1.1. Search Results 30
6.1.2. Qualitative Meta-Synthesis 34
6.2. Results: Primary Qualitative findings 39
6.2.1. Profile of the Respondents: 39
CHAPTER 7 DISCUSSION AND CONCLUSION 62
REFERENCES 71
Appendix A 80
A. Consent Letter (Verbal Reading) 80
B. Interview Guide with MWRA (SEM Level-1 Individual) 81
C. Observation Checklist: (SEM Level 3- Community) 85
D. Critical Appraisal 867

List of Tables

Table 1: List of Countries with Highest Adolescent Birth Rate 7

Table 2: A Description of Social Ecological Model (SEM) Levels 16

Table 3: Sample Split for Primary Evidence Collection 26

Table 4: Qualitative meta-analysis Data Extraction Table 32

Table 5: Overview of the Sample (Adolescent in-depth-interviews) 40

List of Figures

Figure 1: Ever Married Teenage pregnancy in Pakistan: PDHS 2017-18 12

Figure 2: The Social Ecological Model. 15

Figure 3: Temporal Presentation of the Methodology 21

Figure 4: Qualitative Meta-Analysis Reporting Items 31

LIST OF ABBRIVATIONS

ANC	Antenatal Care
ASF	Age-Specific Fertility
CASP	Critical Assessment Skills Programme
CDC	Centres for Disease Control and prevention
CMRA	The Child Marriage Restraint Act
C-section	Caesarean section
FGD	Focus Group Discussion
IDI	In-depth Interviews
KII	Key Informants Interviews
MCH	Maternal Child Health
MNCH	Maternal Neonatal and Child Health
NIH	National Institutes of Health
PDHS	Pakistan Demographic and Health Survey
PEO	Population, Exposure, Outcomes
PICo	Population, Interest and Contex
PNC	Postnatal Care
S.P.I.D.E.R.	Sample, Phenomenon of Interest, Design, Evaluation and Research type
SDG	Sustainable Development Goals
SEM	The Social Ecological Model

STI	Sexually Transmitted Infections
UNCRC	The United Nations Convention on the Rights of the Child
UNICEF	The United Nations Children's Fund
WHO	World Health Organization

CHAPTER 1

INTRODUCTION

The Adolescence is a vulnerable transitional period of human development, from the childhood to adulthood, with the major formative shifts during the age of 10 and 19 in the adolescents within their reproductive, social and economic paradigms. By focusing on vulnerability of girls, on adolescent pregnancy, World Health Organization identified early pregnancy as one of the major contributor to maternal and child mortality (WHO 2018). In general context, it is critical to monitor a mother and her developing child by a skill health service provider. In case of the pregnancy in young mother, the importance of such maternal health care services is more critical, where the adolescent and her child are vulnerable to many health risk (WHO 2018). Early pregnancy and motherhood is a leading cause of adverse pregnancy outcome, poor health outcomes.

Sociologically, adolescence pregnancy is a maternal health aspect as well as a social developmental issue, evenly. Many studies (Dereje Kifle 2017) identified the significantly associated social determinants such as; socio-economic status, educational status, religious practices, knowledge of pregnancy complications, and health provider-patient relations influencing the adolescent maternal health care seeking behaviour (Idris 2013). The aim of this research is to learn about Adolescence maternal health-seeking behaviour, including the socio-economic barriers to utilization of maternal health services, while using social ecological model, in the urban slum of Rawalpindi, Pir Wadhai, Pakistan.

1.1.Statement of the Problem

The provision of adolescent maternal health care services in urban slums is a topic of investigation, which is yet not fully explored. Is the Urban advantage for the adolescent maternal health seeking behaviour such as better choices, decisions making, and practices for health service utilization in slum settlement?

The aim of this study is to understand the adolescence girl‟s (age 15-19) maternal health seeking behaviours while using social ecological model, with convergence of two types of research data (1) qualitative meta-analysis: where analysis of qualitative meta-data, supported to inform the research regarding behaviours and trend of adolescent maternal health care behaviour in neighbouring developing countries, (2) Primary qualitative data collection on adolescent maternal health care seeking behaviours including; decisions,

choices, barriers and practices of health services utilization during the pregnancy and childbirth in selected low-income, urban slum Pir Wadhai, Rawalpindi.

1.2.Research Objectives

1. Socio ecological understanding of adolescent maternal health seeking behaviour (decisions, choices, barriers and practices of health services utilization during the pregnancy and childbirth) with applying qualitative Meta analyses, a qualitative type of systematic review of published literature on adolescent maternal health behaviour in developing countries.

2. To investigate experience and perception of adolescents mothers, family, community and healthcare professionals on the behaviour of adolescent toward utilization of maternal health care services under the socio ecological framework.

1.3.Significance of the Study

Adolescent are the vulnerable segment of the society, they are neither young children nor adults (age-out), and whose needs are often remain unaddressed. The developmental investment on adolescents is comparatively a missed case in many developing countries, as the global developmental focus is heavily convergent either on young children or on adults. It is important to consider the established facts, that early marriage is a common social practice (Wodon 23 Oct 2015) and early pregnancy is an important cause of death for adolescent girls in many developing countries (UNFPA 2018). Adolescent pregnancy can be understood as a social phenomenon, as many social determinants influenced the adolescent maternal health care seeking behaviour (Idris 2013). Generally, Urbanization offers an opportunity for improving the adolescent maternal health, as urban is considered as more accessible for the maternal health care services. The overrated generalizability of availability and accessibility of maternal health care services is a topic of discussion as, much of the existing evidence are generated on average variances between urban (as whole) and rural areas (as whole). Some studies indicated the worse experience of slum communities to access the maternal health care facilities. Utilization of maternal health care in urban slums is an important aspect to investigate as 45.5% of

the Pakistani population is living in slums settlements. Serious attention is needed in researches, programs, policy and community based service for adolescents that respond to their distinctive needs for their maternal health, especially in urban slums. There is a need to investigate the relationship among the three interlinked components; (1) Adolescent, (2) Maternal Health Behavior, and (3) Urban slums.

CHAPTER 2

REVIEW OF LITERATURE

2.1. The Global Maternal Health Context

According to the definition stated by World Health Organization; Pregnancy is the period of 38 weeks and so, during that period a girl or a women (in her reproductive age) become a carrier for a developing fetus (WHO 2018). The health of girl/women during the pregnancy and delivery is considered as maternal health care including, the services of antenatal care (ANC), delivery care and postnatal care (PNC) (Mrisho 2009). According to the latest data updated by WHO „„around 830 women die every day from the preventable cause associated to maternal and childbirth, where only in developing countries 99% of all maternal deaths occur"(WHO 2018). Around the 75% maternal deaths caused by preventable causes including; (1) abnormal postnatal bleeding (2) infections (3) Pre-eclampsia and eclampsia (4) complication during delivery (5) risky abortion (WHO 2018).

Overall at World level, health-seeking behaviour is heavily determined with social inequalities. The recent data on maternal mortality also indicates that maternal mortality is higher in women living in rural, likewise among low socio-economic communities (WHO 2018). Briefly, the pregnant woman or girls from low socio-economic class and living in remote community have least opportunity to utilize maternal health care services. The enlisted socio-economic factors that considered social barriers in utilization of maternal health care are included (1) low affordability (2) least accessibility (3) cultural and normative practices (4) knowledge and information, (5) quality of services. (WHO 2018).

2.2. The Global Adolescent Maternal Health Context

Who is Adolescents – defined by the United Nations (United Nation Dashboard 2018) as „„those people, between the ages of 10 and 19 – number 1.2 billion in the world today, making up 16 % of the World"s population.""

The age-specific fertility-ASF rate is an annual measured number of births in age 15-19 years" girls per 1000 women. (United Nation Population Division 2008). During 2018, the World adolescent fertility rate was 44 per 1000 (United Nations, Department of Economic and Social Affairs, Population Division 2017). A clear declined in the global

trend of adolescent birth rate is observed, for example in 1990 the birth rate was 65 births per 1000, and it declined to 47 in 2015 (UNICEF 2017).

Table 1: List of Countries with Highest Adolescent Birth Rate

Countries with Highest Adolescent Birth Rate		
Country	Year	Birth Rate in Adolescent
Zambia	2012	141
Uganda	2013	141
South Sudan	2008	158
Niger	2015	146
Nigeria	2014	145
Mozambique	2010	167
Mali	2014	174
Madagascar	2014	152
Guiana	2011	146
Congo	2010	147
Chad	2013	179
Africa Republic	2010	229
Angola	2014	163

Source: World Population Prospects: The 2017 Revision (United Nations 2017)

The highest prevalence of early pregnancy and child birth childbearing are observed in the Central Africa Republic with 229 births per 1000 girls age 15–19 (United Nation Dashboard 2018). Countries such as Chad, Angola, Mozambique, and Mali are with highest adolescent birth rate.

The WHO articulations shows that „„the probability of a 15 year old woman will eventually die from a maternal cause – is 1 in 4900 in developed countries, versus 1 in 180 in developing countries, and in fragile states it is 1 in 54 (WHO 2018). In a multi-country analysis of pregnancy and child birth, Ganchimeg found that „„the higher risk of eclampsia, puerperal endometritis, and systemic infections are most faced by mothers (ages 10 to 19 years) than women aged 20 to 24 years (Ganchimeg T 2014). Adolescents

face more likely preterm delivery, and low birth weight babies in developing countries (Ganchimeg T 2014). The accessibility, decision making power, knowledge and choice of contraceptives are the some key reasons of around 3.9 million unsafe abortions, occur annually contributes the maternal mortality among girls aged 15 to 19 year (Darroch J 2016). Furthermore, adolescent needs more social, emotional and psychological supports than those of other women. The risk of adverse pregnancy outcome is higher in as young mothers. Frequent pregnancy is another risk in some settings for young mothers, which is directly related to the wellbeing of young mother and her child (Kozuki N 2013).

2.3. Key Determinants of Adolescent Maternal Health

a. Family Planning, Unmet Needs and Adolescent

The participation and involvement of adolescent in the decision and planning regarding pregnancy and childbearing is still unexplored. Social context is important to understand the setting of early marriages, and social pressure on married couple to have children after marriage. These two factors positively related to unmet need in adolescents. In developing countries, around 23 million adolescent are subject to unmet needs, which means that half of the adolescent pregnancies are the unintended (WHO 2018). Key barriers for adolescent to utilization of contraception can be classified in; (1) Individual level barriers; for example access to contraceptives, lack of information, and affordability and appropriate practices and continuation and fear of side effects (2) social pressure such as pressure to have children, (3) Program side barriers like lack of attention for adolescents‟ reproductive and sexual health needs among health worker and (4) Policy level barriers are restrictive provision of contraceptive for adolescent. According to the WHO, unwanted and unprotected sexual violence mostly adversely affects adolescent girls around the world: where 20% of girls experience sexual abuse as adolescents (WHO 2018).

b. Economic and Social Consequences of Adolescent Pregnancy

The adolescent‟s mothers experience several social and economic violence within marriage (UNFPA 2013). During the pregnancy, the continuation of schooling and

education is a risk for adolescent girls. According to a report by World Bank, (World Bank 2017) „„5% to 33% of adolescent girl"s ages, drop their school in some countries because of early pregnancy or marriage (World Bank 2017). School drop-out result in low opportunity for employment by 9% in adolescents, because of their low education attainment and lack of skills, which further result in perpetuating cycles of poverty (World Bank 2017).

2.4. Human Rights and International Formwork related to Adolescent Maternal Health

The UNCRC defines in Article#1 that under the 18 years of age is considered as Child, and the right of every child to reach and enjoy the full potential of her/his, on the contrast, child marriage is considered as a violation of child"s right (OHCHR 1989). The guideline on the right of children and adolescents was published in 2013, stressed on the rights of adolescent and children to enjoy the maximum possible standards of health. For women and girl"s health, „The Convention on the Elimination of Discrimination against Women-(CEDAW)" presented related rights as well (W. H. WHO 2018).

50 indicators of Sustainable Development Goals-SDG"s Agenda 2030 are directly related to children and adolescent. (Sustainable Development Goals Platform 2018). Specifically, Goal 5.3 focuses on the child marriages stated „„to eliminate all harmful practices, such as child, early and forced marriage and female genital mutilation (UNICEF 2018)."" Although, child marriages prevalence is declining around the world and child brides is estimated 650 million. The Sustainable Development Goals (SDGs) aims to eliminate child marriage by 2030. (UNICEF 2018). Birth registration is another fundamental right of all children that serve as a legal proof of a child and civil registry. Birth Certificate is an effective child protection tool to register the age can support to prevent child from early marriages and other law related aspects. Most adolescent"s rights are protected in „„the Convention on the Rights of the Child"", however, largely global interest of human development is toward young children or on adult, while adolescents are treated as „age out" which make them vulnerable.

2.5. Adolescent's Maternal Health Care in Urban Slum

According to UN-HABITAT, a slum settlement can be defined if the basic living facilities of a household not meet one of the basic living criteria including; (1) permanent and durable housing to protect against extreme climate conditions. (2) Adequate living space, where maximum only three people can share same room, (3) Accessibility and affordability to necessary amount of safe water, (4) Access to adequate sanitation, (5) legal contract to prevents forced evictions (UN-habitat 2006). Slums are human settlements, consist of the poor and marginalized communities, usually settled in peripheries of urban area. It is projected that by 2050, two-thirds of the world"s population will settle in urban (United Nations, Department of Economic and Social Affairs, Population Division 2017). The proliferation of urban slums in many cities of developing countries is caused by rural to urban migration. According to UN, 45.50% of Pakistani Population living in slums (% of urban population) in 2014 (United Nation's Millennium Development Goals database 2014)

Gupta argued that as the urban population in on growth, on the contrast, the health and social services providing to the urban are not sufficient for their growing needs. The accessibility, as no problem for many urban residents, however, the women residing in slum communities experience hard to access the nearly located well-functioning health center. Gupta further added that „„in some cases the urban poor have less access to services than people who live in rural areas (Gupta 2008).

Dr. Natalia Kanem in a speech highlighted the health utilization opportunities in urban as compare to the rural with easier physical access to facility, modern contraceptive method and to health care provider (Kanem 2017) . The greater access to health services, education, and empowerment are also offered in urban areas. However, the opportunities available in urban not always understood as a key indicator to improve the maternal health outcomes. The social inequality gap among different socio-economic classes is observed high in urban setup, including extreme poverty, vulnerability and marginalization and social exclusion, these vulnerable class stay in marginalized communities in the cities, as informal slums. Interestingly, in some urban slums, the

fertility rates of poor women are closer to rural women. Among internal migrants (rural to urban) adolescents can be benefited from the urbanization of health services, however, they may face the problems same as they encountered in rural (Kanem 2017).

2.6. Adolescent's Maternal Health: The Case of Pakistan

Pakistan‟s population, according to 2017 census is 197.02 with 80.4 million of children comprising around 39% of under 18 years of population (World Bank 2018). The Child Marriage Restraint Act 1929 (CMRA) of Pakistan is applicable in most provinces. CMRA limit the age of a boy that should not be under 18 at the time of marriages and a girl‟s age should not under the age of 16. Although the median age of women (25-49) at first pregnancy is 22.8 years (PDHS-NIPS 2017-18), the adolescent fertility rate in Pakistan is 44 of every 1,000 live births, which is among some countries with highest adolescent fertility rate.

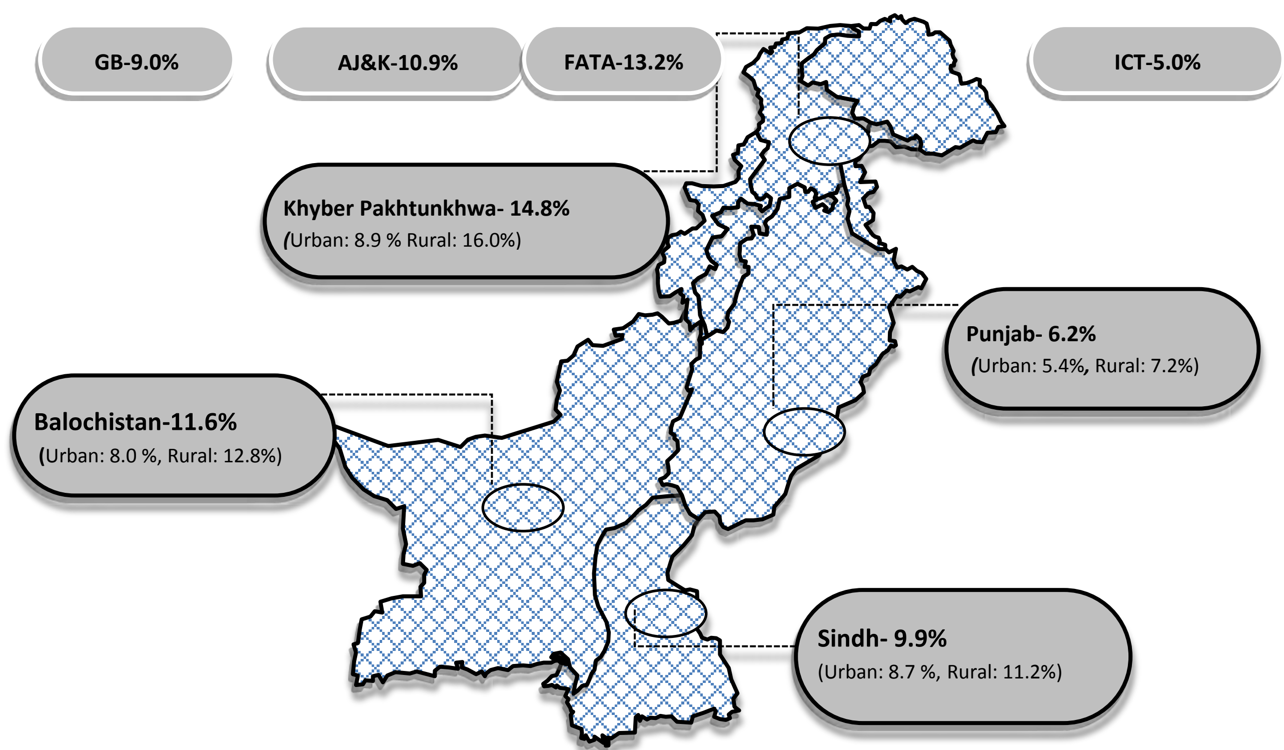
Mubeen argued that the trend of adolescent fertility could be a cause of population boom in coming years, because of the large population of adolescent in Pakistan and if the prevalence of adolescent pregnancies remains constant and out of focus in the country (Mubeen 2016). A case-control study conducted by Shah, presented surprising facts that 50% of the Pakistani adolescent mothers were primigravidas, while 32% were having their second baby, and 17% were delivering their third or more babies at the time of interview (Shah 2011). Early beginning of childbearing extends the reproductive period of a women, result in increases the chances of higher fertility (PDHS-NIPS 2017-18) Many studies have found that adolescent pregnancy outcomes are poorer in Pakistani girls as compared to older mothers. Naqvi and Naseem found that the risk of eclampsia, induced pregnancy, difficult labor, unsafe abortions, and child related critical health consequences lead the cause of increase trend of caesarean sections among adolescent mothers (Naseem 2010).

Pakistan Demographic and Health Survey estimated the contraceptive prevalence in married adolescent is critically low; only 10% of married adolescent aged (15-19)

reported to have access to sexual and reproductive health services, with 6.9 % can obtain modern contraception.

The key factors are mainly related to socio-economic causes, including lack of information on sexual and reproductive health, social and cultural attitude for contraception (Khanum 2013). The overall status of woman and girls in Pakistani society is vulnerable; where they are not principle decision makers for the utilization of their opportunities and mobility, educational attainment, nutritional status and protection from violence and other social and cultural practices, including child marriage. (UNICEF 2017)

(Figure 1: Ever Married Teenage pregnancy and motherhood in Pakistan: PDHS 2017-18)



Source: Own designed Country Map presentation

In Pakistan, rural women gives birth 3.9 children during their reproductive life, as compare to urban woman, who give birth to 2.9 children during the reproductive life, which makes the higher fertility among rural woman in Pakistan. Same pattern is

applicable to adolescent"s mothers; where rural adolescent starts early child bearing. According to PDHS 2017-18, overall 8% of adolescent had initiated childbearing at the time of the interview. Among the provinces of Pakistan, the highest rate of adolescent"s fertility is observed in Khyber Pakhtunkhwa, where 15% of adolescent had begun childbearing, as compared to the lowest rate is observed in Punjab, with only 6%. Educational attainment is directly related to adolescent child bearing in Pakistan where, 15.1% of adolescent started child bearing have no attain any schooling or any education. 9.4 % attain only primary education and 5.9 received middle educations, low prevalence of adolescent pregnancy are observed in the group of adolescent received secondary education as 4.1. Similarly; on wealth quintals, on the high wealth quintile the prevalence of adolescent child bearing is 4.8 while on the lowest quintal it is recorded, as 9.8.

CHAPTER 3

CONCEPTUAL FRAMEWORK

The Social Ecological Model (SEM): This research applied "The Social Ecological Model (SEM)" presented by McLeroy, which is based on the original ecological structure by Bronfenbrenner (McLeroy 1988). SEM is a theoretical model popularly used in public health sector to evaluate the personal effect with environmental factors to identify the opportunities for health promotions in any social environment. Although, SEM advocates assessing the interlinked effect of 5 ordinal levels including; (1) individual or a case (2) relationship and interpersonal aspects, (3) community, (4) organizational, and (5) enabling environment/ Policy, in this study, four ordinal level are included. The rational to select this theoretical framework is the high recommendation by international public health agencies, including UNICEF and CDC- Centres for Disease Control and prevention, due to the most effective approach to public health prevention and control uses a combination of interventions at all levels of the model.

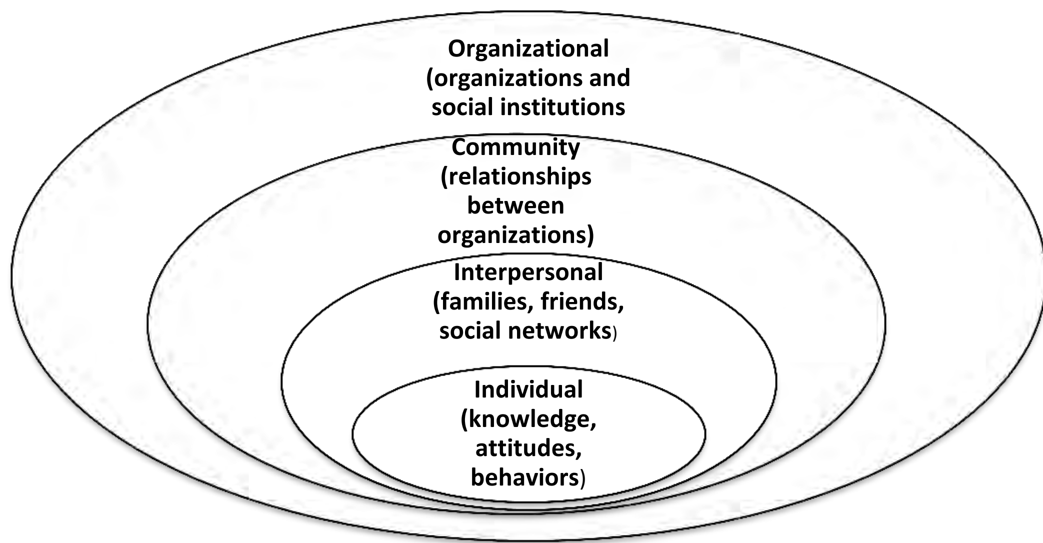


Figure 2: The Social Ecological Model.

Table 2: A Description of Social Ecological Model (SEM) Levels

SEM Level	Description	Indicators
Individual	Characteristics of an individual that influence behaviour change. .	Knowledge, attitudes, self-efficacy, developmental history, gender, age, religious identity, racial/ethnic identity, sexual orientation, economic status, financial resources, values, goals, expectations, literacy, stigma
Interpersonal	Formal and informal social networks and social support systems that can influence individual behaviours.	Family, friends, peers, co-workers, religious networks, customs or traditions.
Community	Relationships among organizations, institutions, and informational networks within defined boundaries	The built environment (e.g., parks), village associations, community leaders, businesses, and transportation
Organizational	Organizations or social institutions with rules and regulations for operations that affect how.	MNCH services are provided to an individual or group.

CHAPTER 4

CONCEPTUALIZATION AND OPERATIONALIZATION

4.1. Conceptualization

4.1.1. Adolescent

Lack of demarcation between adult and adolescent, make it difficult to quote a clear and standard definition of adolescence. Who is Adolescents – defined by the United Nations (United Nation Dashboard 2018) as people between the ages of 10 and 19? And likewise WHO defines adolescents 10-19 years old, with early adolescence 10-14 years and late adolescence 15-19 years old (United Nation Dashboard 2018). According to Laird, generally adolescent is second decade of human life between childhood and adulthood, and considered as a developmental and transitional stage for noticeable changes in physical maturation, cognitive abilities, and social interactions (Laird 2013). Word Adolescence is came a Latin word "adolescere", that"s means "to grow up". Davis stated both biological and social aspect of adolescence, where this period starts with the onset of puberty and end with sexual and physical maturity, while socially; this stage is about the recognition of adult status in a society (Davis 2017).

4.1.2. Maternal Health Behavior

Maternal health is the health of women during pregnancy, childbirth and the postpartum period and maternal health care services are antenatal care (ANC), delivery care and postnatal care (PNC) services (WHO 2016). According to Fact sheets on sustainable development goals: health targets, Maternal Health by EURO WHO, "the behavior of a woman related to her maternal health, before and during the pregnancy, delivery, and postpartum period. These three stages of maternal health behavior can be understand as, the overall choices and health condition before the pregnancy, and high-quality antenatal care and skilled provision during the pregnancy and delivery (R. O. WHO 2017). Similarly, Ehiemere defined maternal health seeking behaviour during pregnancy as the way mothers take care of their health and that of the unborn child so that both remain healthy throughout pregnancy (Ehiemere 2016)

4.2. Operationalization

4.2.1. Adolescent

What is Adolescent in this research? Married adolescent‟s girls age 15-19; who are currently pregnant or recently give birth to a child during the last 6 months.

4.2.2. Operationalization of Maternal Health Care Seeking Behavior

Adolescent maternal health seeking behaviour during the pregnancy including number of ANC visits, utilization of maternal skilled services during pregnancy and delivery and number of PNC after the delivery.

CHAPTER 5

RESEARCH METHODOLOGY

The scope of the research is consist of two folds, guided by the research objectives; (1) Qualitative Meta-Analysis (2) Qualitative primary data collection. Qualitative Meta-Analysis aimed to explore the general mechanism and barriers of behaviors for maternal health seeking behavior in adolescents in developing countries and the findings of Qualitative Meta-Analysis supported in development of interview guidelines for the primary data collection with adolescent, and her community and the key stakeholders. The rational to adopt duel source of qualitative data collection is to triangulate and compare the similarities and differences of Pakistani adolescent‟s maternal behavior with adolescents of other developing countries. All the data (primary and secondary) are collected, and analyzed around the objectives of the study while applying the framework of SEM-Social Ecological Model for theoretical understanding.

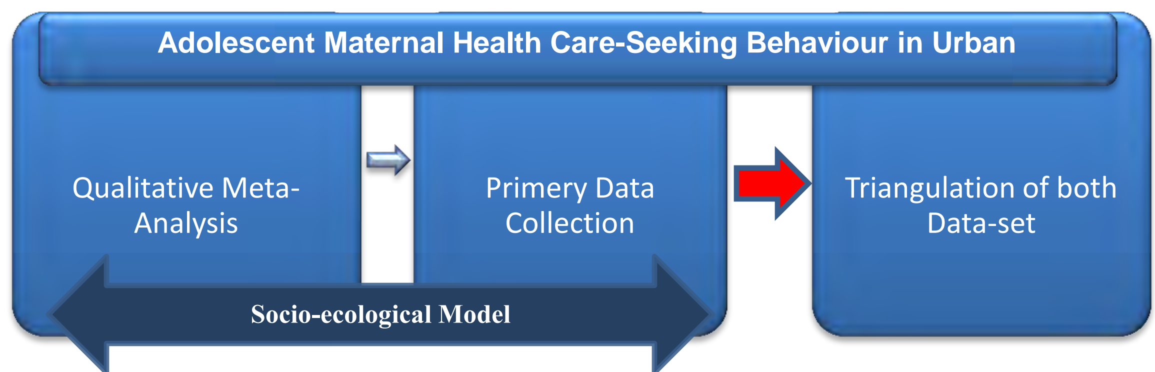


Figure 3: Temporal Presentation of the Methodology

5.1.Qualitative Meta-Analysis of Literature

Qualitative Meta-analysis is newly added and unique type of systematic literature review, which is gradually gaining importance in social science research. The aim to include Qualitative meta-analysis in this study is to systematically collect and integrate the literature of published researches in peer reviewed journals regarding the Adolescents maternal health care seeking behavior and utilization of maternal health care services in developing countries.

For this research thesis, a comprehensive book "*Systematic Synthesis of Qualitative Research*" by Michael Saini and Aron Shlonsky and published by Oxford University Press, 2012, is followed. Three types of Qualitative Meta-Synthesis are discussed in the book; (1) Aggregative, (2) integrative and (3) interpretive. As per the selection criteria to choose any type of qualitative meta-analysis method, this study apply „integrative

qualitative meta-analysis‟, because the research question is predefined. The focus of „integrative qualitative meta-analysis‟ is to summarizing findings.

5.1.1. Inclusion and Exclusion Criteria for Search

Literature published in English language, date; from 2008, onwards to date, based on original qualitative research are included in this study sample. The rational to select only papers published last 10 years is to include latest evidence and also to set a limitation for literature search.

a. Inclusion Criteria

1. Qualitative Original Researches
2. Study sample included adolescent age 15-19 years old.
3. Study aims to behaviors, beliefs and attitude of adolescent‟s, her friends and family, and community.
4. English language
5. Peer-reviewed article
6. Latest literature published within last 10 years (2008-2019)

b. Exclusion Criteria

1. Adolescent pregnancy prevention (however, if the content is about family planning it is included)
2. Clinical and medical aspect of the adolescent pregnancy.
3. Prevention of Sexually Transmitted Infections (STI) in adolescents.

5.1.2. Search Strategy for Meta-Analysis Research Question

There are a number of frameworks are available for formulation of qualitative meta-analysis searches strategies, including PICo Population, Interest and Context, PEO Population, Exposure, Outcomes (PEO), S.P.I.D.E.R. Sample, Phenomenon of Interest, Design, Evaluation and Research type. For this study, PICo was adopted, as suggested by many latest guidelines to conduct qualitative meta-analysi (Butler, Hall and Copnell 2016). Moreover, some studies suggested that PICo is more simple and effective for formulation of qualitative meta-analysis question and searches. In a study, concluded that Results showed a greater number of hits from the PICo searches, in comparison to the SPIDER searches, with greater sensitivity (Mathely et al.2014). We used PICo, while the

compulsory position of qualitative researches. Different terminologies related to adolescent maternal health are included in the search-list with the help of the key terms and Boolean operators (AND, OR etc.).

P	Population/problem	„"Adolescent"""OR "teenage" OR "Young mother"
I	Intervention/exposure	"Behaviour" OR "attitude"
Co	Context	"Maternal" OR "pregnancy" AND "Urban Slums"

5.1.3. Sample databases for Qualitative Meta-Analysis

Identification of the Sample

Following 5 databases are included to collect overall sample qualitative researches. The selection of these databases is subject to the relevance of the databases focus with the topic of this research thesis. Following databases are included to collect sample literature:

1. *EMBASE*: Generally, covers biomedical and Healthcare policy and management information, including the following topics of interest to School staff and students:
2. The Global Health: Database covers all aspects of international Public Health, including: Community and public health.
3. *MIDLINE*: Covers all aspects of clinical medicine, biomedicine, nursing, dentistry, allied health, health policy, genetics etc.
4. *WHO Reproductive Health Library*: Evidence-based information on sexual and reproductive health issues includes systematic reviews, guidelines, podcasts, and videos of techniques.
5. *PUBMED:* Covers all aspects of clinical medicine, biomedicine, nursing, dentistry, allied health, health policy, genetics etc.

Ovid was the interface of most of the database. Google scholar is also accessed to search relevant qualitative researches in *"Other"* category. Only original qualitative researches related to research question are included in the sample.

5.1.4. Data Evaluation for Qualitative Meta-Analysis

Screening Steps

Screening of the literature and decision related to include the literate in the qualitative meta-Analysis is based on three temporal basics;

(1) The Title: to assess the relevance.

(2) The Abstract: to assess the basic qualification of the paper.

(3) The Full text: to help in final selection of the paper for Qualitative meta-Analysis.

5.1.5. Quality Appraisal

Critical appraisal is an integral part of qualitative meta-analysis, aims to bring trustworthiness in selected qualitative researches. It also reduces the risk of personal biases during the database searches, uniform standards of merits, screening, inclusion criteria and key terms. In this research study, Critical Assessment Skills Programme (CASP) checklist (see the Appendix D) is applied. CASP consist of 10 criteria to critically assess the literature including; (1) statement of research aim, (2) Methodology (3) research design, (4) recruitment of the respondent, (5) data collection (6)clear researcher-respondent relationship statement (7) ethical consideration (8) effective analysis strategies (9) statement of findings (10) value of the research. Each criteria has its own indicators to be measured.

5.1.6. Data Analysis/ Review for Qualitative Meta-Analysis

To capture and report the typical characteristics of the literature, a standard template data extraction sheet was developed. The aim of template data extraction sheet is to inform the qualitative meta-analysis some key facts of the literature. This template data extraction sheet is consist of descriptive information of the literature included; author (s), year, purpose of the study, location, qualitative approach, sample, analysis type and identified findings.(see table 4).

Reading and re-reading of the literature findings supported to capture the emerging themes under four levels of socio ecological model (SEM). Researcher identified and sorted the relevant findings to their respective socio-ecological level; such as findings

related to individual level (Adolescent mother), or findings are related to community level, and so on.

5.2.Primary Data Collection

5.2.1. Universe

Urban Slum of Rawalpindi is universe of this study.

5.2.2. Unit of Analysis (Target Population)

Married adolescent‟s girls; are included as respondents, who are currently pregnant or recently give birth to a child during the last 6 months.

5.2.3. Sampling Design/ Sampling Technique

The Sample is designed according to the need of conceptual model of SEM; where data collected from the various relevant groups; including (1) interviews with adolescent married girls age 15-19, (2) interviews with Family and friends of adolescents, (3) Community observation and (4) interviews with Interviews with Health service providers. Purposeful sampling is used, keeping in view the geographical, social and ethnical coverage (representation of the population) (Lawrence A. Palinkas 2015 Sep).

5.2.4. Sample Size

A total of 33 in-depth interviews were conducted; where 18 interviews with married adolescent‟s girls are included as respondents, who are currently pregnant or give birth to a child during the last 6 months, 10 interviews with family member of adolescents married girl, and 5 interviews with maternal health care provider. Observation notes are also taken on community infrastructure, maternal services within locality, accessibly and transportation. Following sampling split indicate the SEM level of investigation and respective respondents.

Table 3: Sample Split for Primary Evidence Collection

SEM Level	Research Techniques	Respondents
Individual	18 In-depth Interviews	Adolescent married girls age (15-19)
Interpersonal	10 In-depth Interviews	Family, friends, networks, cultural practices
Community	Observation Notes	Community services, businesses, and transportation
Organizational	5 Interviews with Health service providers	MNCH services at organizational level including localities, types of services provided, availability of human resources and equipment

5.2.5. Tools for In-depth Interviews and Observations

Integration of findings from qualitative meta-analysis supported in development of interview guideline, to collect qualitative data with three target respondents of this research (1) Adolescent‟s (2) Parents/ family members (3) The health providers. A total 3 interview guidelines and one observational note sheet is developed. Observational guidelines also derived from the SEM definition of community level support to adolescent mothers. As the researcher herself collected the data, all guidelines and observation sheet were remain in English language and not translated in national language (Urdu).

5.2.6. Techniques for Data Collection

Data collection is conducted during March –May 2019, with the support of local community organization "Raise and Shine", where the organization supported in identification and recruitment of the respondents, and logistics. This local organization also support in of translation during the interviews, as the majority of the locals are migrated Afghan, or Pashtun, and not able to answer in either English or Urdu.

5.2.7. Pre-Testing

All tools are pretested in the actual field before the final application. Necessary modifications are incorporated after pre testing in the actual field. For example; in proposed study design, the unite of analysis was the adolescent mothers age 15-19, who are with their 1st Gravida (Primigravida), however during protest, research found that many adolescent mother age 15-19 experienced their 3rd gravida. The pre-test identified the technicality to emit the gravida limits in adolescent girls.

5.2.8. Data keeping for Primary collected data

The interviews are recorded in Sony recording USB device after the consent of the respondents for interview recording. After the interview all collected information is transferred to the computer to avoid the data lose. All type of information and identification of the respondents profile are replaced with unique identification code for each interview.

5.2.9. Analysis of the Qualitative Data

All recorded files are transferred from USB to computer, immediately after day of the data collection. All audio files are carefully transcribed into MS Word in English language. A coding book (see in Appendix E) was developed with the support of research objectives and key findings from qualitative meta-analysis. All the transcribed interviews are coded according to the developed code book. After comprehensive coding of the transcriptions, a content analysis sheet was developed to sort the content according to the relative themes. Reading and re-reading of the themes helped in identification of sub-themes and interrelationship between different themes. All the qualitative analysis procedure is done manually, to avail the maximum chance to read the content of the interviews.

5.3.Opportunities and Limitations of the Study

A mix type of population is observed in the location of the research, Pir-Wadhai. Majority of the population is Afghan families, who are migrated from Afghanistan during war. Some Temporary Displace People-TDPs Pashtun families also migrated from Khyber Pakhtun khu and FATA during war on terror in Pakistan and residing in Pir-

Wadhai. Some Punjabi and Hindku Speaking families are also residing in the research locality. This type of mix population, brought the challenges such as; language barrier, back ground story of the respondents, and cultural aspects of the research population. Some Afghan families do come and go to Pakistan to Afghanistan and Afghanistan to Pakistan, and do not have permanent nature of residence. This aspect of moving nature of respondents is a challenge to understand their utilization of services and their maternal health seeking behaviour. Logistics to the research area was another challenge, and researcher used community gate keepers and local community organization to contact the respondents and conduct interviews within their locality. As many international and national NGOs, implemented many developmental project in same location, and locals appreciated their work, this aspect provided an opportunity to this research as well and locals actively participated in data collection process. Respondents easily granted their consent for interview and for recording of the interviews.

5.4.Ethical Approval and Considerations

The Guidelines for protecting human research participants by NIH (NIH Office of Extramural Research 2018) is followed. The NIH guidelines contains 3 fundamental aspects (1) Respect for Persons, where informed consent is mandatory for research involving human subjects, educating participants about their voluntary participation and their right to answer or not to answer of any question, including the rights of interview termination, (2) Beneficence by Risks and benefits; Privacy and Confidentiality must be assured including the process of data keeping, (3) Justice; equality of the research benefit and burden across the sample population. Informed consents are applied before initiating the interviews (See Appendix A).

CHAPTER 6

RESULTS

6.1.Results: Qualitative Meta-Analysis

6.1.1. Search Results

Total 1531 search results were identified in five sample databases searching. In addition, in other category total 18,700 search hits were in Google scholar. For the presentation of evidence based reporting items in Qualitative meta-analysis search, PRISMA outline (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) was adopted (See Figure 4). Screening of the articles, were done on the bases on inclusion and exclusion criteria, and final list for full text screening were also undergo with critical appraisal. Frist screening of the search results in database and in Google scholar with title screening, and total 32 articles were selected on the base of title relevance. After elimination duplication of 8 articles, only 23 and articles were identified on the base of title relevance, and qualified for further screening. 2nd screening was abstract screening, where all 23 articles were carefully evaluate on the bases on abstract relevance, and 2 articles found irrelevant on the bases of abstract screening. Total 21 articles qualified for full text screening level and after the application of critical appraisal (see in Annexure D) and full text reading, 13 articles were further excluded from the final list. Only 8 articles were selected to include in qualitative meta-analysis for this study.

Qualitative Meta-Analysis Reporting Items. (PRISMA 2009 Flow Diagram)

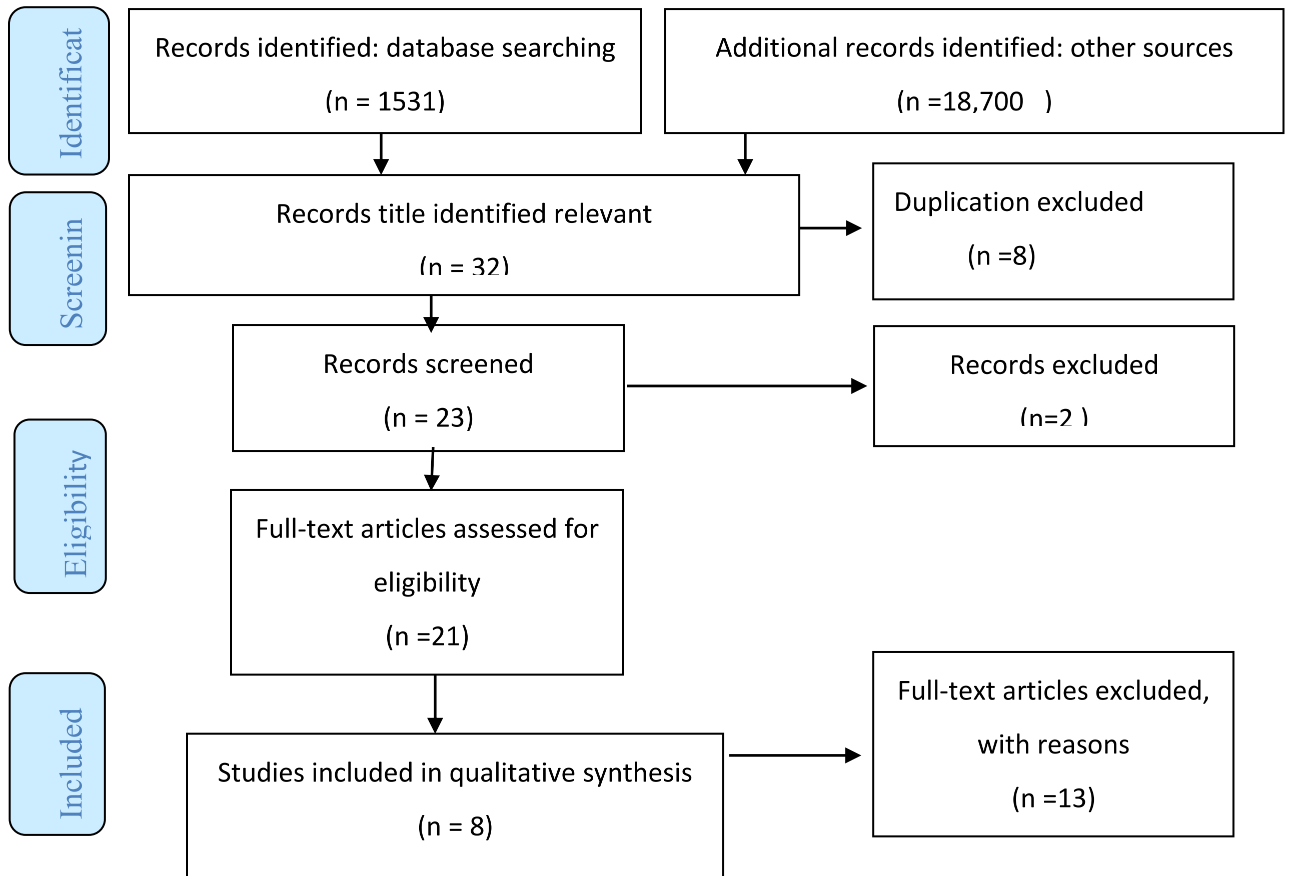


Figure 4: Qualitative Meta-Analysis Reporting Items

Table 4: Qualitative meta-analysis Data Extraction Table

Study	Purpose	Location	Qualitative Approach	Sample	Analysis
(Shahabuddin et al., 2019)	Explore the healthcare-seeking behaviour of married adolescents; (pregnancy, delivery and postpartum)	Banke District, Nepal.	Prospective qualitative study	n=27 married Nepali Adolescent girls	In-depth interviews before and after delivery and one FGD with key informants
(Shahabuddin et al. 2017)	Exploring maternal health care-seeking behaviour and experiences of adolescent girls.	Rangpur district, Bangladesh.	Prospective qualitative study	Pregnant 1st phase n=25, n=23 in 2nd phase, and non-pregnant n=10 1st phase, n=7 2nd phase	In-depth interviews (IDIs) with married adolescent girls, key informant interviews (KIIs) and focus group discussions (FGDs) with different stakeholders
(Moridi, Aminshokravi, 2018)	To explore the perception and experiences of pregnancy in Iranian adolescents	Guilan Province (north Iran)	Qualitative conventional content analysis	n=24 married women aged 14-18 years.	Unstructured interview
(Krugu et al. 2016)	To explore the underlying factors relating to the use of protection for	Bolgatanga Municipality in the	Qualitative Research	n=21 young women aged 14- 19 years	Individual in-depth interviews guided by a semi-structured

	pregnancy prevention in young people"s decisions and beliefs.	north of Ghana.			interview protocol.
(Masemola-Yende and Mataboge 2015)	To explore the access to information and decision making on teenage pregnancy.	Tshwane, South Africa.	Descriptive qualitative and Exploratory research design	N=15 female participants aged 15-26	Face-to-face semi structured interviews
(Atuyambe et al. 2009)	To explore the adolescent health seeking behaviour during pregnancy and early motherhood in order to contribute to health policy formulation and improved access to health care.	Central Uganda	Qualitative study	13 FGDs with 92 adolescent girls, Age 16-19	Focus group discussions and key informant interviews and Semi structured interviews
(Ankomah and Konadu Gyesaw 2013)	To explore the experiences of adolescent mothers during pregnancy, childbirth, and care of their new-borns.	Suburb of Accra, Ghana	Qualitative study	54 teenage mothers aged 14–19 in a suburb in Accra	Focus group discussions and in-depth interviews
(Kumar et al. 2017)	Explore the role of social support and the absence of	Kariobangi and Kangemi,	Grounded theory utilizing	36 participants 15 to 18	Focus group discussions with adolescent and

empathy plays in depression among pregnant adolescents.	Nairobi, Kenya.	multi-stakeholder perspectives	years of age	semi structured and key informant interviews.

6.1.2. Qualitative Meta-Synthesis

Total 8 full length articles were included in qualitative meta-analysis. All the researches published during 2008-2018 and originally in English language. According to the inclusion criteria, all articles were based on original qualitative researches and other any research approach was not used in original research. All the researches were conducted in developing countries, including two studies were conducted in Ghana, while other 6 studies were conducted in Bangladesh, Keyna, Uganda, Nepal, South Africa, and Iran. The unit of analysis of all analysed researches is adolescent married girl‟s age range 14-19 years old. Focus Group discussion, in-depth interviews and key informant interviews were three tools applied in sample researches.

Articles were carefully analysed and sorted according to the SEM model. Following are themes summarized in each SEM level respectively:

a. **SEM Level-1: Individual (Married Adolescent girl)**

Theme 1: Knowledge and perception of pregnancy and reproductive health

A qualitative research conducted in Nepal in 2019 found that adolescent girls recognized the early pregnancy is associated with serious risk to young mother and new-born (Shahabuddin et al.2019). Same themes were captured in two other studies including a research in Iran (Moridi,and Aminshokravi, 2018) and another in Ghana (Krugu et al. 2016), where adolescent acknowledged the risk were associated early age pregnancy.

Theme 2: Utilization of maternal health services, ANC /PNC/ Delivery visits:

The utilization of skilled maternal health care provider is directly related to the perceived importance of skilled health care services. A study in Nepal reported that more than half of the sample utilized ANC services, institutional delivery and also a good trend of PNC. However, those respondents who did not utilized the maternal health care services, are

those who did not recognized the importance of utilization of skilled maternal health care provider (Shahabuddin et al., 2019). Also the same study identified the shyness and reluctance of the adolescent to share their information on their pregnancy during their ANC and PNC check-ups. (Shahabuddin et al, 2019).

Theme 3: Why Adolescent prefer home based delivery

In study conducted by Shahabuddin et al. in Bangladesh, girls prefer home based delivery over institutional delivery because girls and her family have fear with C-section at the hospital. Another factor is the majority of the adolescent girls expected to have family members around them during the time of delivery. Therefore, they preferred home delivery to have direct support from the family members (Shahabuddin et al. 2017). Shahabuddin et al. in both studies, in Nepal and in Bangladesh identified the same trends in adolescents to preferred home based delivery, because of the shyness with male healthcare workers at the health service facility (Shahabuddin et al. 2019).

Theme 4: Adolescent exclusive needs related to Maternal Health Care:

Kumer conducted a qualitative study in Nairobi, Kenya and came up with five distinctive adolescent maternal needs including; social stigma, lack of emotional support, new life adjustment stress, poor health care access especially to MCH clinic assistance and future planning (Kumar et al. 2017). In a qualitative study conducted in Central Uganda, emphasised on the emerging theme of „sæking safety and empathy‟ in adolescent, adolescent mothers expects a continuous safety and empathy by their peer, family and maternal health providers. If their experiences with health care services didn‟t meet with their expectation, they feel themselves helpless (Atuyambe et al. 2009).

Theme 5: Adolescent Decision-making autonomy

In Shahabuddin et al. (2019) only three adolescent girls mentioned that they participated in household decision-making, including the use of health care. Decisions were reportedly made either by husbands or by mothers-in-law. The majority of girls indicated they had very little decision-making autonomy towards their own health care, including maternal health. In Shahabuddin et al. (2017) in Bangladesh, Adolescent girls had little

decision-making autonomy regarding maternal health care because they depended on the decisions of their husbands or parents-in-law (especially mothers-in-law) to seek maternal health care. Atuyamble in a qualitative research in Central Uganda discussed the lack of decision power in adolescent mothers. Adolescents face the dilemma of becoming a teenage age mother, so she perceives herself exposed and powerless because of lack of decision making power (Atuyambe et al. 2009).

Theme 6: Adolescent perception of her martial relationship during the pregnancy

An Iranian study conducted in 2018, found two types of dynamics related to the marital relations between adolescent and her husband during the course of her pregnancy; where adolescent perceived themselves alone, and helpless, as their husband started keeping distance with them and lost interest in their adolescent wives. On the other hand, adolescents noticed an improvement in marital life as pregnancy and elimination of spousal conflicts (Moridi,and Aminshokravi 2018)

Theme 7: Various types of fear in adolescents married girls during pregnancy

Fear of delivery, especially adolescent with her 1st pregnancy is also reported in a study in Ghana. A fear is associated with natural vaginal delivery. Interestingly, the same fear prevail in adolescent during her pregnancy, and after delivery as well (Moridi,and Aminshokravi 2018). Fear of injection, is another fear reported in literature. Masemola-Yende and Mataboge in their qualitative research found that fear of needle in adolescents is a cause of non-use of contraceptive in multigravida adolescents and cause of getting again and again (Masemola-Yende and Mataboge 2015)

b. **SEM Level-2: Interpersonal and family level factors**

Theme 1: Peer as Source of information

Masemola-Yende and Mataboge argued in their study about the importance of peer, as an effective source of information on maternal health care. Adolescents trust to her peer, friends and discuss their personal problems and maternal problems with them as compare to their mothers, sisters or healthcare providers (Masemola-Yende and Mataboge 2015).

Theme 2: Family Culture and traditions

In Bangladesh In most of the cases, family members demanded that pregnant girls delivered at home with the help of relatives and older women who had experience in childbirth (Shahabuddin et al. 2017). Qualitative study in Central Uganda also highlighted the role of cultural practice, beliefs and family tradition in utilization of maternal health care services. Adolescent seeks maternal health care both in formal and traditional health sectors, but it was found that they prefer to go for traditional maternal health sectors, because that is accessible, on affordable cost and match with their cultural context. (Atuyambe et al. 2009)

Them: 3 Influence of Family members

Family members influence on decision to utilize ANC and PNC and skilled maternal health services during delivery, is captured in Shahbuddin et al. qualitative study in Bangladesh. He identified four most influential family members including husband, mother-in-law, girl"s parents and other elder and senior relative, and their beliefs, and knowledge regarding maternal health and availability of services positively related to the decision to utilize or not utilize maternal health care services for adolescent. (Shahabuddin et al. 2017). Kumar also came up with the critical role of social capital during adolescent pregnancy. His study also highlights the direct relationship between the attitude and knowledge of caregivers with the utilization of maternal health care in adolescent (Kumar et al. 2017).

c. **SEM Level-3: Community and social level factors**

Theme: 1 Community Based health worker

In Bangladesh, adolescent prefers home based ANC services, in the area of research by Shahabudin et al. The reason behind to prefer home based ANC services and no going to the health care centres are; cost and expense, as many of the population of sample area belongs to poor settlement of the community (Shahabuddin et al. 2017) The same reason is applied for home based delivery, where they save the expenses on delivery at hospital.

Theme: 2 Religion, Cultural and spiritual

Only one article discusses the community role in utilization of adolescent maternal health care, Shahbuddinet al. in his study in Bangladesh found the role of local culture, spiritual beliefs in decision to utilize the maternal health services is directly linked (Shahabuddin et al. 2017) Adolescent is considered as vulnerable to expose to evil eye, and that is the actual reason of any maternal health problem in adolescent. Such beliefs influenced adolescent pregnant girls to seek care spiritual healers. Shahabuddin et al. also found that religion shape the beliefs related to maternal health care, he reported that Muslim families did not like to their adolescent pregnant girls to be seen by male healthcare provider.

d. SEM Level-4: Organizational and health system level factors

Theme: 1Adolescent Accessibility to health care services

Shahabddin et al. in study in Bangladesh analysed the SEM Level 4, with three basic indicators; (1) Availability, (2) Accessibility (i.e. distance, cost) and (3) quality of maternal health services. He analysed that to overcome the challenges of accessibility and availability of maternal health services within community, government of Bangladesh established Community Clinics at village level, where the Maternal health services are free available. However, these are ill-equipped health facilities and adversely affect the behaviour of adolescent to utilization of skilled maternal health care services (Shahabuddin et al. 2017). Importance of accessibility and adequate transport is also highlighted by Atuyambe, in research in Uganda, and identified as a key detriment to maternal health seeking behaviour (Atuyambe et al. 2009).

Theme: 2 Quality of Care

Shahbuddin et al. identified low quality of maternal health services in public sector as a trigger to choose private or traditional method of maternal care and delivery (Shahabuddin et al. 2017). Private hospitals are preferred over public hospitals because of their fast services, however they are expensive but due to their quick services, they are preferred.

Theme: 3 Healthcare Provider Attitudes

Atuyame et al. in the analysis of qualitative research in Central Uganda recognized the needs of adolescent pregnant girl are included safety and empathy. They expect empathic behaviour from their health provider, in both modern and traditional health sectors. Atuyambe et al. emphasized the need of training for health care provider for their better attitude toward maternal health services (Atuyambe et al. 2009). Kumar et al analysed the beliefs and attitude of maternal health services providers in Kenya, and found that adolescent perceive themselves not welcomed in health facility, due to the stigma related to early pregnancy. The feel of marginalization among the adolescents, aggravate with the negative attitudes, beliefs, and practices of service providers (Kumar et al. 2017).

6.2.Results: Primary Qualitative findings

6.2.1. Profile of the Respondents:

All the interviews were conducted in the area of Pir Wadhai. Total 18 interviews were conducted with married adolescent girls, age 15-19 years old. Educational attainments of the adolescent married girls were within the range of Illiterate to matric. Out of 18, total 7 adolescent girls were belong to Afghan migrated families, while 5 were from Pashtun families and 3 were Hindku speaking and other 3 were belong to Punjabi families. Most of the husbands of the adolescent girls were related to labour work, nearby fruit market, bus stops and construction labourer. Age at marriage for adolescent girls vary from age 13 to 18 years, while most of the husband were between 16-35 years old at the time of marriage.

> *"At the time of marriage, I was 13 years. I belong to a Pashtun family, my village is Swat. When I delivered my 1st child, I was 15 years old". (1 Married adolescent girl, Pir Wadahai)*

Respondents spent their daily life in house hold chores, looking after their children, and watching T.V. few respondents also reported to use mobile phone and use of social media on internet.

Most of the respondents were living in joint family setup, the trend of extended families were seen in Afghani families. The head of the household were either their mother-in-law or their father-in-law. Only 2 husbands of the respondents were the head of the family.

Table 5: Overview of the Sample (Adolescent in-depth-interviews)

Unique ID	Age at marriage	Education	Ethnicity	Husband Age at marriage	Family Type	No of ANC	Delivery	No of PNC
Res#1	16	Matric	Punjabi	32	Joint	8	Private	2
Res#2	15	None	Afghani	16	Extended	2	Private	0
Res#3	18	Matric	Hindku	26	Joint	11	Private	3
Res#4	13	None	Pashtun	30	Nuclear	3	Local DAI	0
Res#5	17	Matric	Punjabi	30	Joint	6	Local DAI	0
Res#6	15	None	Afghani	25	Extended	3	Local DAI	0
Res#7	16	None	Pashtun	30	Joint	5	Local DAI	1
Res#8	18	Middle	Hindku	30	Nuclear	10	Private	2
Res#9	14	None	Afghani	25	Extended	1	Local DAI	0
Res#10	17	None	Pashtun	23	Joint	4	Public	0
Res#1	18	Matric	Punjabi	30	Joint	7	Local	3

1							DAI	
Res#12	13	None	Afghani	17	Joint	3	Local DAI	0
Res#13	17	Matric	Hindku	32	Extended	3	Public	0
Res#14	17	None	Pashtun	20	Extended	5	Local DAI	0
Res#15	14	None	Pashtun	25	Joint	7	Local DAI	1
Res#16	16	None	Afghani	22	Extended	2	Private	0
Res#17	15	None	Afghani	19	Joint	2	Local DAI	0
Res#18	17	None	Afghani	17	Extended	3	Local DAI	1

Source: Own research, February 2019 to June 2019.

a. SEM #1: Individual Level Dynamics

Theme: 1 Experience of Early Marriage

Perception regarding early marriages and experiences were asked with adolescent‟s girls, during the interviews. Some respondents regretted the decision of their parents for their early marriages, and stressed on the importance of the attainment of education for a girl, before the marriage.

> *"Sometimes I think about my marriage, why my parents married me so early. But when I think about today's society and environment, I feel thankful that my parents made good decisions" (5Married adolescent girl, Pir Wadahai)*

One respondent supported the practice of early marriage, if an adolescent could avail the support of social capital and health providers during her pregnancy. However she identified the ill attitude of the health care provider to adolescent pregnant girls, which make a girl feel guilty and regret.

> *"I am in favour of early marriages, because of bad environment of society. But system should be good. A teenager when go to hospital and they behaviour so badly then she realized that she had done something wrong, she felt guilty and ashamed for herself."(2 Married adolescent girl, Pir Wadahai)*

Adolescents mother were encountering with financial challenges. Although they were powerless over the income of the household but they wanted a better living standards, job security for their husband and handsome monthly expense for their family.

The importance of *"Family"* was asked to adolescents mothers, interestingly two types of themes emerged; (1) Married adolescents girls with multigravida (at least 2 live children), perceived the meaning of family was their children, (2) Married adolescent girls, who were experiencing their 1st pregnancy or delivered her 1st child (primigravida), were with the opinion that the meaning of family was her parents and sibling.

The concept of a responsible mother was consist of uniform factors across all of the respondents including; look after of her children, household chores, to keep clean her house, to keep clean her children take care of guest and hospitality. The only role of the father was perceived, as a bread winner for the family.

Mother-in-law was the most influential decision maker at the household level, she was, who decided about the daily cooking, shopping, cloths and other house hold related matters.

Theme: 2 Pregnancy Revealed to Adolescents

Adolescent with their 1st pregnancy encountered the challenge to recognize her pregnancy after amenorrhea, she suffered with multiple symptoms including; vertigo, weakness, body pain, anxiety and abdominal pain. The role of mother-in-law was critical in identification of pregnancy in their adolescent daughters-in-law. Some mother-in-law accompany with adolescent daughters-in-law to nearby clinics for 1st check-up, some brought pregnancy strips from market and assistant their daughter-in-law in checking their pregnancy with home based urine test.

I felt pain in my kidney, or I thought those pain were of kidney pain. I was not aware. I had abdominal pain. I informed my husband, that I have pain in my kidney, he brought me to a Pashtun doctor here, a male doctor, and he gave me drip, because doctor treated me for kidney. After two months my mother-in-law started to ask about pregnancy بلھیتککچھہوا نہی؟ *my husband told her that she was suffering with kidney pain, but my mother-in-law asked me to go for ultrasound. And at the end we made a card from holy family. My mother-in-law purchased strips from medical store and she test my urine. After that we went to hospital (17, Married adolescent girl, Pir Wadahai)*

Generally, family enjoyed the news of pregnancy, and adolescent pregnant also felt the sense of "accomplishment" due to the social pressure on adolescent to get pregnant after her marriage. Respondents mentioned that at the time of pregnancy revealed, they have a very minimal level of information and knowledge about the life with pregnancy.

I was ill, my face also turned bad, and I lost my appetite, so my sister-in-law asked me about pregnancy. After that I went to a hospital with my sister in law, and they checked and confirm pregnancy, they checked urine test. What was your reaction, were you happy? Actually the environment of the house was happy, all family was happy after that news, that"s why I was also feeling happy (14, Married adolescent girl, Pir Wadahai).

In the 1st year after marriage, I didn"tgot pregnant.my relative started making issue of that, because two brother got married on same time, and my brother-in-law got his 1st son after 1st year of marriage, but for me, I experience one year gap. After that year, I started medicine; doctor gave me medicine for general weakness. I was feeling bad, and ill, my husband brought me to doctor, and some test are done to confirm the pregnancy. I was very happy after that. I was not aware of the pregnancy that much. I didn"trealize that I have to care about my family, my self and now f children in a very young age. I have got a daughter. And people also started making fun of daughter (7, Married adolescent girls, Pir Wadahai).

Theme: 3 Adolescent's Expectation of Empathy and Respect at Maternal Health Facility

Respect and empathy was found the main theme underlying all other exceptions of an adolescent during her pregnancy. She needed to be guide with kindness and respect.

> *Doctors and staff treating a girl during her maternal care, it is very important. When doctor treat us in good way, it defiantly makes easy the process of delivery. We follow their instruction. Still today, I remember that bad experience. I was feeling regret for my parents and family, why they married me so early. I was got angry, but I was not daring to complain (1, Married adolescent girls, Pir Wadahai).*

Adolescent expected an empathic attitude from health care providers. Respondents reported that they wanted to be understood, dealt with respect and they should be talked with a polite way to guide them, during the course of pregnancy and during delivery. They wanted to be supported and not being ashamed of guilty, or something wrong they did. They wanted to share their fears related to pregnancy and delivery with health care providers.

> *Because girls are going through her toughest phase of life, she is already in pain, so a doctor should treat her polity, with kindness. Ask her about her fears and health. Even if she speaks with soft voice, that is enough to gain confidence for a girl. If you go to holy family, staff will come to you and ask in a harsh voice; lady, do you want to check you are? (5, Married adolescent girls, Pir Wadahai).*

Pregnant adolescents, who visited both in private and public health facility during their ANC, continuously compare and evaluate both facility for their delivery. Aside of the facilities available at any maternal health centre; including equipment, facilities, skilled birth attendant and cost of hospital, the only important aspect expected by the adolescent girl was empathy, and show the pumper care to adolescent.

> *They showed their concern for my health, my food, my complaint. They gave me quick treatment with drip and attend me with full care. They also gave me very good medicine. (12, Married adolescent girls, Pir Wadahai).*

Some adolescent respondents also mentioned the special need of nutrient food during her pregnancy and in case of joint family system, rest from house hold chores also mentioned as a need of adolescents pregnant woman.

> *Yes, a teenage mother needs more support during pregnancy and after pregnancy; there were a lot of needs, like food, rest and*

milk. Hospital"s stuff behaviour and they do not have proper food and nutrition during pregnancy. Yes, these are problems, family do not provide proper food. A teenage mother needs protein, iron and good food but she doesn"t. Because in joint family a girl need to have that food all what is cooked for all family, nothing special, not according to specific need of teenage mother. (3, Married adolescent girls, Pir Wadahai).

Theme: 4 Adolescent needs Orientation and Information on Pregnancy

Adolescent respondent clearly described the need of brief knowledge and information about the pregnancy, delivery and the way to look after of the new born. They related their experience of delivery with the lack of knowledge and information, also they founded that if they were aware with the process of delivery, they could manage the pregnancy and delivery more appropriately.

I was 18 years old at the time of my pregnancy; it was too bad, because I was unaware with the process and procedure during the pregnancy, how to handle the pregnancy, as a result my second child also delivered through an operation.

Any fear? Defiantly, I was even didn"t aware that from where baby will come out (deliver) from here or from here… and when my son delivered, after that I realized that whole process (2, Married adolescent girls, Pir Wadahai).

Especially, during pregnancy? They do not have awareness, and information. They face a lot of problems, because they even don"t know much about themselves, how they can look after her child? (5, Married adolescent girls, Pir Wadahai).

At least four adolescents" respondents reported the failure in recognition of labour pain in their 1st pregnancy, which made their delivery experience more painful. Many respondents also highlighted the shyness to inform anyone in home regarding the labour pain, and they also feel vulnerable to seek support in a joint family setup.

I was experiencing mild pain for night but I didn"t tell anyone in my home, because I felt ashamed that was my 1st experience. My sister-in-law noticed that I was in my room and not came out. (3, Married adolescent girls, Pir Wadahai).

A strange shame, a hesitation, how could I ask my in-laws for help, or how could I explain my pain to them. I was afraid. My mother-in-law bought me to Shakila Hospital. When I reached to hospital, they took my ultrasound and said that I was in labour. I only share these types of things with my husband. My husband is very nice. He went to his mother and asked for assistance. (1, Married adolescent girls, Pir Wadahai).

I was not aware of labour pain, or that would the time for delivery so I visited three or four hospitals, but every hospital suggested going to home back as delivery time to so far. I visited to hospital at 12 P.M, and hospital suggested me to come back to 8 PM. (7, Married adolescent girls, Pir Wadahai).

b. SEM #2: Family and Friends of Adolescents

Theme: 1 Impotence of Friends during Adolescent Pregnancy

The trend of having friends after getting married, in adolescents, disappeared. Many respondents stated that they had friends and peer in her parents‟ house before their marriage, but after their marriage, they leaved all connections with their friends.

Yes, I did. One year ago, when I was not married, I had many friends there at my parents"home. After marriage, I don"tgo out here in neighbours. I stay at home. (8 Married adolescent girl, Pir Wadahai)

Many serial questions were about the importance of peer and friends, however adolescent respondents showed their trust to share and discuses secretes and personal matters with their mother or sisters instead of peer and friends. To discuss the problems related to pregnancy or marital life also observed with either mother or sister. The role of friends during adolescent pregnancy identified as "outside the house". General discussion about cloths, daily routine, cooking recipes are the few of topics discuss with friends via using mobile phones or during live meeting.

I ask my mother if I faced any problem, after marriage I lost contacts with my friends. And in some cases friends also misguide you so I trust my mother. (12 Married adolescent girl, Pir Wadahai)

No, I was young; I had not that much understanding about maternity related problems. So how can I could discuss with my

friends? I discussed with my sister, and when I have my sisters with me, there is no need of friends? So who is important in life? Sisters or friends? Sisters, defiantly. (6 Married adolescent girl, Pir Wadahai)

Theme: 2 Role of Husband during Pregnancy

Almost the entire adolescent reported the caring and supportive role of husbands during the course of pregnancy; however some adolescents with old marriages (more than 5 years) also mentioned passive role of husband during their maternal health care need. No response observed to report about spousal abuse (Physical) or conflict during pregnancy. Husband"s role was an important aspect identified, which gave a sense of protection and support to an adolescent among her in-law.

After marriage I was not aware at all. I was very scared after my marriage. My husband is very caring, he supports me a lot. Yes, if your mother-in-law is supportive, but your husband is with you, so you can spend a good life. But if your husband is not caring but your in-laws are supportive, you will have a miserable life. (17 Married adolescent girl, Pir Wadahai)

Some respondents also mentioned the non-supportive role of husbands during pregnancy; as they were influenced in a joint family system; respondents argued that their husbands were not expressive in front of their family. Respondents were with the view that, their husband could be supportive and caring, but because of the presence of her mother-in-law and other in-laws, they kept a distance with their wives and not showed affection with their pregnant adolescent wives.

No, there was no any role of his, in my mind, yes I wanted him to support in my work and care for me. But no, all work was done by me alone. In joint family system, there is an influence of family (6 Married adolescent girls, Pir Wadahai).

Husbands accompanied their adolescent wives to health facility, and took care of food for her during pregnancy. Some respondents also reported that their husband look after their new-born after delivery and provide a chance to their wives to take some rest.

It is difficult for a teenage mother seeks for maternal health in our society. But my husband was very cooperative, if your

husband is cooperative, a teenage mother can cope up with difficulties. (3 Married adolescent girls, Pir Wadahai).

Theme: 3 Family Influences over the use of Maternal Health Care Services

The family and specifically the in-laws family found critically important in the decision to utilize any maternal health services or not. The information, knowledge and beliefs of the family positively associated with their attitude to suggest an adolescent to go for health facility and avail the maternal health services. Role of mother-in-law, and adolescent mother was significant; however other seniors of the family also have had a big influence. As the family members were experiences, senior and with authoritative position within a family, adolescent follow and trust them more as compare to health care providers. The feeling of "in group" with relatives and family was clearly found in the analysis of this qualitative research, and the feeling of "out-group" was associated with maternal health care providers.

> *My family elders asked me to not to go for so many ultrasound sessions, as it was harmful for my baby. Because of that I faced lack of water in my water bag because of ultrasound frequent sessions. Heartbeat of my baby was very slow (1, Married adolescent girls, Pir Wadahai).*

The factor of family also influenced the selection of the type of the maternal health care, the decision to select the private hospital or public hospitals or local DAI also influenced by the family.

> *My mother asked me to go to the Dai at night, because she trust that Dai very much. I had Card for delivery but because of my mother I went to Dai. Did your mother also go to Dai during her maternity? Yes, few children from Dai and few from hospital (2 Married adolescent girls, Pir Wadahai).*

> *My mother-in-law said that you should not go here and there, they can make the case complicated, and you should go to government hospital only. Because there is flow of patients so, doctors are experienced (1 Married adolescent girls, Pir Wadahai).*

Adolescent respondent found that the supportive role of in-laws was more important during their pregnancy as compare to their own parents and sister, because they were

living with in-laws during the course of pregnancy and they were also there at the time of any problem related to their pregnancy.

> *I was at my uncle house in Peshawar. I shifted to Peshawar for delivery, because in village facilities were not present. I stayed at my uncle house for 5 days, and visited Al Badar Hospital for delivered, where Allah blessed me with a boy. There is a significant role of in-laws in taking care of teenage mother or pregnant, yes because in-laws are always there (2 Married adolescent girls, Pir Wadahai)..*

Respondents identified their need to be cared and supported by their in-laws during their pregnancy. They found that in-laws could support in their daily chores, in their food requirement, in their rest and accompany during the visit to health facility.

> *Any support available during that phase? No, (laugh),…..my sister-in-law often visit me, but if I was in dare need of support, or I was ill, she never visit me. I felt big need of support those days (3 Married adolescent girls, Pir Wadahai)..*

> *That was a bad experience indeed was facing tension. After marriage a teenage girl face very different life. There was nobody along with me during delivery, only my mother was. I was new here in Pir wadhai, and I was pregnant that time of migration from Kabul (18, Married adolescent girls, Pir Wadahai).*

Theme: 4 Family Accompany during Visit to Maternal Health Facility

Mother in-law, sister-in-law, husband, and mother of the adolescents were only four person identified in the research, who accompanied the adolescent during her ANC or delivery or PNC. However during the delivery, other senior relative also accompany and assistant adolescent, who was perceived as an experienced delivery assistant in their family.

c. ***SEM# 3: Community Level***

Theme: 1 Community Influence over Family Planning in Adolescents

The concept of Family planning was found not popular in the adolescent, because of the social pressure to have more children, in the early age, and lack of counselling from

health providers. Although, the natural gap of 2 years during nursing the child was welcomed by many families, who did not opt for family planning. Adolescent"s respondents also mentioned the reference of the instruction of holy Quran, regarding family planning.

> *No, because these are early days of our marriage and my relative want more children. Everyone wants children. 1st child is must. But I will take 2 years gap, because my child will have my milk for two years. Who told that to you? It is also mentioned in Quran (1, Married adolescent girls, Pir Wadahai).*

Social pressure on adolescent was found serious in term to adopt any maternal health behaviour including family planning, adolescent expected to have more fertile as compare to old age woman.

> *Opt for any contraceptive method? No, it was naturally. But even that people were making issue of it. People were saying she was unable to give birth to other children. She is not fertile. I was not wise, but after listening so much from my family, I pray for many children (3, Married adolescent girls, Pir Wadahai)..*

Husband and wife were they key decision makers in some families for family planning, who were based in urban area such as Punjabi families. However, a factor of dislike and disassociation with the concept of family planning found in Afghani and in Pashtun families. Mother-in-law was the final decision maker to utilize the services of family planning or not. After the mutual consultation between husband and wife, mother-in-law finalized to utilize or to reject the idea of family planning.

> *Both, my husband want a gap of 3 years. But my mother-in-law said that people will make fun (6, Married adolescent girls, Pir Wadahai).*

Theme: 2 Sources of information within a Community for Adolescents

Mother of adolescents was identified as the key source of information to adolescents regarding maternal health issue, as the trust level was high and mother„s information was considered as authentic and reliable to adolescent.

> *Elders of my family. But my mother is on top of them. If I face any small issue, I make a call to her. She advises me in every situation (1, Married adolescent girls, Pir Wadahai).*

If the relationship of adolescent married girl and her in-laws was based on mutual trust and respect, their advice or information would also be considered as authentic. Mother-in-law specifically considers a good source of information to adolescent.

> *If in-laws are supportive and caring they can give authentic information(4, Married adolescent girls, Pir Wadahai)..*

Only one respondent acknowledge few Pakistan dramas as well on TV, focused on maternal health care. However majority of the adolescents didn"t recognize any TV drama or other show, which gave information maternal health. Another respondent mentioned the reading of charts and IEC materials in private clinic, while waiting time at clinics, during ANC.

> *Yes, I saw some dramas related to maternal care, they counsel in good way(1, Married adolescent girls, Pir Wadahai).*

Theme: 3 Utilization of Health Services in Urban Slum Community

The understating of population characteristics in research area was important, as the area was comprised of different ethnicities, with different culture and beliefs. Most of the Pashtun and Afghan families" preferred to deliver their children in home. Afghan communities" faces difficulties in seeking proper maternal health in public hospital; therefore they prefer to go in private hospital, or to traditional birth attendants. Punjabi families, who were the native of the area and many were the owner of their own houses, avail all three types of maternal health services including public hospital, private hospital and traditional birth attendant. These families selected any type of maternal health services as per their traditional and cultural requirements and preferences. Many non-qualified health provider were also operating in the area, and their only marketing strategy was "low fees and maximum opening timing of the clinic". During our observational visit, researcher found that some spiritual healers were also sitting on the floor at the corner of some main streets, and interestingly, local residence showed their trust on them.

Because here majority of residence are Pashtun, they prefer delivery at home because of Purdah. And behaviour of doctors is another problem (17, Married adolescent girls, Pir Wadahai).

For adolescents No, today we see hospitals and clinics are operational everywhere. In this area, we have many health care providers. (3, Married adolescent girls, Pir Wadahai).

d. SEM#4: Organizational and institutional

Theme: 1 Poor Confidentiality and Privacy Measures in Public Hospital

Adolescent respondents who visited to public hospital during their ANC, and observed the overall environment of the hospital, mentioned that due the overall rush in hospital, and many delivery cases were conducted at the same time, the privacy and confidentially of patients, was compromised. Presence of many medical, Para medical and training staffs in labour room make it discomfort for labour mother. Additionally, throughout the gestational pain, pelvic area of woman exposed as lower cloths were removed and she was exposed to all the personals presented in the labour room. Adolescent found that situation super embarrassing for her and tried the escaping strategies from the public hospital. She consulted with her husband or mother-in-law and preferred to go to private hospital and traditional birth attendants, such as DAI.

I was scared, because I didn"twant to expose my body in front of anyone including doctors. Because after my test at hospital, I went to holy family, where I observe that woman were treated so badly by the staff and doctors. . . ھفلی اس ہلیفولی ی ریں یں اورگی *(1, Married adolescent girls, Pir Wadahai).*

So we went to holy family again, but I observed that many women were lying on delivery table naked and staffs were walking around, they were fully exposed to hospital staff. عورتیں ننگی پڑی تھی اورسٹاف گھوم رہا تھا۔ *(3, Married adolescent girls, Pir Wadahai).*

After that visit and after saw those woman, I was suffered with a panic attack and fever, I discuss with my husband that I could not go that hospital for that reason. I was worried. After I discuss that with my mother, she suggested a private hospital Shakila Hospiatl near her home, she was very nice (16, Married adolescent girls, Pir Wadahai).

Theme: 2 Adolescent Antenatal and Postnatal Care

Respondent who belonged to the urban back ground and mostly from Punjabi families, reported more ANC as compare to the Pashtun and Afghan families. Girls who visited for ANC in public hospitals, also registered themselves for delivery in that same hospital, however many respondents reported that they didn"t received any ANC visit scheduled card from the hospital. The overall behaviour for ANC visit was observed as "need based", where adolescent visited the public health facility, if she encountered with some type of pain or any problem related to her pregnancy. Interestingly, according to the respondents, health care provider also didn"t emphasized and pressurized them for routine ANC visits.

> *I didn"t received card from hospital. I only went to hospital, if I feel any pain or any other problem. But when I started visit to holy family, they prescribed a medicine which was not suitable to me, my mouth was full of sours and my stomach was out, and I was becoming ill (9, Married adolescent girls, Pir Wadahai).*

> *No, they didn"t ask that much for next ANC visits. Not that much, I visited to hospital, before delivery, only at the time of need. Whenever I felt low energy, fever, and any pain (11, Married adolescent girls, Pir Wadahai).*

As the population of sample area consist of many Afghan and Pashtuns family, who had trend to move frequently from urban to rural, and rural to urban and Afghanistan to Pakistan and way around. Respondent didn"t report the accessibility issue in urban slums, as many private, public and traditional health cares were located within the sample area. However some respondents also shared their experiences of accessibility to health care for ANC at the time, when they were in their villages.

> *I my village, doctors don"t ask for next visit, because the facilities are not there. If they really need to go to hospital, they have to climb 3/4 streets in mountain to reach the public transport. I travelled a lot, and it is also associated with cost. There was no any card or schedule for visit given by doctor (3, Married adolescent girls, Pir Wadahai).*

All of the respondent mentioned that they were accompanied by any family member including; husband, mother-in-law, mother, or sister-in-law, but they were not

empowered enough and also they were not allowed to visit health facility alone, although, maternal health facilities were situated in the their accessible area. The empowerment to visit health facility was also determined with the money, adolescent have, as adolescent did not control over the money and depended on her family for her ANC.

> *Young girl should be accompanied by someone from home; she is not allowed to go alone. Husband or mother-in-law should accompany her, otherwise no.No she does not have that much amount with her (1, Married adolescent girls, Pir Wadahai).*

PNC visits were less frequently mentioned by the respondents as compare to ANC, after delivery seeking care was only based on the severity of the problem. If the problem related to mother and child could be resolved within house, they did not prefer to go for unnecessary check-ups. Post-partum depression was not mentioned either by the adolescent married girls or by the health care provider, as that was not considered as a health problem. Only 6 adolescent respondents mentioned their PNC visits, due to dire need of medical assistance.

> *Yes, one time, after delivery. Actually I was not aware how to sit, and how to move with stiches, after delivery I sit somewhere, my stiches were broken. So doctor did my stitches again. (8, Married adolescent girls, Pir Wadahai).*

> *When doctor asked me to visit, I visit for ANC, but after delivery, I never return to doctor, because there was no problem. (10, Married adolescent girls, Pir Wadahai).*

Theme: 3 Adolescent Preferences of Place to utilize Maternal Health Services

A mixed trend of utilization of maternal health care service was observed, as all three options of maternal health care including; (1) Public hospital, (2) private hospital and (3) traditional health care services, were visited by the adolescents during her pregnancy. As all three venues of maternal health facilities were within the access of adolescents, so she attempt to all three facilities. The attitude toward the all three types of health facility was heavily depended on the ethnicity and culture of the community, adolescent belonged to.

Theme: 4 Meaning of Quality of Care to Adolescent

Some respondents reported the effectiveness of services and quality of care in private sector hospitals. The definition of quality of care in adolescent was fast, polite, effective and timely services in provided by the health facility.

> *Because holy family suggested me medicine which were not suitable to me, but here in Shakila Hospital, they prescribed effective medicine, I felt better. If I would not go to that doctor, I would face a very difficult time on delivery. (16, Married adolescent girls, Pir Wadahai).*

Experiences of others also influence adolescent to understand and estimate the quality of care in private, public or traditional maternal health services.

> *Yes, we witnessed an event, a girl, went to the private doctor in our area. That private doctor gave her blood in her clinic. They diagnosed blood deficiency in her. She was ill with low blood pressure, when she got that bottle of blood, during second bottle she died on spot. She vomited the blood a lot (نوالٹیبھربھرکر خویکیللٰیاں کر رہیتھی۔She was young, below 17 years and belongs to a Pashtun family, these Pashtun girls got married in early age. They were illiterate and family also. (2, Married adolescent girls, Pir Wadahai).*

About an experience with midwife, respondent stated:

> *"Off course, the proper hospital and proper treatment is better. Allah saved me. Husband is with you and the doctors are educated. Now people of this area also go for hospital for proper care. That midwife is also exposed in this area after death of three women". (3, Married adolescent girls, Pir Wadahai).*

Overall those respondents, who were seeking maternal care from private hospital, gave positive response with their experience. They perceived themselves more welcomed, well treated and well understood by the maternal health care providers. Overall positive experience private hospitals during ANC visits, also lead the adolescent and their families to pursue their deliveries as well in the same hospital.

> *When I visited to private hospital and they took my trust and because of server deficiency of water in water beg, they gave me three consecutive drips at hospital, immediately. After these*

> *drips my baby heart beat started again. That private hospital also suggested us to go to holy family in case of any emergency. Because that government hospital is full of all facilities (1, Married adolescent girls, PirWadahai).*

Interesting aspect was observed regarding the expenses in private hospitals, as private hospitals were more expensive and costly as compare to public hospitals, but the cause of preference to private hospitals over public hospital, was perceived quality of care in private hospital.

> *In your opinion, which is good option to go for health care for a teenager? Private. Why? They take care of us and Because of more facilities. Off course they charge a good amount to us.* پیسے لیےتھےتو اچھا ہیتھا روہ۔-،یسہولتا ہے۔ *(2, Married adolescent girls, PirWadahai).*

Theme: 5 Attitudes from Medical Staff with Adolescent

Many respondents shared their worse experiences in public maternal health facility centres, and the main reason behind the negative experience was the non-empathic attitude of health care provider with adolescent"s pregnant girls. The same reason played a role in changing the preferences for place of delivery, as they started looking alternatives for delivery and maternal care. Similarly, adolescents couldn"t find the venue to discuss and consult their problems related to pregnancy with skilled health provider, which develop anxiety and feeling of helpless in adolescents.

> *But when I asked my doctors to change my medicine they refused in harsh tone, I felt strange with their behavior.my heart was broken with their ill treatment. I discussed that with my husband that holy family was not good for me, I felt humiliating there. My water level in water bag was low at the time of delivery and blood was also not enough. But holy family hospital was not taking my case serious, the only thing they did in each visit is ultrasound. Yes, 250 Rs to 300 Rs. They only emphasized on ultrasound. But they were not giving us attention. After experienced their bad behaviour my mother-in-law and husband bought me to a private hospital, because I was in serious condition. (1, Married adolescent girls, Pir Wadahai).*

Some adolescents also reported the insulting attitude from public maternal health care provider especially with adolescent, with their primigravida. Few of the respondents were

the mother of 3 children, but they were still remembering their worse experience at the time of their 1st pregnancy. Inappropriate and abusive talks by Para-medical staff also reported in in-depth interviews.

> *They were making mock of me, they were saying; „"is this age for marriage? Now scream loudly, we don"t care, why you got married". Ok, so after receiving such statements, how did you feel? I felt ashamed, also that hospital was managed by afghan owner, mostly staff was afghan, and they were saying why you got married to a Pakistan man? (2, Married adolescent girls, Pir Wadahai).*

Adolescent mentioned their specific need of orientation and guidance generally, during pregnancy, and specifically during the labour pain and delivery. They added the feeling of vulnerability during the delivery process, where an adolescent with her very new experience find unable herself to control the situation, and seeking support and assistance from medical staff.

> *I went twice to holy family, on 1st occasion, when I was feeling pain, and went to holy family, the staff treated me so badly. I asked my mother-in-law that I will not come here again. Very badly. With me and with other girls as well, it was disgusting. and I feared with that. They making fun of us with dirty talks, like „ پہلے تنکو کچھ نہیں ہوتا اب چیخ رہی ہو" (5, Married adolescent girls, Pir Wadahai).*

Among the health care providers and skilled birth attendants, the bad attitude of public health staff facilities including nurses, and midwife were mostly reported. Private hospitals and traditional birth attendant were recognized as kind and empathic as compare to public sectors hospital.

> *They are behaving badly with everyone. But they should take care of young girls, because they are underway the 1st experience of delivery they need more care and support. But they were treating all women in same way. If a woman has two or three children, she knows how to push and how to tackle, but for girls it is entire new experience. Was that behaviour of doctors or from staff? Both, mostly staff. A girl is in pain, in already a bad condition, and they are treating us badly, and blaming us. (9, Married adolescent girls, Pir Wadahai).*

Theme: 6 Hospital Infra-Structures

Another key influencer to select any health facility for utilization of maternal health services was the hospital infra-structure. In different in-depth interview, respondents argued that rush hours, dirtiness, less individual attention to each patient, and slow services were some indicators of health care facilities.

> *"Because the hospital was very dirty. I went twice to holy family". (12, Married adolescent girls, PirWadahai).*

> *"So I asked my husband to accompany me doing a visit to hospital that was my 6th month of pregnancy. My husband waited to take ultrasound slip in a long queue He was also irritating with the hospital bad management". (6, Married adolescent girls, Pir Wadahai).*

Theme: 7 Why Adolescent Preferred DAI Over Skilled Healthcare Provider?
Majority of the respondents described the positive experience with DAI, however only two respondents who consulted a DAI during her pregnancy and delivery reported ill skilled of DAI in recognition of risk associated with adolescent pregnancy.

> *Because of my negligence and also I should go to the proper hospital for delivery. Because I went to the DAI, in hospital they would not send me back to home, they would treat me properly (3, Married adolescent girls, Pir Wadahai).*

In the area of PirWadhai, some traditional DAI were operating their home based delivery centres, while some skilled Midwife was also practicing in the same area. Selection of any DAI for delivery was the subject to the previous experience of adolescent family, word of mouth and near access to that DAI.

> *Yes, I went to 5 number streets to a DAI she is midwife. Whenever I pass the street I saw the board of midwife, and also her clinic is so near to my home. But at the time delivery my mother came from Swat and she accompanied me for delivery to DAI. She is operating from one room clinic in her home. I was not aware to hospital. Yes, that DAI, where I went from delivery is also famous for injecting harmful and powerful injection for delivery. Even two women also died during delivery. She is not doctor, she cannot write the name of medicine even. I went to her, and I was standing in front of her, she removed my dupata,*

and gave me an injection. Suddenly after the injection, my throat dried and all labour pain disappeared and in that standing position, my son delivered. I even did get the time to sit on floor. I experienced extreme vertigo, and started suffering badly. یں تڑپنا شروع ہوگئی تھی بس اللہ نے بچا لیا *(14, Married adolescent girls, Pir Wadahai).*

Another respondent shared her experience, which was focusing on utilization of maternal health services from traditional DAI, instant of public or private hospitals nearby the area. Her experience was important to understand the decision making process to select traditional DAI, even if the skilled birth attendant also operating in same area.

Yes in Next Street, Loharoon Street, we have a doctor practicing. I only went to holy family because of my mother-in-law advice. My delivery was done in a home of DAI. Anaya Jan, she is died now. I asked my mother that even I died during delivery, but I will not come to hospital. She bought me to a Dai in our area. That DAI talked me so softly. Yes she talked in good way, and top of that she was reciting holy Quran during delivery process and after. And with that I was feeling hope. اللہ جی گر یں مربھوگئی تو کوئی گل نیں- *(4, Married adolescent girls, Pir Wadahai).*

As adolescents expecting empathy and respect during delivery, DAI handle adolescent with kindness, and respect. That can be understood as cliental marketing strategies, as many adolescents re-visit to same DAI, for other delivery.

She (DAI) started every talk like that „"yes daughter'"' „" jee beeta"," and Bismillah. Yes, she was uneducated, but her behaviour was very good. I went to her for my next delivery; I never went to hospital again. Even in some cases, people asked me to make emergency hospital card, but I never went to hospital again. (4, Married adolescent girls, Pir Wadahai).

The reason to select DAI over private hospital was identified as cost and expenses in private hospital. Respondents who could not afford the delivery charges in private hospital, and also they were not willing to deal with the problems of public hospitals, select the nearby trusted DAI for delivery. In the case of DAI or traditional maternal health service, the element of "trust and respect" was the key influencer for adolescents and they did not pay preference to skilled health provider.

There are some private hospitals also operating in our area, if you go there they will demand for 15 thousand or 20 thousand in 1st check-up. My mother-in-law said that why should we give that much amount to private doctor, if child is ours and why we give money to doctors. They only assist during delivery; all hard work of delivery is done by us, why we give money to doctors (9, Married adolescent girls, Pir Wadahai).

Theme: 8 Maternal Health Care Services in Rural/ Urban

As many respondents showed the trend of moving nature, even during their pregnancy from village to city and from Afghanistan to Pakistan and way around. They were better to compare their experiences during pregnancy and delivery in cities and in their villages. Accessibility, time of travelling, non-conveniences, operating timing of maternal health care facility, unavailability of health care staff, were some identified differences between maternal health services in rural and in urban setups.

Yes defiantly, there are a lot of differences. There we faced a lot of problem. When I was pregnant with my 1st baby girl, there were no any facilities in village; I have to travel far away from my home without any transport. And travel on mountainous area to reach to civil hospital. No, staffs were not present most of the time in civil hospital. Forget that time, still these days, the condition are same. Operation facility is not available; they refer me to Rawalpindi hospital. No, in my village there is no any health facility present. And the hospital where i used to go during my pregnancy is located in main Murree city. And what about private doctors? In your area? No there is no any private doctor, but only one private general clinic in top of the mountain in Jheika Gali, and after 5 P.M. there is no doctor available in that clinic. That is a general clinic, and mostly mother are referred to go to civil Murree. (3, Married adolescent girls, Pir Wadahai).

Another respondent, highlighted that accessibility to maternal health care services in urban area would not meaningful for many adolescents, as in urban setups as well, these adolescent were powerless to control the budget, they were reported totally depended financially to their in-laws, and other aspect is the adolescent own perception of incapability to go alone and avail health care services.

The access in city area to go to health facility is easy as compare to village. Yes, here to go to health facility is easy. Even that, not every woman in this area can go to the health facility. No, not for all, some woman does not have money to go to the health facility. And they don"t go. If you think about only one ultrasound, hospital charge at least 1000, so it is very hard for daily wage labours to bring their wives to health facility. They do not go for regular check-up. Many women died during the pregnancy in this area. (16, Married adolescent girls, Pir Wadahai).

An adolescent respondent also identified the difference in attitude of family members in urban and rural area, during the pregnancy of adolescents. She found more care and support during the course of pregnancy was provided to adolescent by the family in urban areas, because people in urban were open minded, as compare to the family members in rural area.

As you told that you moved to this area Pir Wadhai, after marriage and when you were 15 years old. Do you feel any difference in city area and facilities for maternal health in this area? Yes, here in city people are wiser. Here people also think about daughters but in rural area. People do not think of daughter they only think of their son. For daughter they think that they are not included in family. And after marriage they completely disconnect daughter. (3, Married adolescent girls, Pir Wadahai).

CHAPTER 7

DISCUSSION AND CONCLUSION

7.1. Discussion

The discussion around the topic is constructed by triangulating three key dimensions of this study; (1) Primary qualitative findings, (2) Systematic Literature review, i.e. qualitative meta-analysis, and (3) Social ecological theory. To make this discussion more valuable, the aim of the study, key objectives and international published facts were also included in this discussion.

The topic of this study is an important aspect of public health in Pakistan; the country is among the countries with highest adolescent fertility rates. One of the interest of sociology in this topic is to understand the behaviour of adolescent during their maternal phase, her social capital, available facilities by private and public sector and moreover, adolescent attitude toward these available services. Urban slums are chosen to discover such behaviours of adolescent, as in rural area services are targeted and narrow, but for the same socio-economic class there are is multiple choices of health care are available, accessibility is there, and so how these determinants contribute to facilitate an adolescent during her maternal phase to reach and utilize the maternal health services. In search of these questions, researchers chosen to conduct a type of systematic review; qualitative meta-analysis, as the primary data collection was also consist of qualitative approach to collect data. Both sets of data carefully analysed, and findings are classified into such categories;

(1) Confirming findings: commonalities and similarities of the findings from primary data and qualitative meta-analysis, confirming a common phenomenon of adolescent maternal health care behaviour in developing countries and in Pakistan.

(2) Differences of findings: different types of adolescent maternal behaviour traits in primary data collection of Pakistan and qualitative meta-analysis of other developing countries.

(3) Unique contributors: such findings from primary data of Pakistan, which is uniquely associated with culture, religious practice and express a unique standing in both primary and secondary type of data of this study.

Four levels of theoretical framework of socio-ecological model were analysed with both types of data sets. Socio-ecological model level#1 is about the characteristics of an individual that influence adolescent maternal health care behaviour, these characteristics are including her knowledge, attitudes, self-efficacy, developmental history, gender, age, religious identity, racial/ethnic identity, economic status, financial resources, values, goals, expectations, literacy, stigma, and others. Adolescent ill knowledge related to pregnancy was clearly captured in both qualitative datasets. In this research, Adolescent recognized the serious risk associated with early pregnancy, and this recognition is a confirming finding at individual level of SEM. The literature review educated that the risk of adverse pregnancy outcome is higher in as young mothers (Kozuki N 2013). Three included qualitative research articles in qualitative meta-analysis highlight the perception of adolescent respondent about the association of early pregnancy and serious risk to young mother and new born (Shahabuddin et al. 2019) (Moridi,and Aminshokravi 2018) and (Krugu et al. 2016). Similarly, primary qualitative data analysis found the recognition of many risks, however, adolescent emphasized the potential supportive role of health care provider to meditate the risks associated with early pregnancy. Primary qualitative data also stressed the need of basic orientation and briefing to adolescent pregnant girls and young mothers, as their lack of knowledge directly related with their fear of risks. Basic knowledge on risk management at individual level also effectively plays a role during the all three trimesters, during delivery and post-partum period.

The need of emotional support, empathy and respect in adolescent pregnant girls, also classified as confirming finings at individual level of SEM, in both qualitative meta-analysis of developing countries, and in primary qualitative interviews in Pakistan. Literature review of relevant studies identified the work of Kozuki N, 2013, emphasized the adolescent needs of social, emotional and psychological supports than those of other women (Kozuki N 2013). In qualitative meta-analysis, two qualitative studies highlighted the emotional and empathic adolescent maternal needs. The study of Kumer identified two emotional and empathic adolescent maternal needs including; social stigma, lack of emotional support, new life adjustment stress, while Atuyambe et al emphasized the continues adolescent mothers expectation for a empathic behaviour by their peer, family and maternal health providers. (Kumar et al. 2017; Atuyambe et al.2009). In primary

interviews with adolescent mothers in Pakistan"s urban slums, it was confirm the need of respect and empathy. Primary Qualitative data collection confirmed that an adolescent expected to be guide with kindness and respect. Interviews also revealed the adolescent expectation of empathic and respective attitude from maternal health care provider adolescent. The feel of guilty and insult lead her to divert from skilled maternal health services to ward traditional maternal health services.

Low participation in overall decision making in daily life, and almost complete dependency on in-laws during pregnancy is identified as commonality in both sets of data. Two qualitative researches included in qualitative meta-analysis specially, emphases on the phenomenon of decision making during pregnancy and for maternal health care services (Shahabuddin et al. 2017; Atuyambe et al. 2009). In primary data analysis, research found an economic deprivation in adolescent mothers and pregnant girls, where the power over household income and even income generated by her husband is in mostly cases under the mother-in-laws and in some cases husband controlled the total income and expenses of a household. The role of mother-in-law is found as care taker and as a guardian to an adolescent daughter-in-law. Although the trend of family planning is not identified as a popular fashion in primary data analysis, however, ethnicity contributed a major role in adoption of family planning in some Punjabi families; the only aspect of family planning is identified as the area where the adolescent consult with her husband over producing more children and healthy gap between two pregnancies.

“Positive relationship of Individual adolescent"s beliefs toward the skilled maternal health care and utilization of services”, is classified as differences of two data. The positive relationship between perception of Adolescent and utilization of maternal health services is captured in qualitative meta-analysis, however primary data analysis didn"t report such type of relationship. In primary qualitative interviews with adolescent; respondents mentioned the importance of skilled maternal health care but on a contrary they utilized traditional maternal health services and selected DAI for child birth.

Fear of labour pain and Trypanophobia identified as uncommon and different individual level SEM, in two qualitative data sets. Two qualitative research papers included in qualitative meta-analysis mentioned, these two types of fears in individual adolescents (Moridi,and Aminshokravi 2018; Masemola-Yende and Mataboge 2015). However, primary qualitative data analysis didn"t report such type of fear tolerate by adolescent. Adolescent as depended on her in-laws and under a great social pressure to have children after marriage, contributed to depress her fears related to labour pain, and injection phobia.

Level 2 of Socio-ecological theoretical model is about the social capital and available support of family and friends to adolescent pregnant girl and young mother. Qualitative meta-analysis indicated two potential dynamics of spousal relationship during adolescent pregnancy, delivery and post-delivery including; distance between spouses and improvement in marital life **(**Moridi,and Aminshokravi 2018). However, the primary qualitative data analysis identified that there are many other intervening factors are involved in marital relations in a Pakistani society. The primary data recognized a confused state of mind in Pakistani adolescent during her pregnancy as she is already under stressed with adjustment challenges in new family environment and the pregnancy double her vulnerabilities in new household. Husband support during pregnancy, delivery and post-partum period provide a strong back to an adolescent.

Interesting contradictory finding emerged during triangulation in both qualitative data sets under the framework of SEM, where in qualitative meta-analysis the trend of having peer group and a prominent supportive role of peer during pregnancy is identified in many developing countries. This social capital of peer, also paly an effective role in transfer of authentic information on maternal health care. The high trust level is mentioned in qualitative researches included in qualitative meta-analysis (Masemola-Yende and Mataboge 2015). Contrary, in Pakistani urban slums the bound of friends and peer is found fad after the marriage of adolescent as she is completely under the guardian of her in-laws after her marriage. Adolescent prefer to trust and share her marital and maternal problems with her primary family members; mother or sisters.

In other developing countries, studied in qualitative meta-analysis and primary data from Pakistan, the same trait of influential nature of family on utilization of maternal health care, is observed. The attitude of the family members directly influences the behaviour of adolescent in seeking maternal care, ANC, PNC, and place of delivery. Shahbuddin and Kumar, identified direct relationship between the attitude and knowledge of caregivers with the utilization of maternal health care in adolescent (Shahabuddin et al, 2017) (Kumar et al. 2017). Primary data analysis, also confirmed the same aspect of adolescent maternal behaviour in Pakistan, and extended the aspect that family not only influence the utilization of maternal health care in adolescent, but also influence the type of maternal health care services; either public, private or traditional. Qualitative meta-analysis captured four most influential family members including husband, mother-in-law, girl"s parents and other elder and senior relative, while primary qualitative interviews revealed the influential role of mother in-law, sister-in-law, husband, and mother of the adolescents. The findings from Pakistan with primary data collection also indicated the critical role of in-laws, in the decision to utilize any maternal health services or not.

The 3 level of socio-ecological theoretical model reflects the impotence and contribution of community in utilization of maternal health care in adolescents. The positive beliefs of community toward skilled maternal health services are vital to utilize maternal health care services within that community. This finding is captured in qualitative meta-analysis and in primary qualitative data analysis. Qualitative researches highlighted the importance of community beliefs and practices and ultimate effect on adolescent maternal health care behaviour, where her in-laws , her family, neighbour and overall impression of the community toward maternal health services influence her choice of utilization maternal health services (Shahabuddin et al. 2017; Atuyambe et al. 2009). Similarly, in primary qualitative analysis, research found that ethnicity and community beliefs positively associated with maternal health care practices, especially in Pashtun and Afghan families, where accessibility to formal maternal health care facility is not an issue, but accordance to their community beliefs and culture, they prefer to deliver their babies either in their home or at DAI house. The same trait was also observed in qualitative meta-analysis by Atuyambe et al, where adolescent prefer to utilize traditional

maternal health sectors, due to accessibility, affordability and align with their cultural context (Atuyambe et al. 2009).

Discussion on level 4 of socio-ecological theoretical model is very important because this level analyse the relationship of formal and informal organizations providing maternal health services, the qualitative meta-analysis included the qualitative researches, and mostly conducted in either urban or only in rural area, and the aspect of urban slums was not searched in all databases. Shahabddin analysed the three basic indicators; (1) Availability, (2) Accessibility (i.e. distance, cost) and (3) quality of maternal health services (Shahabuddin et al., 2017). Atuyambe, also identified accessibility as a key factor to maternal health seeking behaviour (Atuyambe et al. 2009). The case of accessibility and availability is different in primary qualitative research sample area Pir Wadhai, as there are many private, public and traditional types of maternal health services providers are operating within same locality. The only reason in difference in utilization of formal and non-formal maternal health services is observed that is ethnicity and cultural background of the respondents. Afghan and Pashtun families prefer DAI and home based delivery, while the case of Punjabi families is complex, where they decide any place to receive maternal health services based on various factors. Comfortably, professional skills, previous experience, and word of mouth all contributed to choose a right place for receiving maternal health care.

The definition of quality of care is varied in data in qualitative meta-analysis and in primary data analysis. Shahbuddin claim the low quality of maternal health care services is actual cause to choose private or traditional method of maternal care and delivery and quality of maternal care can be understood as a fast responsive treatment (Shahabuddin et al. 2017). In primary data analysis an overall complex picture is captured to understand the relationship of adolescent maternal health care behaviour and quality of care, where due to the easily accessibility, adolescent approached all types of maternal health care facilities, and evaluate the quality of care with some indicators including; fast, comfortable, infrastructure of the facility and respective services provision, regardless of the cost associated in private hospital or in traditional sector.

On the individual level, the exclusive need of empathic behaviour in adolescent is identified in both data sets, and on the organizational side, the need of empathic behaviour of maternal health care provider, is demanded in qualitative meta-analysis (Atuyambe et al. 2009; Kumar et al. 2017). Qualitative interviews and analysis of content loudly indicated the finding of serious lack of empathic and respective attitude of maternal health care provider including; skilled doctor, nurse, midwife, and other staff, during the adolescent visit to hospital for seeking ANC, delivery and PNC. The same factor holds the strong potential to change the preferences and start the searching of alternatives for place of maternal health services, consultation, and delivery.

Adolescent Maternal health care consist of three main components; ANC, Delivery and PNC. In the primary qualitative research, findings indicated interesting behaviour dynamics of adolescent for seeking maternal health care. PNC visits were not mentioned by the respondents as compare to ANC, after delivery seeking care is only based on the severity of the problem. If the problem related to mother and child could be resolved within house, they did not prefer to go for unnecessary check-ups. Post-partum depression was not mentioned either by the adolescent married girls or by the health care provider, as that was not considered as a health problem. Only 7 adolescent respondents mentioned their PNC visits, due to dire need of medical assistance. Respondent‟s adolescent who visited both in private and public health facility during their ANC continuously compare and evaluate the both facility for their delivery. Aside of with the equipment, facilities, skilled birth attendant and cost of hospital, the only important aspect expected by the adolescent girl was empathy, and show the pumper care to adolescent.

7.2. Conclusion

The study safely concluded that multiple maternal health care services are available in the locality of urban slums for adolescents pregnant girls and young mothers, these services are accessible, low cost and 24/ 7 available, however adolescents girls as in a transitional period for their life have distinctive needs and expectations as compare to older woman. Empathy and respect are two identified reasons that influence their behaviour and decision to avail maternal health care services. Ethnicity and culture are other two

important contributors in adolescents‟ maternal health care seeking behaviour. More studies are needed to explore the behaviours of adolescents in different setting; urban and rural, as there is not a single published peer qualitative research is found in qualitative meta-analysis in Pakistan and India. Adolescent age group is not included in any policy related to her maternal care at public policy level, and the same policies are applied on adolescents and adult pregnant woman.

7.3. Recommendations

1. The inclusion of cultural specific needs of the locals should be considered, while the development of the policies and protocols for the health facilities in any urban peripheries, specifically consideration of inclusion of the population of urban slums.

2. Adolescent‟s age specific needs during pregnancy should be included in national, provisional and district MNCH programs.

3. There is a serious need to explore patient-doctor relationship in the domain of adolescence maternal health care behaviour.

4. Adolescents maternal health care should be studied in various settlements of Pakistan, including urban and rural areas.

5. Sociological understanding of the context of urban slums in Pakistan is recommended, in order to better collection of evidence on mechanism and process of different social institutions operating in urban slums and how individuals responding to these institutions differently, as compared to urban areas.

REFERENCES

References

Articles

Ankomah, Augustine, and Nana Yaa Konadu Gyesaw. 2013. "Experiences Of Pregnancy And Motherhood Among Teenage Mothers In A Suburb Of Accra, Ghana: A Qualitative Study." *International Journal of Women's Health* 2013(5):773-780.

Atuyambe, Lynn, Florence Mirembe, Johansson Annika, Edward K. Kirumira, and Elisabeth Faxelid. 2009. "Seeking Safety And Empathy: Adolescent Health Seeking Behavior During Pregnancy And Early Motherhood In Central Uganda." *Journal of Adolescence* 32(4):781-796.

Butler, Ashleigh, Helen Hall, and Beverley Copnell. 2016. “A Guide to Writing A Qualitative Systematic Review Protocol To Enhance Evidence-Based Practice In Nursing And Health Care.” *Worldviews on Evidence-Based Nursing* 13(3):241-249.

Cook, Sinead M.C., and Sharon T. Cameron. 2015. “Social Issues of Teenage Pregnancy.” *Obstetrics, Gynaecology & Reproductive Medicine* 25(9):243-248.

Ehiemere, Ijeoma O. 2016. “Maternal health seeking behaviour and pregnancy outcome in rural communities in Enugu State, Southeast Nigeria” *Journal of Community Medicine & Health Education* doi: 10.4172/2161-0711.C1.020

Ganchimeg, T., E. Ota, N. Morisaki, M. Laopaiboon, P. Lumbiganon, J. Zhang, B. Yamdamsuren et al . 2014. "Pregnancy and childbirth outcomes among adolescent

mothers: a World Health Organization multi country study." *BJOG: An International Journal of Obstetrics & Gynaecology* 121(1): 40-48.

Gupta, Madhu, Jarnail S. Thakur, and Rajesh Kumar. 2008. "Reproductive and child health inequities in Chandigarh Union Territory of India." *Journal of Urban Health* 85(2): 291-299.

Idris, Suleman Hadejia, Mohammed Nasir Sambo, and Muhammed Sani Ibrahim. 2013. "Barriers to utilisation of maternal health services in a semi-urban community in northern Nigeria: The clients" perspective." *Nigerian medical journal: journal of the Nigeria Medical Association* 54(1): 27-32.

Khanum, Asifa, Amna Akhsheed, and Azeem Sultan Mir. 2013. "Investing in the health of future populations through a youth-focused programme." *JPMA. The Journal of the Pakistan Medical Association* 63(3):54-9.

Kifle, Dereje, Telake Azale, Yalemzewod Assefa Gelaw, and Yayehirad Alemu Melsew. 2017. "Maternal health care service seeking behaviors and associated factors among women in rural Haramaya District, Eastern Ethiopia: a triangulated community-based cross-sectional study." *Reproductive health*14:6 doi: 10.1186/s12978-016-0270-5

Kozuki, Naoko, Anne CC Lee, Mariangela F. Silveira, Cesar G. Victora, Linda Adair, Jean Humphrey, Robert Ntozini, Robert E. Black, and Joanne Katz. 2013. "The associations of birth intervals with small-for-gestational-age, preterm, and neonatal

and infant mortality: a meta-analysis." *BMC public health* 13:3 doi: 10.1186/1471-2458-13-S3-S3

Krugu, John Kingsley, Fraukje Mevissen, Meret Münkel, and Robert Ruiter. 2016. "Beyond Love: A Qualitative Analysis Of Factors Associated With Teenage Pregnancy Among Young Women With Pregnancy Experience In Bolgatanga, Ghana." *Culture, Health &* Sexuality 19(3):293-307.

Kumar, Manasi, Keng-Yen Huang, Caleb Othieno, Dalton Wamalwa, Beatrice Madeghe, Judith Osok, Simon Njuguna Kahonge, Joyce Nato, and Mary McKernon McKay. 2018. "Adolescent pregnancy and challenges in Kenyan context: Perspectives from multiple community stakeholders." *Global Social Welfare* 5 (1): 11-27.

Masemola-Yende, J.P.F. and Sanah M. Mataboge.2015. "Access to Information and decision making on teenage pregnancy prevention by females in Tshwane." *Curationis* 38(2) DOI: https://doi.org/10.4102/curationis.v38i2.1540

McLeroy, Kenneth R., Daniel Bibeau, Allan Steckler, and Karen Glanz. 1988. "An ecological perspective on health promotion programs." *Health education quarterly* 15(4): 351-377.

Methley, Abigail M., Stephen Campbell, Carolyn Chew-Graham, Rosalind McNally, and Sudeh Cheraghi-Sohi.2014."PICO, PICOS and SPIDER: a comparison study of specificity and sensitivity in three search tools for qualitative systematic reviews." *BMC health services research* 14(3):460-464.

Moridi, Maryam and Farkhondeh Aminshokravi.2018. “Ambivalence Perception” the Consequence of Exposure to Pregnancy in Iranian Adolescent Women: A Qualitative Study." *Journal of reproduction & infertility* 19(3): 157-66.

Mrisho, Mwifadhi, Brigit Obrist, Joanna Armstrong Schellenberg, Rachel A. Haws, Adiel K. Mushi, Hassan Mshinda, Marcel Tanner, and David Schellenberg.2009. "The use of antenatal and postnatal care: perspectives and experiences of women and health care providers in rural southern Tanzania." *BMC pregnancy and childbirth* 9(10) doi: 10.1186/1471-2393-9-10

Mubeen, Kiran and Marina Baig. 2016."Adolescent Pregnancies: The case of Pakistan." *Journal of Asian Midwives (JAM)* 3(2): 69-78.

Naqvi, M. M. and Azra Naseem. 2010."Maternal and Fetal Risks Associated with Adolescent and Adult Pregnancy."*Journal of Rawalpindi Medical College (JRMC)* 14(1): 40-2.

Nguyen, Minh Cong and Quentin Wodon. 2015. "Global and regional trends in child marriage." *The Review of Faith & International Affairs* 13(3): 6-11.

Palinkas, Lawrence A., Sarah M. Horwitz, Carla A. Green, Jennifer P. Wisdom, Naihua Duan, and Kimberly Hoagwood. 2015. "Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *“Administration and policy in mental health and mental health services research”* 42 (5): 533-544.

Pinquart, M. 2017. "Associations of parenting dimensions and styles with externalizing problems of children and adolescents: An updated meta-analysis." *Developmental psychology* 53(5): 873-932.

Shah, N., D. K. Rohra, S. Shuja, N. F. Liaqat, N. A. Solangi, K. Kumar, K. Kumar, K. L. Ahuja, S. I. Azam, and N. Khan. 2011. "Comparison of obstetric outcome among adolescent and nonadolescent mothers from three tertiary care hospitals of Sindh." *Pakistan. Journal of Pakistan Medical Association* 61(10): 963-7.

Shahabuddin, A., Christiana Nöstlinger, Thérèse Delvaux, Malabika Sarker, Alexandre Delamou, Azucena Bardají, Jacqueline EW Broerse, and Vincent De Brouwere. 2017. "Exploring maternal health care-seeking behaviour of married adolescent girls in Bangladesh: a social-ecological approach." *PloS one* 12(1) doi: https://doi.org/10.1371/journal.pone.0169109

Shahabuddin, A., Delvaux, T., Nöstlinger, C., Sarker, M., Bardají, A., Sharkey, A., Adhikari, R., Koirala, S., Rahman, M., Mridha, T., Broerse, J. and De Brouwere. 2019. "Maternal health care-seeking behaviour of married adolescent girls: A prospective qualitative study in Banke District, Nepal". *PLoS ONE* 14(6) doi: https://doi.org/10.1371/journal.pone.0217968

Books

Saini, Michael and Aron Shlonsky. 2012. *Systematic synthesis of qualitative research.* OUP, USA: Oxford University Press.

Web Posted Information

"Adding it up: Costs and benefits of meeting the contraceptive needs of adolescents" 2016. Guttmacher Retrieved April 21, 2019 (https://www.guttmacher.org/report/adding-it-meeting-contraceptive-needs-of-adolescents)

"Adolescent birth rate (15-19) per 1000 women in that age group [SDG 3.7.2]." 2017. United Nations, Department of Economic and Social Affairs, Population Division Retrieved December 17, 2018 (https://esa.un.org/unpd/wpp/Download/Standard/Fertility)

"Adolescent by Laird, Robert D." 2013. Oxford bibliographies Retrieved December 17, 2018 (https://www.oxfordbibliographies.com)

"Adolescent health." 2017. UNICEF. Retrieved December 17, 2018 (https://data.unicef.org/topic/maternal-health/adolescent-health/).

"Adolescent Pregnancy." 2018. United Nations Population Fund Retrieved January 12, 2019 (https://pakistan.unfpa.org/en/topics/adolescent-pregnancy-0)

"Adolescent pregnancy." 2018. World Health Organization, News Room Retrieved February 23, 2019, (https://www.who.int/news-room/fact-sheets/detail/adolescent pregnancy)

"Adolescent pregnancy: a review of the evidence." 2013. UNFPA New York Retrieved March 23, 2019 (https://www.unfpa.org/sites/default/files/pub-pdf/ADOLESCENT%20PREGNANCY_UNFPA.pdf).

"Adolescent" 2017. Oxford bibliographies Retrieved February 17, 2019 (https://www.oxfordbibliographies.com).

"Adolescents, social support and help-seeking behaviour : an international literature." 2007. Department of Child and Adolescent Health and Development, WHO Retrieved February 17, 2019 (https://apps.who.int/iris/handle/10665/43778).

"Adolescents: health risks and solutions" 2018. World Health Organization News Room Retrieved December 13, 2018 (https://www.who.int/en/news-room/fact sheets/detail/adolescents-health-risks-and-solutions)

"Metadata Fertility" 2008. Monitoring Population Global Trends, U.N.O. Retrieved February 17, 2019 (https://www.un.org/en/development/desa/population/publications/dataset/fertility/total-fertility.asp)

"Pakistan Demographic and Health Survey" 2017-18. The DHS Program of NIPS Retrieved February 17, 2019 (https://www.nips.org.pk/abstract_files/PDHS%20-%202017 18%20Key%20indicator%20Report%20Aug%202018.pdf).

"Population" 2019. United Nations Retrieved February 17, 2019 (https://www.un.org/en/sections/issues-depth/population/)

"Slums, Some Definitions." UN-habitat Retrieved February 17, 2019 (http://mirror.unhabitat.org/documents/media_centre/sowcr2006/SOWCR%205.pdf)

"UNICEF is the custodian or co-custodian for 17 SDG indicators." 2018.UNICEF Retrieved December 27, 2018 (data.unicef.org/children-sustainable-development-goals).

"United Nation's Millennium Development Goals database." 2014.Un-habitat Retrieved February 17,2019 (http://mdgs.un.org/unsd/mdg/default.aspx).

Appendix A

Consent Letter (Verbal Reading)

My name is Syeda Sitwat Hasan, and I am a student in Quaid-i-Azam University, for the study purpose, I am collecting data on the topic of Maternal and Child Health. The research will support us to better understand the merits and demerits of health care services provision in your area.

I will ask you a series of question around the research topic and you are completely free to answer or to NOT to answer to any specific question. This interview will take your 20-30 minutes. Your responses will be recorded on the device, (if you are agreed) or we will take active notes. All your responses will be secured as no other then research team can access to your response, additionally, your name and other related information"s also will be kept in privacy, and not mentioned along with your response. Immediately, after the data analysis, all your responses will be discarded.

Your participation in this activity will be volunteered, and there is no benefit and harm to participate in this research. You can contact me (Sitwat Hasan), if you want to ask any question about this activity.

If you have any question, please ask

If you fully understand this consent, can we start our discussion?__________________

Appendix B

Interview Guide with MWRA (SEM Level-1 Individual)

Instructions: After ensuring the relevance of the respondent, a brief introduction to the study will be made including; volunteer participation, total time consumption during the interview and type of questions, confidentiality of the data and anonymity of the identification. Verbal consent will be taken to use of the audio recording device.

SECTION 1: INTRODUCTION

Warm Up: Life circumstances, aspirations, and fears

-Tell me your age and your education? Number of children do you have, Age at marriage, age at birth of your first child? Tell me briefly about your husband; what was his age at marriage with you? What is his occupation?

- Please tell me about a typical day in your life. What sorts of activities do you do? Probe for her work, household chores (either in or outside the home), what sorts of things do you do in your spare time? What is her media habit, TV, Radio, other

-Please tell me about the important challenges that you face today and past. What problems do you encounter in your life? And what are the challenges in future? Personal, professional, economic, educational, how these could be overcome?

Social Capital: Family and Friends

-What comes to your mind when I say „ʻfamilyʻ"ʻ? What is the role of a wife and Husband? Probe for responsible wife? What is role of a Mother? Probe for responsible mother?

--what type of support your friends and peer provide you regarding your maternal and sexual life? Probe for (a) Advices/Information (b) physical support in work (c) accompany during visit to healthcare facility (d) other???

- Please tell me about your friends, who are important in your life (Friends from anywhere, peer group, co -workers, relatives, neighbors). Who do you discuss personal or sensitive matters with them? Do you discuss your married life, including sexual and maternal problems with them?

-what type of support your friends and peer provide you regarding your maternal and sexual life? Probe for (a) Advices/Information (b) physical support in work (c) accompany during visit to healthcare facility (d) other??

SECTION 2: KNOWLEDGE AND PERCEPTIONS OF MATERNAL HEALTH CARE

-What are available maternal health care services in your area? Probe for private and public hospitals, clinics, organization clinics.

-Please tell me about the current experience of (Pregnancy, Antenatal, Delivery, and Postnatal)? What do you think about each of these stages for an adolescent?

-what were your fears related to your pregnancy? How did you overcome those fears? Who support you during the course of the pregnancy? What is the role of a family, hospitals, friends and husband during different stages of pregnancy?

-What types of services you avail during your pregnancy? What was your experience for: Probe for antenatal care?

- ✓ Regular visits, who accompany you?? support of in-laws during antenatal checkup.
- ✓ Availability of provider, availability of medicine, availability of recommended food and comfort.
- ✓ Accessibility and transport to the health facility?

-Why do you think it is important or useful to use a Maternal Care services? What are merits and what are demerits of available maternal health care services in your area? Do you think you might ever use them in the future?

SECTION 3: DECISION MAKING PROCESS FOR MATERNAL HEALTH CARE SEEKING BEHAVIOR

-Can you tell me how decisions about your family are made? What sorts of decisions are made by your husband? What sorts of decisions do you make? What sorts of decisions do you make together?

DM for Family Size:

-Tell me about the number of children that you think is good for you. Why do you think this is a good number of children to have?

- Have you ever thought about how many children you would like to have? What sorts of things have you thought about? Have you ever discussed family planning with one or your friends / family / or partner? What did you talk about? Probe for:

    - What / who influenced the decision
    - Any obstacles or challenges she faced in making the decision to plan (or not plan) his family?

-Please tell me about what you think is the ideal amount of time that should pass between pregnancies? Why is this best amount of time? Is it the same for everyone, or does it differs?

DM for utilization of maternal health care services:

- How do you and your husband plan to use maternal health care services available in your area? Who advise you?

-How you made decision to go to the health facility? When you visit the health facility, what are the factors influenced your decisions?

- How you decide to go for second visit to the facility for antenatal, delivery or post natal? What was the role of health provider? What was the role of husband? What was the role of in-laws and friends?

SECTION 4: SOURCE OF INFORMATION ON MATERNAL HEALTH CARE

"Now, I'd like to ask you a few more questions about you and your community..."

-Where do you get important information about health?

-Is this information easily accessible?

-When need information or services for maternal health, which health facility (facilities) do you prefer? Are they in the public or private sector?

-Where would you like to get information about family planning?

-What source of information do you trust most? Why?

-Do you remember any Advertisement or drama or program on TV / Radio / Billboard/ Social Media on Maternal health?

-Where did you get your information on maternal health care? What information would you need to know for better maternal health care?---

1. Interview Guide with Family and Friends of MWRA (SEM Level-2 Interpersonal)

Instructions:

After ensuring the relevance of the respondent, a brief introduction to the study will be made including; volunteer participation, total time consumption during the interview and type of questions, confidentiality of the data and anonymity of the identification. Verbal consent will be taken to use of the audio recording device.

ROLE OF FAMILY AND PEER DURING AND AFTER PREGNANCY

1) What is your role during her period of pregnancy and after delivery? What types of fears and problem she face during her pregnancy? During delivery and after delivery? Probe for role of husband, difficulty to handle new born, role of family, health problems, social problems, stress
2) What type of support you provided her regarding her maternal and sexual life? Probe for (a) Advices/Information (b) physical support in work (c) accompany during visit to healthcare facility (d) other???
3) What are available maternal health care services in your area? Probe for private and public hospitals, clinics, organization clinics? Why do you think it is important or useful to use a Maternal Care services? What are merits and what are demerits of available maternal health care services in your area?
4) Where did you get your information on maternal health care? What information would you need to know for better maternal health care?

THANK YOU

Appendix C

Observation Checklist: (SEM Level 3- Community)

Instructions: All observation will be made during field visits, briefing sessions with community and general observations of the surroundings)

SR	Indicators	Yes/No	Observation Notes
1	Infrastructure of the health facility available		
2	No of public health facilities providing MNCH Services		
3	No of Private health facilities providing MNCH Services		
4	Availability of public transport, means of transport (Rickshaw, Buss, Taxi, Other)		
5	Local markets and availability of foods, medicine and other basic needs of MWRA		
6	General infrastructure of the area; Parks, community centre, police station other?		

7	NGOs and Civil organizations working for MNCH		

Interview Guide with Health Providers (SEM Level-4 Organization)

SECTION1: INTRODUCTION OF PROVIDER AND FACILITY:

1. Please briefly introduce yourself and how long you are providing your services? Currently what services are you offering here; Antenatal, Postnatal, Delivery, counseling, family planning, other.
2. Please tell me something about your patients; what are demographics of patients visit you: age, socio-economic class, education, PARA, Reproductive preferences.
3. Are these services available for free or do you charge? How much do you charge for antennal services, Post natal and delivery charges?
4. Do you have any contact and network with pharmacists, LHW, and other health providers? How they approach you?
5. Please tell me about the special needs and requirement for adolescent mothers, what are their needs during pregnancy, delivery and after delivery? How you as a maternal health care provider cater their needs?
6. Do you think the trend of institutional delivery is increasing these days in urban slums, if yes why? If no why?
7. What types of fears and problem a adolescent mother faces during her pregnancy? During delivery and after delivery? Probe for role of husband, difficulty to handle new born, role of family, health problems, social problems, stress problem.
8. How you educate local woman about adolescent maternal health care? What is their response?

-----------------------------------THANK YOU--

Appendix D

Critical Appraisal for Qualitative meta-analysis

STUDIES	Clear aims of the research	Appropriate qualitative methodology	Appropriate research design	Appropriate recruitment	Appropriate data collected	Researcher ,participants relationship	Ethical issues consideration	Data analysis rigorous	Statement of findings
(Shahabuddin et al., 2019)	✓	✓	✓	✓	✓	✓	✓	✓	✓
(Shahabuddin et al. 2017)	✓	✓	✓	✓	✓	✓	✓	✓	✓
(Moridi, Aminshokravi, 2018)	✓	✓	✓	✓	✓	✓	✓	✓	✓
(Krugu et al. 2016)	-	✓	✓	✓	✓	✓	✓	✓	-
(Masemola-Yende and Mataboge 2015)	✓	✓	✓	✓	✓	✓	✓	✓	✓

(Atuyambe et al. 2009)	✓	✓	✓	✓	✓	✓	✓	✓	✓
(Ankomah and Konadu Gyesaw 2013)	✓	✓	✓	✓	✓	✓	✓	✓	-
(Kumar et al. 2017)	✓	✓	✓	✓	✓	✓	✓	✓	✓

Appendix E

Qualitative Data analysis themes, code and definitions		
Theme	Code	Definition of the code
Profile	Prof	General introduction of the respondents, age, education, ethnicity, marital life, husband introduction and daily base hobbies, and challenges in life
Experience of Marriage	EX-MRG	Adolescent married girl‟s experience with their early marriages, decision making power, and effect on her life.
Experience of maternity and pregnancy	EX-MAT	Adolescents experience with her pregnancies, ANC, delivery and PNC, quality of care, experience with skilled maternal health provider, and DAI.
Family and friends	F&F	Primary peer group and primary family members around the adolescent during her pregnancy.
Decision making	DM	How an adolescent makes her decisions? How are the influencers?
Openings/sources of information	OP	From where an adolescent receive information on her maternal health,

Turnitin Originality Report

ADOLESCENT MATERNAL HEALTH CARE-SEEKING BEHAVIOUR IN URBAN SLUMS, RAWALPINDI PAKISTAN by Syeda Sitwat Hasan .

From DRSM (DRSML)

- Processed on 21-Aug-2019 14:17 PKT
- ID: 1161975996
- Word Count: 19285

Similarity Index
10%
Similarity by Source

Internet Sources:
6%
Publications:
4%
Student Papers:
8%

sources:

1 — 1% match (Internet from 16-Jul-2019)
https://journals.plos.org/plosone/article?id=10.1371%2Fjournal.pone.0169109

2 — < 1% match (student papers from 22-Apr-2016)
Submitted to Asian Institute of Technology on 2016-04-22

3 — < 1% match (Internet from 09-Jul-2019)
https://journals.plos.org/plosone/article?id=10.1371%2Fjournal.pone.0217968

4 — < 1% match (student papers from 30-Sep-2016)
Submitted to Kwame Nkrumah University of Science and Technology on 2016-09-30

5 — < 1% match ()
https://doi.org/10.17635/lancaster/thesis/538

6 — < 1% match (student papers from 21-Feb-2018)
Submitted to CVC Nigeria Consortium on 2018-02-21

7 — < 1% match (Internet from 20-Aug-2019)
https://www.afro.who.int/health-topics/maternal-health

8 — < 1% match (student papers from 10-Oct-2017)
Submitted to London School of Hygiene and Tropical Medicine on 2017-10-10

9 — < 1% match (student papers from 28-Apr-2009)
Submitted to Mahidol University on 2009-04-28

10 — < 1% match (Internet from 24-Jun-2019)
https://link.springer.com/article/10.1007%2Fs40609-017-0102-8

11 — < 1% match (Internet from 05-Nov-2017)
http://ecommons.aku.edu/cgi/viewcontent.cgi?amp=&article=1043&context=jam

12 — < 1% match (student papers from 19-Jan-2019)
Submitted to Birzeit University Main Library on 2019-01-19

13 — < 1% match (student papers from 09-Apr-2019)
Submitted to College of Agriculture, Food and Rural Environment (CAFRE) on 2019-04-09

14 — < 1% match (publications)
Rajesh Kumar Rai. "Utilization of maternal health care services by Muslim women in India, Bangladesh, and Pakistan, 200[illegible]-2007", Journal of Public Health, [illegible]