Patterns of access to and utilization of Reproductive Health Services in Afghanistan: A Literature Review

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Master of International health

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A thesis submitted in partial fulfillment of the requirements for the degree of Masters of International Health

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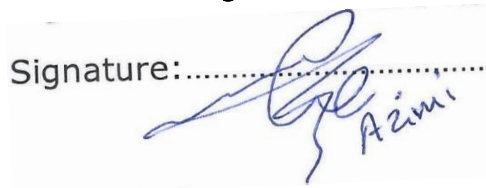

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Annex 1: Searching words

Words Glossary

Approachability refers to the existence of people's health needs and their ability to perceive the health needs. And, the health care system should be able to inform them about their health needs.

Acceptability is the acceptance of people for the services they have been offered or they have received. The acceptance level of the people depends on their economic, cultural and physical factors.

Availability of services is referred to the physical existence of health services infrastructure consist of health centers, human resources, pharmaceutical and equipment. And also, it includes the ability of people to reach the services.

Affordability refers to the economic capacity to use appropriate services. It also reflects the ability of people to generate, pay the direct and indirect costs of the services and spend their time without being concerned about losing the opportunity cost. It also refers to the system in which the services are cost-efficient.

Appropriateness means matching offered services with the needs and the ability of people. And, to engage people with the offered services until its completion.

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List of Abbreviations:

HFs	Health Facilities
OPD	Out-Patient Department
PHC	Primary Health Care
HMIS	Health Management Information System
MoPH	Ministry of Public Health
CSO	Central Statistic Organization
CBR	Crude Birth Rate
TFR	Total Fertility Rate
MMR	Maternal Mortality Ratio
GDP	Growth Domestic Products
HDI	Human Development Index
IDPs	Internal Displaced People
NGO	None-Governmental Organization
BPHS	Basic Package of Health Services
SHC	Sub Health Center
BHC	Basic Health Center
CHC	Comprehensive Health Center
DH	District Hospital
SM	Strengthening Mechanism
AMS	Afghanistan Mortality Survey
PNC	Postnatal Care
ANC	Antenatal Care
SBA	Skilled Birth Attendance
BEmOC	Basic Emergency Obstetric Care
CEmOC	Comprehensive Emergency Obstetric Care
RH	Reproductive Health
RMNCH	Reproductive, Maternal, Neonatal and Child Health
LMIC	Low Meddle Income Country
KAP	Knowledge, Attitude and Practices
CBHC	Community Based Health Care
CHW	Community Health Worker
CHS	Community Health Supervisor
FHW	Female Health Worker
TBA	Traditional Birth Attendance
AGFs	Anti-Government Fighters
DSF	Demand Side Financing
PBF	Performance Based Financing
OOPE	Out of Pocket Expending
HCW	Health Care Worker
MWH	Maternity Waiting Home

Abstract

Background:

Afghanistan is one of the countries in the world with the highest level of MMR (396/100,000 live births). While coverage of reproductive health services, which are learnt to be the most effective interventions for the reduction of maternal death, are not in the satisfactory level. Therefore, it is a need to find the factors contributing for low utilization of RH services and address those factors to improve maternal health status in Afghanistan.

Objective:

To research/describe Afghan's characteristic in relation to RH needs and to describe the process and steps to reaching the needs in Afghanistan; and to present some examples from other countries on improving RH services.

Methodology:
To fulfill the objective, a well-planned literature review has been conducted and different databases and sites have been explored including PubMed, Cochrane, Psych Lit, and Web of Science databases.

Findings:

People's low awareness on availability RH services and their low knowledge on importance of the services, mal-distribution and limited working hours of the BPHS HFs, unavailability of Female Health Workers (FHWs), weak transportation infrastructure and networks, cultural norms, low privacy of RH services, high direct and direct costs and low quality for RH services are the factors mainly affect access and utilization of RH services in Afghanistan. On the other hand, lessons from other countries such as, incentivizing RH services for either health service providers and pregnant women, establishment of Maternity Waiting Home (MWH) are among the lessons which may be effective to improve utilization and increase coverage of RH services. Yet there are needs to conduct research to specifically address contextual barriers in front of RH services' access and utilization in Afghanistan.

Key words:
Reproductive Health Services, Utilization, Access, Maternal Mortality, coverage
Word Count:
12,941

Introduction

Graduated from medical university in 2002, I started my career as an in-charge of a Health Facility (HF) in the country. My main responsibility was to manage and run the HF's activities. In addition to managerial role as a physician, I was responsible to provide Out-patient Department (OPD) consultation services where I received regular comments on the method we were delivering Reproductive Health (RH) services. Furthermore, while reviewing the HF's monthly activity reports, as it was my role as director of the health center, I noticed that very few women attended to give birth in the HF although very good facilities such as good delivery-room with proper equipment's for giving birth inside the HF were available. After 3 years of work in the HF, I joined Primary Health Care (PHC) unit of public health directorate as PHC supervisor; by that time, still the utilization of skilled birth at the HF was very low, thus it was a challenge that I failed to tackle during my first career.

As a PHC supervisor, my new responsibility was to monitor and supervise the provision of PHC services in particular to reproductive and child health services. Observing low quality and low utilization of RH services in most of visited HFs, similar to what I experienced in my previous job, it made me more interested in digging the factors creating such challenges and obstacles in the system.

After two years of working as PHC supervisor, I joined Health Management Information System (HMIS) department- the main M&E component of PHC– in Afghanistan as HMIS Officer in Herat province. Working with HMIS team lasted more than a decade at different capacities; starting as a provincial HMIS officer and ending as the Head of HMIS unit of Ministry of Public Health (MoPH). Establishment of a sound and rigorous monitoring mechanism was my main duty; therefore, I and my team established a proper and well-organized feedback mechanism to all PHC's and to the partners who were providing PHC services in which weak performance of the RH services was first agenda of all the reports.

To conclude, being questioned during my whole career why healthcare system weakly-performed specifically in the RH services is the base of my thesis which made me so excited to research about it. I see this as an opportunity to understand the context and factors affecting access and utilization of the service in my country with a hope that this study helps policymakers, program managers, and health care providers to improve the coverage and utilization of the services which ultimately reduces maternal and child mortalities in Afghanistan.

Chapter One: Background Information on Afghanistan

1.1 Demography

Afghanistan with estimated population of 30 million (CSO, 2017) and 37 percent population between 15-24 years old is ranked as the third young country in the world (World Bank, 2018). Life expectancy at birth is estimated 63 years, Total Fertility Rate (TFR) is 5.3 and Crude Birth Rate (CBR) is 36.8; in addition, four-fifths of the currently married women age 15-49 are not using any modern contraceptive method; out of which,25 percent have an unmet need for family planning services (CSO & MoPH, 2015). Also, under-five mortality rate is 91 deaths per 1,000 live birth and Maternal Mortality Ratio (MMR) is 396 deaths per 100,000 live birth (UN estimates, 2015).

Moreover, the country has diverse ethnic groups which are geographically unequally distributed; almost three fourth of the population are living in the rural setting where less access to social services, low productivity, poor market integration, and recurrent shocks are being experienced (the Islamic Republic of Afghanistan, 2016).

1.2 Geography

Afghanistan is landlocked country located in the south-east of Asia, characterized by mountainous terrain, harsh seasons and poor transportation network. The country area is 652,864 square kilometers with several borders with other countries; in the north, it is bordered with Tajikistan, Uzbekistan, and Turkmenistan, from West with Iran and from south and east has a long border with Pakistan. Finally, Afghanistan has 34 administrative units and the capital is Kabul Province.

1.3 Socioeconomic and political

Afghan gross domestic product (GDP) is USD 19.47 billion of which Agriculture contributed to 22% of GDP in 2016 (World Bank, 2016), gross national income (GNI) per capita is USD 1,871 and human development index (HDI) - a summary measure for three basic aspects of human development (long and healthy life, decent standards of living and access to knowledge) - is 0.479 which places the country at the bottom of human category ranking table and putting the country at 169th out of 188 countries in the world (UNDP, 2016). World Bank reports that the country is experiencing a very high poverty rate of 39.1 percent. This means that more than one-third of the population is living below poverty line (less than USD1.25 per day). Moreover, education status of Afghan population can be explained as the cause and consequence of the poverty. The adult literacy rate is 31.4 percent but the situation is worse while disaggregating the education status based on gender; a recent study shows that 84 percent of

women of reproductive age have less or no education at all. (CSO & MoPH, 2015).

On the political situation, Afghanistan has been experiencing more than 40 years of conflict staring by the Soviet invasion in 1979. During the last four decades of war, millions of people have been killed, injured or displaced. Recent reports suggest that almost 5 million people are still displaced or are refugees in other countries. Pakistan and Iran are hosting a huge portion of the refugees. In 2017, 546,000 Afghans refugees returned to the country from Iran and Pakistan while based on humanitarian organization reports 500,000 people have been newly internally displaced population (IDPs) mostly due to conflict and insecurity (UN-OCHA, 2018).

1.4 Health delivery care system and BPHS, EPHS

In Afghanistan, principally MoPH plays a stewardship role in the healthcare system by formulating policies, strategies and guidelines and overseeing the implementation of those policies; and non-governmental organizations (NGOs) are responsible only to provide healthcare services.
In the country, health delivery care system consists of three levels of care; primary, secondary and tertiary. For primary care, Basic Package of Health Services (BPHS), which is a modified version of World Health Organization's Primary Health Care (PHC) model, exists and for secondary healthcare, essential package of hospital services (EPHS)exists.
Furthermore, Afghanistan's BPHS has 7 main components which mostly focusing on mother and child health. The seven components are; 1) maternal and newborn health, 2) child health and immunization, 3) public nutrition, 4) communicable disease treatment and control, 5) mental health, 6) disability services, and 7) regular supply of essential drugs. In addition to the components, BPHS identifies the type of HFs to provide different interventions; for instance, Sub Health Center (SHC), Basic Health Center (BHC), Comprehensive Health Center (CHC) and finally District Hospital (DH). In addition to predefined services, staffing requirement, equipment needs, and an estimated catchment population for each level of BPHS health facilities is described (MoPH, 2012). (figure 1)

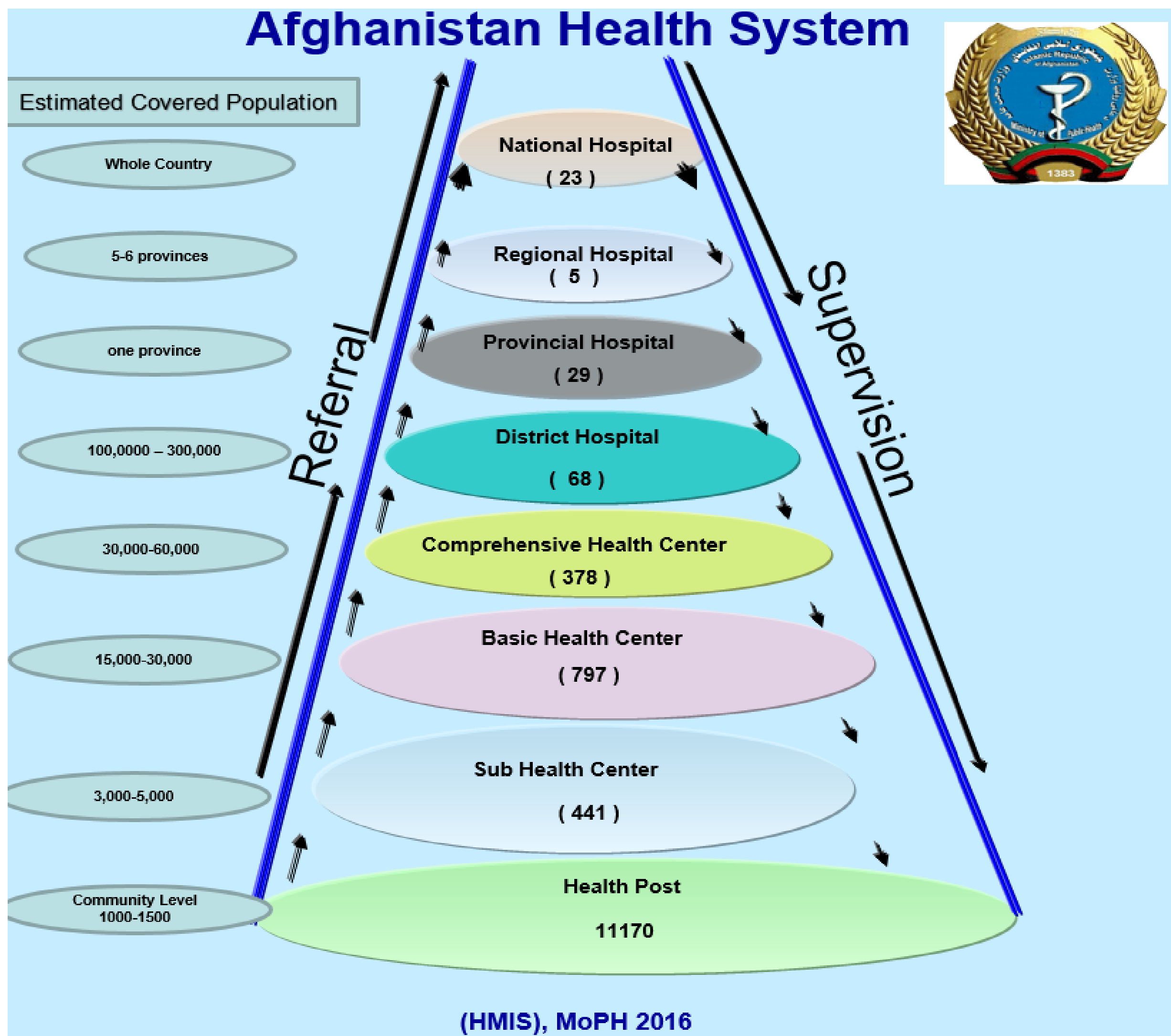

Figure 1: Afghanistan Health Care System, MoPH HMIS, 2016

The BPHS is implemented all over the country applying two different modalities. The one which covers more than 90 percent of the country is implemented by Non-Governmental Organizations (NGOs) in 31 provinces through contracting out modality, ministry of public health (MoPH) awards a contract to NGOs to provide health care services. The second modality called Strengthen Mechanism (SM) in which government (MoPH) directly provides BPHS services via provincial health directorate.

Chapter Two: Problem statement, Justification, Objective and Methodology

2.1 Problem Statement

Reduction of maternal mortality (measured as MMR) is one of the targets for the Sustainable Development Goals. Yet, Afghanistan is known as a country with highest MMR in the world with 396 deaths per 100,000 live births (UN estimates, 2015). In which the causes vary in different contexts. In Afghanistan, hemorrhage is the leading cause (56%), followed by eclampsia and pre-eclampsia (20%), then prolonged or obstructed labor (11%), and finally sepsis (5%) (APHI, CSO, IFA, 2010); most of which can be prevented or treated if a responsive healthcare system delivery - providing RH services- is in place and utilized properly in a timely manner. For example, Antenatal care (ANC), Skilled Birth Attendance (SBA), Postnatal care (PNC) and Family Planning (FP) services are among those preventive measures; while basic emergency obstetric care (BEmOC) and comprehensive emergency obstetric care (CEmOC) are effective curative measures to avert maternal deaths. In this paper, preventive aspect of RH services is going to be discussed.

As documented in different papers, different aspects of households and community's life are affected by maternal death. For instance, Kes et al. (2015) explain that financial burden on the household after the death of women has increased. Mutangadura GB (2000) found that treatment and funeral costs (both) affect negatively food security resulting on the reduction of the family's food consumption which declines the child schooling and ends with the loss of assets. In addition to what presented, a study in Sub-Saharan Africa shows that due to inappropriate caregiving; inadequate nutrition, education, and health, the orphaned children are less likely to contribute to society and development of their community (Jackson, 1997). At the same time after the death of women in the household, children school enrollment at the households is negatively affected (Ainsworth, 1993; Mutangadura GB, 2000; Basu, 1998). Similar findings have been reported in other studies which states decline in schooling is one of the consequences of parent's death not only specified to maternal death. But if death is maternal, it doesn't only affect older-children's schooling rate but also it does affect the neonate health and wellbeing (Ainsworth & Semali, 1998; Basu, 1998). Increased chance of child death particularly during the first year of his or her life and increased risk of establishment of chronic malnutrition is another consequence of maternal death (Strong, 1998; Ainsworth & Semali, 1998). Furthermore, in India, the economic effects of maternal death are documented which shows that maternal death negatively contributes to the financial stress of the households (Basu, 1998).

In summary, considering the huge impact of maternal death not only on the mothers but also on socio-economic status of children, families, and their communities; it's even worsening the cycle of poverty, from one side and high burden of MMR in Afghanistan, on the other side; there is an urgent need to expand coverage and improve utilization of cost effective RH interventions, proven to improve maternal health status, to address the high mortality rate in the country.

As stated above, the positive impact of RH interventions on the reduction of maternal death has been also documented; for instance, delivery by SBA can avert 13-33% of maternal death (Bell, Bullough, 2001).Despite limited evidence on ANC's potential effects on maternal deaths reduction, still it is argued that quality ANC provides a good opportunity to make a good relation between the pregnant woman and healthcare system and push health care workers to transfer health messages; for instance, danger sign, birth planning and other important information (Canavan, 2009) to the pregnant women. Canavan (2009) emphasized that 45% of maternal deaths happen within 24 hours after giving birth, so maintenance of high coverage of quality PNC immediately after delivery is learned a major measure to averted maternal death. UNFPA, 2016 expresses that contraceptive use lowers the incidence of death and disability related to complications of pregnancy and childbirth. A family planning model for Afghanistan proposes that by increasing contraceptive use from 10% to 60% over the course of 5 years, 11,653 maternal deaths and 317,084 infant deaths could be averted (Rahmani A. M et al, 2013).

In Afghanistan, the above-mentioned interventions are comprehensively translated into BPHS at both HF and the community levels. For instance, provision of SBA, ANC, PNC, and FP are integral parts of all types of BPHS HFs and referral is the main part of Community Health Workers (CHWs) responsibilities.

In Afghanistan, with the implementation of BPHS, a good improvement on the coverage of RH indicators during 2002-2010 has been observed. The improvement even continues after 2010 but in a slower pace (World Bank, 2018). For instance, the coverage of skilled birth attendance at 50.5 %, first ANC coverage at 58.6%, contraceptive prevalence and PNC coverage at 19 % and at 39.9% respectively; which show very little progress comparing to the records in the previous periods (CSO & MoPH, 2015).

2.2 Justification

The high MMR is a big public health concern in Afghanistan, most of which can be averted by the provision of quality RH services. It is obvious that still half of the pregnant women do not have access to SBA, PNC, and ANC services, four-fifths of child bearing women do not use modern methods of contraception. Thus, this paper is going to review literature and describe

predisposing factors, enabling factors and the context in which the both interact and finally to present the current situation of all factors contributing to the access and the use of RH services. Therefore, it is a need to understand the different socio-economic, geographic, socio-cultural norms and standards, gender issues, distribution of RH services, availability of resources, quality and acceptability and affordability of the services to address the barrier in front of access and use of RH services.

To sum up, the main aim of this paper is to provide strategic and operational recommendations to Reproductive, Maternal, Neonatal, and Child Health (RMNCH) directorate of the ministry of public health to modify current policy documents and revise operational guidelines and ultimately to improve the coverage of RH services.

2.3 Research Question

What factors contributing to low utilization of RH services in Afghanistan.

General Objective

To research/describe Afghan's characteristic in relation to RH needs, RH awareness and to describe the process and steps to reaching the RH services in Afghanistan; and to present some examples from other countries on improving access and use of RH services.

Specific Objectives

1. To review literatures using academic databases and web sites in order to describe demographic, socio-economic, cultural characteristics of individuals', households', and communities' which influence the use of RH services in Afghanistan.
2. To elucidate Afghanistan healthcare system's characteristics as the hindering as well as enabling factor to access and utilize the services.
3. To present some of the LMICs lesson learns regarding improving access to and utilization of RH services.
4. And finally, to provide strategic and operational recommendations to RMNCH directorate of MoPH.

2.4 Methodology

2.4.1 Literature Review Strategy

To fulfill the objective, a well-planned literature review, starting with listing down of the key searching words (Annex 1), has been conducted in which different relevant papers whether published or gray ones have been extracted. To find the relevant documents and information, different

databases and sites have been explored including PubMed, Cochrane, Psych Lit, and Web of Science databases. Moreover, the searching engine like Google scholar was used. The keywords such as sexual and reproductive health services, Afghanistan, and Low middle-income countries, LMICs, utilization, coverage, access, maternal health, consequence, cause and maternal mortality were used for online searches. The keywords were combined with Boolean connectors (AND; OR) while searching in the databases and search engines. Moreover, UNFPA, WHO, World Bank, UNICEF, CSO, and ministry of public health Afghanistan websites were also searched to find the relevant reports, studies, assessments, surveys and policy documents for RH services. Finally, the list of references of relevant articles were reviewed using snowballing approach to find the relevant and appropriate articles.
On the other hand, considering the patterns of access and utilization of RH in Afghanistan, three categories of the interventions which have been documented as the best practices in other LMICs, which may be applicable in the Afghanistan context, have been selected. Demand and supply side financing, accessibility of services, community mobilization and involvement in RH services planning process, and socio cultural demand generation will be presented.

2.4.2 Inclusion/Exclusion Criteria

The articles included are between years 2002-2016 - a period where the new health system was established. When needed, articles from similar LMICs were included but without considering the period. The main reason for inclusion of the articles was to get good practices as much as possible and reflect the best ones in this paper.

2.4.3 Limitations

Most of the articles used for the paper are very small-scale researches which cannot be generalized for the total population also quality of them were not examined. On the other hand, findings from the other countries may not applicable in the Afghanistan’s context regarding utilization of RH services so they may need to be contextualized.

2.4.4 Conceptual Framework

Access to health services and utilization of them has been defined differently in different literatures during the last decades. The most recent definition presented by Levesque et al. (2013) is as below:
“Access is the possibility to identify health care needs, to seek healthcare services, to reach healthcare resources, to obtain health care services, and to actually be offered services appropriate to the needs for care”; while he defines utilization as realized access, he also suggests a new framework to describe or to examine the level of access and utilization of the services. Therefore, I am going to use the suggested framework, as it is

comprehensive enough to capture almost all aspects of reproductive healthcare services. Consequently, it can address the interaction between the healthcare system and individual, households, and communities. In addition, the selected frame work can be utilized to describe the context (environment).

The framework has five-dimensions (Figure 2). It presents both the supply side and demand side of health care system. The dimensions are approachability, acceptability, availability and accommodation, affordability and appropriateness. All of them are interlinked with different abilities of individuals to benefit from the services. (List of Glossary)

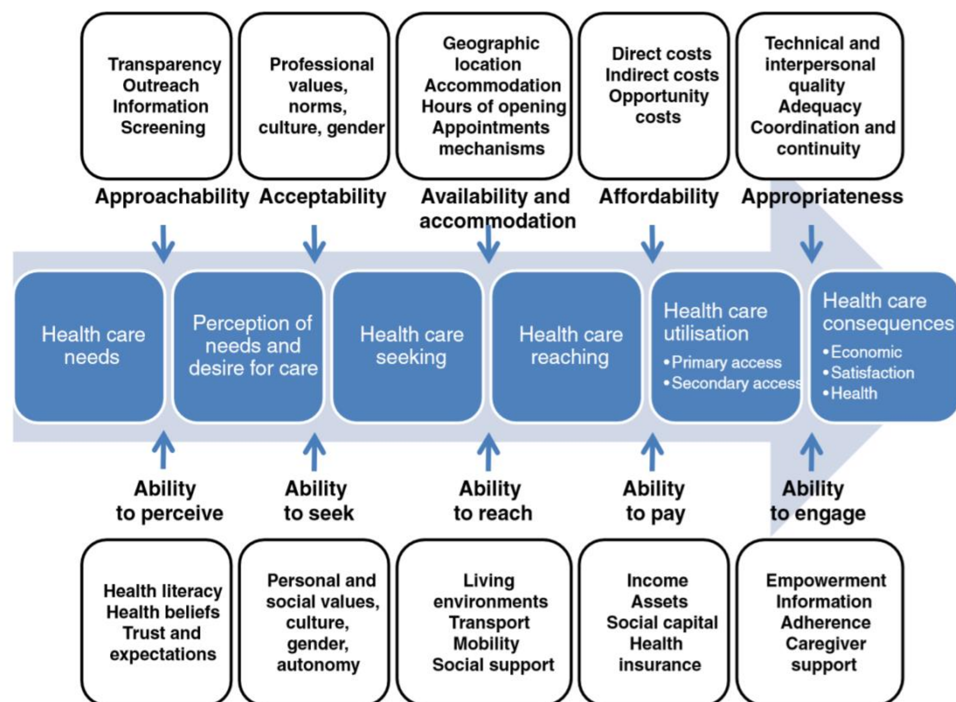

Figure 2: Conceptual framework of access to health care, Lévesque et al., 2013

Chapter Three: Findings

3.1.1 Approachability:

In this topic, transparency, outreach information, health literacy is going to be discussed.

3.1.1.1 Transparency

Levesque et al. (2013) found that as the more people are aware of the availability of RH services the more they will utilize the services. Like Levesque's findings, in Afghanistan, based on a KAP assessment, Singh et al. (2012) report that lack of awareness on availability of health services adversely affects the utilization of the services.
Denno et al. (2014) report that media plays a big role in improvement of people's knowledge. Doinga meta-analysis of a national survey in Nigeria, Babalola & Fatusi (2009) found a positive association of media's saturation with the use of ANC, SBA, and PNC services. Also, in Ethiopia, media exposure significantly contributed in improvement of ANC attendance (Birmeta et al., 2013). In addition, Bishwajit et al. (2017) through analyzing DHS data, reveal that media exposure had a significant positive impact on male involvement in the utilization of RH services by pregnant women.

On the other hand, in Afghanistan, where Rasooly et al. (2015) report no association between media exposure and use of contraception, Osmani et al. (2012), CSO and MoPH (2015) confirm the previous findings. A possible explanation for this contradiction could be the use of different data-sets, different methodologies or different time periods while conducting the surveys.

The level of awareness of RH services can be affected by the level of media's coverage. In Afghanistan, CSO & MoPH (2015) report that half of the ever-married Afghan women are not exposed to media on a weekly base. At the same time, the level of media exposure in particular to maternal health messages, is associated with other socio-economic factors; for instance, residency, education level, and wealth status. These factors will be explained in detail later in this paper.

3.1.1.2 Outreach information

Levesque et al (2013) report outreach activities are one of the enabling factors that contributes in improving health-seeking behavior. In Afghanistan, Community-Based Health Care (CBHC) refers to outreach activities. CBHC is one component of BPHS and Community Health Workers (CHWs) are implementing the policy in their communities. One of the main objectives of policy of CBHC is,*"To improve quality of health care (curative, preventive) services at the community and household level."* (MoPH, 2012).

The objective is intended to be achieved mainly by provision of health education services at a community by CHWs (MoPH, 2012).

To assess the level of CHWs' contribution in improving the use of RH services, several surveys have focused on this dimension. For instance, Afghanistan Living Condition Survey (2014) reported a very low level of CHWs' contribution regarding provision of RH services. Surprisingly, Mayhew et al. (2008) report a negative association between the presence of CHWs within HF's catchment and use of SBA. The factors contributing to this negative association is not discussed but based on my own experiences, it could be due to a fact that MoPH and its implementing partners do not properly monitor CHWs' activities. As a result, people have to pay for the services provided by CHWs which negatively affects the CHW's performance. On the other hand, a systematic literature review took on by Warren E, et al. (2015), which focuses on a finding presented by Viswanathan et al, counter argue that the presence of female CHW has a positive impact on utilization of SBA, ANC and contraception. However, no association of availability of male CHW was found.

In Afghanistan, based on recent MoPH reports and records, has 11,170 health posts with 22,340 functioning CHWs almost 45% of them are female. It's expected that these huge number of CHWs can play a vital role in spreading awareness about RH services in the country. (Figure 1)

3.1.2 Ability to Perceive

N. Chakraborty et al. (2003) summarize Andersen and Newman's (1973) findings regarding utilization of health services. They state that the utilization of health services is positively correlated with the level of perceived need. In addition, they state that although enabling and predisposing factors determine the utilization of health services, the mother does not use the services unless she perceives the seriousness of treatment needed (N. Chakraborty et al., 2003). In another paper, Anne AM (2006) explains the effect of having knowledge about the complications and the level of severity of illness with the decision-making process (Ochako & Gichuhi, 2016).Similarly, in Ethiopia, a study found that absence of illness and lack or little knowledge about ANC are among the most common reasons that women were not using ANC services; therefore, the pregnant with better knowledge about pregnancy's danger signs are three times more likely to utilize ANC services (Birmeta et al., 2013).

In Afghanistan, surveys show that most of women do not have enough knowledge on their RH needs. For example, two-fifth of women attending ANC do not consider vaginal bleeding as a sign for seeking emergency care (CSO & MoPH, 2015). This may lead to low utilization of the available RH services resulting in a high level of delivery complication and finally it may end up with maternal death.

3.2.1 Acceptability:

The level of acceptance of offered health services and the way people behave to seek those services are determined by socio-economic and socio-cultural factors (Levesque et al., 2013). In Afghanistan, based on a comprehensive and systematic evaluation of the socio-economic and geographical inequalities regarding availability of RMNCH services, significant inequalities among women and children exists (b. Akseer et al. 2016).

3.2.1.1 Professional values and norms

Professional values and norms means conflict between the HCWs' beliefs and the work they are supposed to perform. Provision of abortion services by a HCW; however, he or she may not agree with provision of those kind of services is an example of such conflicts which were not found during reviewing the literatures for provision of preventive RH services. Instead social values are an area which is going to be discussed later.

3.2.1.2 Gender

Following the module, gender is a standalone topic that affects acceptability of the services. In Afghanistan context, a girl or woman is expected to stay home, not study, not work, and not to seek health services be her own choice are among issues which contribute to the level of use of RH services at both supply and demand sides. For instance, a small-scale research conducted in two provinces of Afghanistan shows that females' child caregivers are less likely to use health services as they are not allowed to leave the home alone or not able decide to seek the services without permission (Howard et al., 2014). Also, performance of Female Health Workers (FHWs) can be affected because of being a female thus reduces productivity of FHWs to provide RH services. Based on a quality assessment conducted in 2016, one-fifth of skilled birth attendants mentioned childcare and household responsibility (Culturally, Afghan women are responsible for household activities), adversely affecting their performance. In addition, one-third of them has claimed to experience misbehavior and misconducts working as FHW and some of the experiences have resulted in physical or emotional shock which has also affected their performance negatively (MoPH & Jhpiego, 2017). Moreover, another study examined role of sex of children with the use of family planning in the Afghan community. Findings show that having more son is linearly contributes to more use of family planning services while having more daughters has reverse effects (Osmani et al., 2012). Meanwhile, gender issues will be also discussed indirectly in the upcoming different topic, as it was found to be more cross-cutting topic.

3.2.2 Ability to Seek

This topic covers personal, social values and culture, and socioeconomic factors such as education, age of women, parity, family size and marital status and finally women autonomy.

3.2.2.1 Personal and social values, culture

Social values refer to traditional believes and cultural norms. Babalola & Fatusi (2009) report that some of traditional and religious beliefs hinder the utilization of SBA in Nigeria. They explain that women perceive the SBA services un-effective; therefore, they do not use the available services.
Like Nigeria, in Afghanistan traditional medicine is a part of Afghan culture and beliefs (Singh et al., 2012). It can also negatively affect seeking modern health services. As Howard et al. (2014) report, based on a small-scale study, that cultural preference of traditional medicine to modern one is a hindering factor in the utilization of SBA.

In addition, privacy of healthcare services - which is mostly considered as a part of people's traditional beliefs - is also highlighted as an important factor affecting the level of acceptance of RH services (Kyilleh et al., 2018; Jonas et al., 2018; Howard et al., 2014). Polygamy, early marriage, limited mobility, inability of women to leave home and limited education opportunities for the female are outcome of social values hindering the use of RH services which is going to be discussed in upcoming sections.

Privacy - as social and cultural norms - is another important factor which influence people's decision in seeking the RH services. In South Africa, for instance, nurses who had participated in a study emphasized the critical role of privacy on improvement of healthcare seeking behavior. They recommended provision of a separate room or a separate space for the female clients to improve the use of RH services (Jonas et al., 2018). In addition, Kyilleh et al. (2018) describe lack of privacy and confidentiality as a hindering factor in utilization of RH services in Ghana (Kyilleh et al., 2018).

In Afghanistan, likewise as in South Africa and Ghana, participants of a KAP study in 6 provinces with different ethno-cultural characteristics, reported the lack of privacy for women as an obstructive factor in seeking healthcare services. They argued that women, in the BPHS HFs, wait for healthcare services along with men (Singh et al., 2012). In addition to the previous evidence, a recent comprehensive and systematic assessment proves the effect and importance of privacy during a HF visit. it also confirms that better privacy is associated with increased use of SBA in Afghanistan (Akseer et al. 2016).

In Afghanistan, almost half of ANC consultation and SBA clients suffer from lack of visual and auditory privacy in the BPHS HFs (MoPH & JHPIEGO, 2017). This can be a firm for the low coverage of RH services in the country.

Levesque et al. 2013 explain that some societies expect no contact between HCW and client from different sex. In Afghanistan, a woman is expected to receive medical services only by a FHW (JR Acerra. et al., 2009). Mayhew et al. (2008), for instance, confirm a strong positive association of the availability of female doctor and midwife with the utilization of SBA. Similarly, based on a Knowledge, Attitude and Practice (KAP) study, despite preference of the rural area's respondents to use public health facilities, they are not able to seek the services due to unavailability of FHW (Singh et al., 2012).

Therefore, unavailability of FHW can negatively affect use of RH services (Howard et al., 2014). A recent assessment report that two-fifth of HFs do not have a female skilled birth attendant (Female doctor, female nurse, and midwife) for 24-hours or even for a whole week straight (MoPH & JHPIEGO, 2017). One of possible reason for low level of FHWs availability is their high turnover rate. A study suggests the availability of FHW, in particular midwife, has a linear correlation with the level of their retention rate. As much as the retention rate is improved, the level of availability of FHWs increases. In a study in Afghanistan, insecurity, family disagreement (28.1%), increased workload without compensation, inappropriate accommodation was specified as the main factors for high turnover rate of midwives in the BPHS HFs (Mansoor et al., 2013). They will be discussed in different sections later in the paper. (Figure 3)

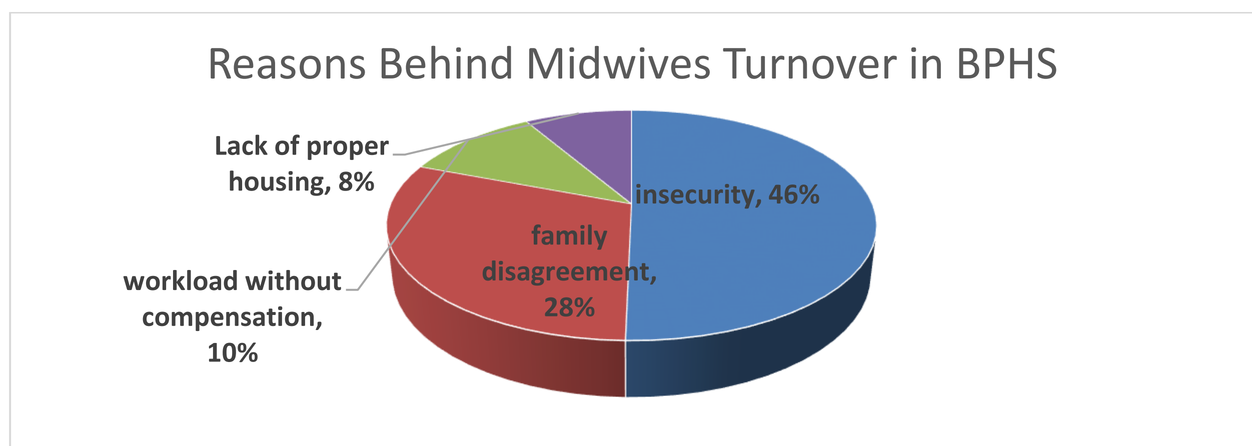

Figure 3: List of reasons that midwives leaving BPHS HFs.

3.2.2.3 Education

Education determines the level of women's socio-economic status. Education enables women to know their health needs, better communicate their needs, and affect their decision for seeking healthcare. Higher education level of women is positively associated with a higher employment

rate and ultimately enhances women's ability to pay cost of health services (Babalola & Fatusi, 2009; Chakraborty N et al., 2003). Mayhew et al. (2008) state that the level of SBA uses is significantly determined by literacy status. The similar correlation between primary education and ANC use is documented by analyzing DHS data in Kenya (Ochako & Gichuhi, 2016). On the other hand, young girls with educated fathers are more likely to use RH services (Wassie Negash et al., 2016). Residency, which will be discussed later, is one of the factors which is associated with the level of education. As per Benefit Incidence Analysis (2013), in the central highlands, almost nine of ten pregnant women are in favor of giving birth by TBAs where most of them tend to have the lowest level of education (MoPH, 2013).

Likewise, in Afghanistan, women with higher education are more likely to use SBA, ANC, and contraceptive methods (Osmani et al., 2012; CSO & MoPH, 2015). Another study undertaken by Akseer et al. (2016) reports that maternal literacy is one of the main drivers of SBA coverage in Afghanistan.

Afghanistan has a low level of education and literacy rate. Only 16 % of ever-married Afghan women age 14-49 has at least primary education and 50% of Afghan men age 14-49 has at least primary education (CSO & MoPH, 2015). This has negative impact on the level of RH services utilization.

3.2.2.4 Age of Women

Another proxy variable to measure the level of usage of services is the age of the mother. After analyzing DHS data in Kenya, Ochako & Gichuhi (2016) found that older women are less likely to receive ANC services compared to younger ones.

Several age factors, obviously varying in different contexts, determine the use of RH services. Older women are more likely to have higher level of knowledge and experience (Chakraborty N et al., 2003) which increases the chance of leaving home without being accompanied (CSO, 2016) and this could positively contribute to use of RH services. In contrast, modern technology and improved education system are explained to be in favor of young women and leads to further use of the services. Also, first pregnancy is perceived more risky; therefore, the pregnant with the first parity may seek more healthcare (Chakraborty N et al., 2003).

In Afghanistan, older women are four times more likely to use contraceptive methods compared with young women (Osmani et al., 2012). They are more likely to use SBA and ANC services (CSO & MoPH, 2015; MoPH, 2014; CSO, 2016) where no association between age of first marriage with the use of contraception is found (CSO & MoPH, 2015);

In addition, CSO & MoPH (2015) estimated that the median age for the first birth is 20.1 years which shows improvement compared to other age cohorts. On the other hand, the finding also mentioned that one eighth of pregnancies happened during 15-19 years of age which have adversely effected the of use of RH services.

3.2.2.5 Parity, Family Size, and Marital Status

Number of parity is one of the determinants of seeking SBA services. A study conducted in Ethiopia shows that women with first parity are 3 times more likely to seek SBA services compared to women with fifth parity (Birmeta et al., 2013); CSO & MoPH (2015) also confirm that first births are associated with higher utilization of SBA services. For the contraception use, it is the opposite. Osmani et al. (2012) found that as the number of children increase, contraceptive use also increases (Birmeta et al., 2013; Rasooly et al., 2015; APHI, CSO, IFA, 2010). More children make big families, which results in longer caring time for them. This results in shortage of resources and, thus negatively affects healthcare seeking practices (Chakraborty N et al., 2003).

Marital status is categorized as another factor determining utilization of RH services. Gabrysch & Campbell (2009) undertook a literature review to examine the level of RH use by polygamous and monogamous women in six countries. They found that the level of SBA use is higher for monogamous in 4 out of 6 countries.

In Afghanistan, the prevalence of polygamy is 7.9 % which causes inequitable distribution of resources and inequitable care among wives by the husband (CSO, 2016).

3.2.2.6 Women Autonomy

The position of women in household, income, and decision making are other determinants in seeking RH services. All of which are influenced by education level of a woman which has already been discussed.

Birmeta et al. (2013) report that utilization of SBA services is higher if joint decision made by woman and her husband than a decision made only by the husband and his family (Birmeta et al., 2013). This reflects that the higher level of women's participation in the decision-making process results in the higher utilization of RH services.

In Afghanistan, most of the women cannot leave home without a male escort or without their husband's permission. This is still a taboo in the country. Finding from KAP study in 6 provinces, with different ethnocultural characteristics shows that to access HFs, a woman has to be authorized or accompanied by male family member, or else, she cannot decide to access a HF by herself. Therefore, she has no choice except to use Traditional Birth

Attendance (TBA) (Singh et al., 2012). Furthermore, income level, wealth status, age of women, women education level and residency (urban, rural) are other determinants of their autonomy (CSO & MoPH, 2015; CSO, 2016). (Figure 4)

Furthermore, in Afghanistan, another survey called Living Condition Survey (2013-14) uses the level of women control on their earning and ability to leave home alone as two proxy indicators to measure autonomy status of the women. It shows just one-third of women can decide to use their own earnings and almost one fourth of them can leave the house alone.

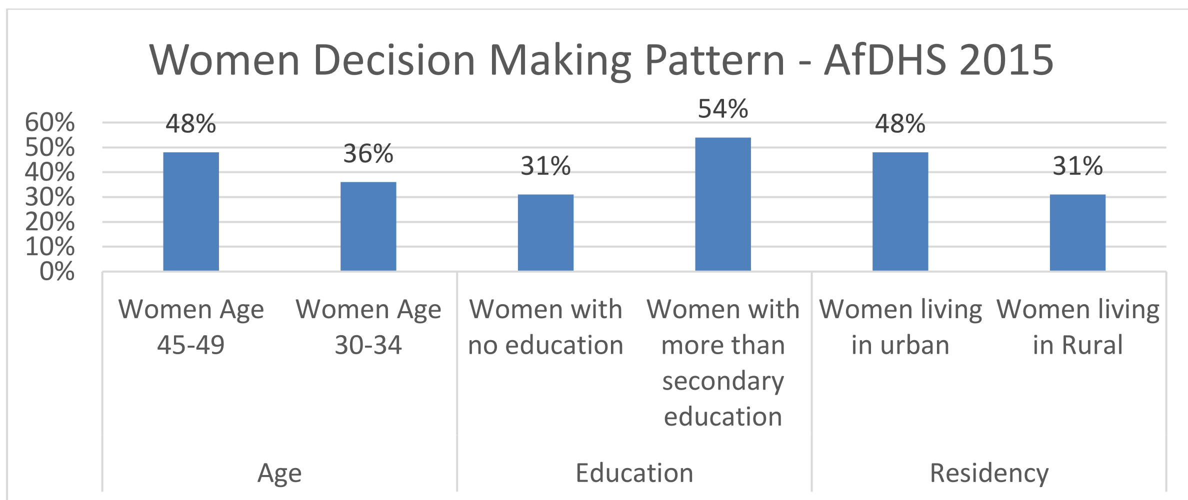

Figure 4: Women's decision making by age group, education level and residency, ADHS 2015

3.3.1 Availability and Accommodation

Physical accessibility is the main dimension of access in acquiring RH services especially in LMICs (Chakraborty N et al., 2003).

In this section, we are going to describe the geographic location, working hours, availability of human resource but insecurity which affects access of both health staff and the clients will be describe in the next section (ability to reach). And appointment mechanism which is in the original framework is not going to be discussed as it is not applicable in the context of Afghanistan.

3.3.1.1 Geographic Location

Location of HFs determines the level of access of the health services. Analyzing Nigeria DHS data-set, Babalola & Fatusi (2009) found density and distribution of HFs are associated with utilization of SBA and ANC services. The study also elaborates that as much as the number of people seeking healthcare from a single HF is increased, it is much likely to negatively affect the utilization of services due to overloading of the HF. This also impacts the quality of services and as a result the utilization of the services may be decreased (Babalola & Fatusi, 2009).

In Afghanistan, Health Facility Rationalization Assessment 2014 reveals a huge inequality on distribution of BPHS HFs. The assessment shows that the number of inhabitants covered by a CHC is ranged from 6,188 to 166,979; however, the BPHS standards assign a CHC for 30,000-60,000 catchment population. Therefore, misdistribution of BPHS HFs could adversely affect access to health services. This may result in low utilization of the services or overloading of the HF which decreases quality of the services.

3.3.1.2 Hours of Opening

Another factor which affects the level of accessibility to RH services is operating hours of the HFs. Though, based on BPHS policy a CHC and DH should provide 24-hours services, MoPH & HPRO (2015) report that 90% of the mare working just during the daylights maximum 8 hours per day. About one-tenth of SHC and MHT are working more than 5 hours in the working days. Based on KAP study conducted in 6 provinces of Afghanistan, Singh et al. (2012) also report that most of respondents living close to BHS/CHCs in urban are mentioned no access to services due to limited working hours for female staffs since they are not assigned to night duty (Singh et al., 2012). In addition, Jonas et al. (2018) report that the nurses, who had participated in an interview, believed that timing hours to be extended to 30-60 minutes more to accmodate the female clients attending school during daytime.

Insecurity also has negative effect on working hours. Due to insecurity, a study revealed that FHWs should leave the HFs earlier which reduces their operational working hours in the HFs (MoPH & HPRO, 2015). Therefore, human resource as it is a key indicator to measure the availability of health services, where the availability of midwife is the key for the provision of RH services. In LMICs, absence of staff is reported as one of the common and important barriers in reducing maternal mortality (KoblinskyM et al., 2006).

"The extent of coverage of birthing care depends on strategic decisions in three areas: training, deployment, and retention of health workers." (KoblinskyM et al., 2006)

Several factors influence the level of availability of FHWs, as it was discussed earlier no availability of FHWs may affect the level of acceptance of RH services. In spite of high level of midwives' availability in BPHS-HFs, still high turnover rate is a challenge in provision of proper RH services. Based on a small scale qualitative study, in two provinces of the country, service providers and health program managers reported staff turnover as one of the main issues in the provision of health services (Howard et al., 2014). Another study covering all BPHS HFs in 12 provinces, estimates the overall retention rate for a midwife as 61% which has resulted in low availability of RH services (MoPH & HPRO, 2015). It also shows that just half of the HFs met the BPHS staffing standards. In addition, a Joint health sector review reported 17% of all BPHS HFs, 4% of CHCs and one-fifth of BHCs, SHCs and MHTs without a single female technical staff.

Finally, Akseer et al. (2016) conducted a comprehensive and systematic assessment of RMNCH services using 11 national representative surveys conducted between 2003 and 2013. They concluded that the rate of deployment of community midwives is one of the independent factors for increasing of SBA coverage in Afghanistan.

3.3.2 Ability to Reach

3.3.2.1 Living Environment

Living environment refers to residency (Urban, Rural) area which may not be a good measure in accessing of RH services due to several con founders. The level of access to education services, media's coverage (Babalola & Fatusi, 2009), employment rate; and traditional beliefs, size of family, transportation network and roads condition can affect the level of access to RH services.

In Afghanistan, evidence shows a lower level of utilization of RH services especially ANC, SBA and PNC services and contraceptive use in rural areas compared to urban areas (CSO & MoPH, 2015; CSO, 2016; Babalola & Fatusi, 2009; Osmani et al., 2012). Also, as per Benefit Incidence Analysis results (2013), the utilization of services is greater in urban are as

compared to rural areas (70% to 25.6%). Preference of traditional birth attendants and delivery at homes among rural population is a fact opposite to preference of urban population to give birth in health facilities. The level of preference is also differed in geographical locations. In the central highlands, almost 90% of pregnant women are in favor of giving birth by TBAs. Mayhew et al. (2008) confirm that utilization of SBA is much higher in the southeast including capital Kabul (Mayhew et al., 2008). Also, in addition to geographical variation, a wide provincial variation of RH services utilization has been reported (CSO, MoPH, 2015).

As already discussed, residency – as a cause as well the result - is confounded with several other factors which should be considered. Generally, almost 74% of Afghan population are living in rural areas (CSO, 2015) which, based on the evidenc can affect the utilization of RH services negatively.

3.3.2.2 Mobility (Distance)

Mobility relates to distance, which is one of the main variables in describing physical access to the health services. A study in a rural setting in Bangladesh suggests that geographical distance is one of the main determinants of utilization of health services (Chakraborty N et al., 2003). Another study in Yemen revealed that distance determines the level of vaccination coverage after adjusting for socioeconomic status (Al-Taiar et al., 2010). Whereas, Chakraborty N et al. (2003) found no relation of distance and use of services for complicated cases which confirms that perceived need for health services undermines distance barriers.

Based on a KAP study in 6 provinces of Afghanistan, likewise as in Yemen and Bangladesh, long distance of HFs was reported as the main reason for using Traditional Birth Attendance (TBA) (Singh et al., 2012). In addition to the long distance, Niamh Nic et al. (2014) argue that difficulty and danger during the journey to reach HFs are also other factors in accessing the health services (Carthaigh et al., 2014; Howard et al., 2014). Similarly, Afghanistan Mortality Survey (AMS) 2010 reported long distance and transportation problem as the main factors in not using ANC services in the rural setting. Based on a small scale qualitative survey in Bamyan province, respondents reported “far distance” when they were questioned for the reason behind not giving birth in HFs (Howard et al., 2014).

“Half of the work of the clinic involves deliveries. When you ask people ‘why don’t you go to the clinic?’ they say it’s too far”. (BPHS provider-level 2)

Moreover, based on a recent comprehensive systematic assessment undertaken by Akseer et al. (2016), distance is known to be one of the main drivers of SBA coverage in the country. Long distance is a proxy measure to assess the level of maldistribution of BPHS HFs. Although, WHO defined one-hour walking distance as the minimum standard to reach

primary health care, Afghan government used 2-hour distance by any means of transportation as the measurement indicator for accessing health services which is reported as 87% (CSO, 2012).

3.3.2.3 Transportation

Another measure to describe the physical access to the health services is availability of transportation. Acerra JR. et al. (2009), emphasized that weak road networking in Afghanistan especially in winter season is a key factor to low access to the social services. Howard et al; (2014) also confirm that poor roads and lack of transportation facilities are hindering factors in both mothers and FHWs in improving the coverage of health services. Howard et al. (2014) explain that one of BPHS managers expressing his concern about a road closure in winter. He quoted the manager's statement as below:

"But during the winter, the roads are blocked…Nothing can go there except helicopters. Even helicopters cannot go there sometimes".

On the other hand, except CHC and DH, other BPHS HFs do not have ambulance services for women (BPHS); however, functionality and the level of utilization of ambulances in CHC and DHs are also very limited (MoPH, 2015).

Due to weak transportation network, inadequate transportation facilities, and closure of roads in some part of the country during cold season, health services are practically un-available for a big portion of Afghan population.

3.3.2.4 Insecurity

"A constant and growing state of insecurity and instability clearly presents a challenge to health service delivery", World Bank (2018) states.

Mobility of popultion is limited during armed conflicts and insecurity. This has consequently limited access to health services. Armed conflicts, for instance in Cambodia, caused inequalities mainly due to forced displacement and sexual and gender-based violence. Thus, it has undermined the goal of universal health coverage for reproductive and maternal health (Rivillas et al., 2016). Like Cambodia, in Afghanistan, insecurity and armed conflicts have caused almost 700,000 and 500,000 population displacement inside the country in 2016 and 2017, respectively (UN-OCHA, 2018). This has restricted the women's ability in reaching RH services. In addition to the forced displacement, insecurity due to armed conflicts has been reported as a big barrier in accessing health services. Insecurity has been also considered as a main reason in the shortage of FHWs due to a high turnover rate in conflict-affected areas. Also, insecurity has decreased working hours of staff in HFs (Howard et al., 2014; MoPH & HPRO, 2015). Despite 24-hour availability of RH services, people do not

access the services during night time and health staffs also have limited time in commuting from clinic to home and vis versa. This is also another reason effecting working hours in the HFs (MoPH & HPRO, 2015). Moreover, insecurity not only limits the availability of services but affects decision-making process of women and their family to seek or reach the services which have been discussed in the previous chapters.

In addition to what has been discussed, 40 years of war made Afghanistan still unsafe and unpredictable. In 2007, 45% of districts were inaccessible to UN missions due to insecurity (Acerra JR. et al., 2009). Closure of health facilities due to armed clashes between government and anti-governmental fighters (AGFs), targeting health care providers by AGFs, attacking the HFs, have led to a higher turnover in health care providers especially female staff. Difficulties reaching the HFs by people during conflict period have been reported as the main reasons for low level of utilization of health services (Acerra JR. et al., 2009).

Despite all the evidences on the negative effects of conflict and insecurity on provision of health services, World Bank (2018) through a policy note, which examines health services provision in Afghanistan, argues that insecurity have had very small effect in provision of RH services in Afghanistan. World Bank also explains service provision modality (contract-out mechanism) which pushes contracted NGOs to respond independently and to seek better options for provision of BPHS services in the insecure areas, as a reason of slight effect of insecurity on provision of RH services.

3.4.1 Affordability

Affordability refers to the economic ability of people to spend time and resources for health services. It also relates to the cost of the services (Levesque et al., 2013). The socio-economic status does not only determine decision-making process to seek care but also directly influences the ability of people to bear the costs which were described comprehensively in the previous chapters.

In this section, direct and indirect costs are going to be discussed. But health insurance which is in the original framework is not going to be discussed as it is not applicable in the context of Afghanistan.

3.4.1.1 Direct, indirect and opportunity costs

Direct cost refers to cost of the health services which determine the level of access to health services and their level of utilization. In Afghanistan, although, based on MoPH's policy, the health services are free for all the Afghan, Cockcroft et al, 2011 report that the BPHS health services are not accessible without a fee. However, this finding cannot be generalized due to scale of the study which was limited to only two geographical areas (Cockcroft et al., 2011). For instance, almost half of clients of BPHS HFs claimed paying for medicine and for diagnostic services inside and outside of the HFs. In addition to direct costs, indirect cost is another discouraging factor for the poor which pushes them to prefer TBA rather than SBA. For instance, based on a KAP study in 6 provinces of Afghanistan, L. P. Singh et al. (2012) revealed that informal payment after successful delivery in a HF as a gift (Nazrana) is a barrier in the use of SBA. Based on a small-scale survey in one province of Afghanistan, Howard et al, (2014) categorized the out of pocket expenditure as a barrier in the use of BPHS services. Indirect costs also refer to transportation expenses which can be doubled if a woman is accompanied by a family member (mahram). In addition, opportunity costs which refer to travel time and waiting time can cause loss of productivity and leads to loss of income (Gabrysch& Campbell, 2009; Levesque et al., 2013; Thaddeus & Maine, 1994).

3.4.2 Ability to Pay

Ability to pay for services is determined by level of income, assets and social capitals of a population. Therefore, wealth index is a common measure to describe people's ability to pay for the health services. In Ethiopia, Birmeta et al. (2013) reported increased income level associated with increased utilization of ANC services.

In Afghanistan, conducting an equity analysis in 2016, Nadia A, et al. confirm that coverage of ANC4 and SBA is much higher in wealthiest quintile than the poorest, ranging from 15% to more than 80% (Nadia A,

et al., 2016). Likewise, to Nadia's findings, MoPH & CSO (2015) confirm the former findings not only for ANC4 and SBA but also for contraceptive use. (Figure 5) Mayhew et al. (2008) reveal that SBA is 6 times higher in the wealthiest quintile compared to the poorest one in Afghanistan. But the other factors contributing to this higher access is not elaborated in the documents.

Moreover, the wealth status varies significantly between urban and rural population. For instance, Afghanistan DHS (2015) estimates more than seventy percent of the urban population is placed in the wealthiest quintile compared to 3% of rural population.

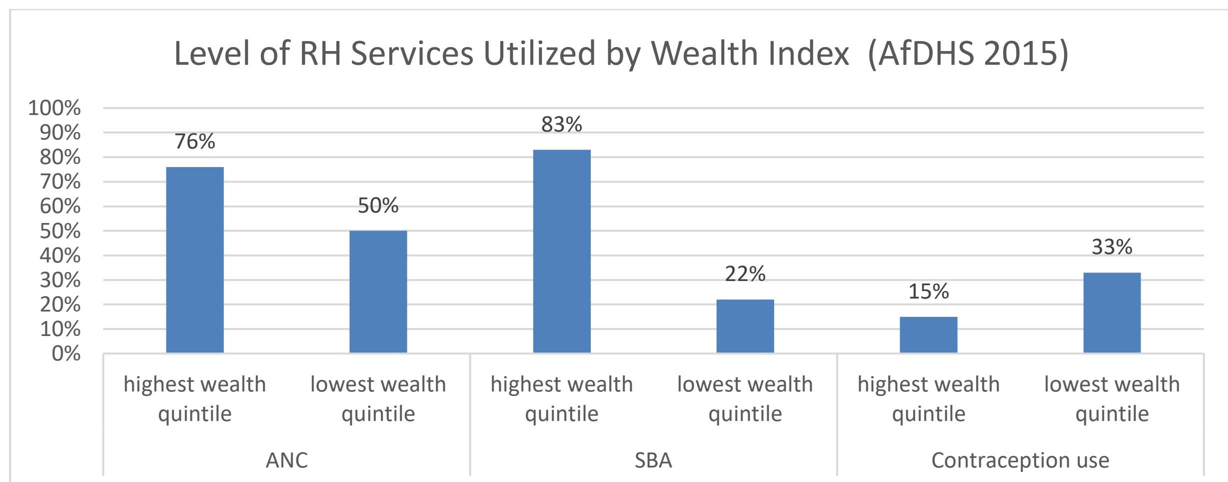

Figure 5: Level of ANC, SBA, and Contraceptive use by wealth index AfDHS 2015

Employment condition can determine wealth status of individual. To measure income level and wealth status, particularly in LMICs, the women employment rate is a good indicator (Chakraborty N et al., 2003). In Afghanistan, the level of education of women is strongly associated with their increased level of employment rate (CSO & MoPH, 2015). In addition, the employment rate for ever-married women age 15-49 is twelve percent. On the other hand, women marital status, education level, and residency are associated with women's employment status which has been discussed in detail in the previous sections (CSO & MoPH, 2015).

3.5.1 Appropriateness

Appropriateness relates to the level of agreement between health services and health needs (Levesque et al., 2013). It's discussed with its factors in the upcoming paragraphs.

5.3.1.1 Technical and Interpersonal Quality

Technical quality refers to actual quality of the services itself, whereas interpersonal quality refers to health staff's behavior and attitude while dealing with clients.

In article published in Lancet series 2016, it is emphasized that provision of women-centered maternal healthcare universally is the right of women. Jacobs B, et al. (2011) argue that proper resources including competent staff, quality drug, and equipment are the key resources for the provision of quality RH services (Jacobs Bart et al., 2011). In Afghanistan, the quality of RH services is evaluated through different assessments. For instance, Niamh Nic et al. 2014 report that four-fifths of people do not use nearby BPHS HFs during recent episode of illness due to a fact that they perceived the health services is inadequate. Moreover, they have listed long waiting times, unavailability or low quality of medicines, and finally lack of qualified staff as the hindering factors to use BPHS health services (Carthaigh et al., 2014). MoPH (2015) also reports a very poor availability of essential pharmaceutical in the HFs. The report indicates that one-third of HFs faced stock out for at least one essential medicine in the last 3 month before the assessment and 6% have had expired medicine in their pharmacy stock.

In Afghanistan, it is expected that RH services to be provided mainly by female staff; therefore, provision of quality of RH services can be affected by the level of female staff's motivation. Social and economic factors are among the factors that can influence staff's motivation (MoPH & JHPIEGO, 2017). To measures the level of RH services, quality and the knowledge of pregnant about the signs of pregnancy complication can be used. Two fifth of pregnant women attending ANC services did not mention vaginal bleeding as a danger sign (CSO & MoPH, 2015). Knowledge about danger signs can increase perceived need for RH services; while, it is a proxy measure to assess the quality of ANC services which has been described in the first section of this chapter.

3.5.2 Ability to Engage

Perceived quality of services is an important factor for making the decision whether to use the services (Germain et al, 2015). There are some studies confirm achieving RH quality standard as an encouraging factor to utilize the services while poor RH quality services has negative effect on the use of the services.

In Afghanistan, there is limited evidence regarding the association of quality with the utilization of RH services. However, several studies have recently examined the level of perceived quality of RH services. Recent KAP study in 6 provinces with different ethnocultural characteristics revealed that inappropriate behavior of health staff with their clients is a hindering factor in utilization of available services (Singh et al., 2012). Also, Kyilleh et al. (2018) report attitude of service-providers as one of the determinant of going for RH services.

Chapter Four: Lessons Learned from Other Countries

In this chapter, some experiences from other LMICs regarding RH services are going to be presented and discussed.

4.1 Financing

Financing is an area that can simultaneously affect both access and utilization of RH services. This modality is generally divided into two parts. The supply side and the demand side. Both of which are going to be elaborated in the upcoming sections.

4.1.1 Demand Side Financing (DSF):

Primarily Indian government funded a project which offered a conditional cash transfer for safe motherhood called Janani Suraksha Yojana (JSY) scheme. Through JSY, a cheque was provided to the mother if she gives birth in a HF. Assessment's results show that JSY contributed to an increased utilization of SBA, and partial improvement of ANC and PNC coverage and a slight improvement in financial risk-protection. While JSY did not reduce the out of pocket payment expenses (OOPE), only 25% of delivery cost reimbursed after giving birth in the HFs. Therefore, JSY had no effect on reduction of OOPE. The incentive was also failed to prevent irrational practices of prescription, OOPE on medicine and informal payment. Moreover, it has failed to increase awareness of people on maternal healthcare needs. Gopalan (2012) recommended introduction of an integrated maternal healthcare package with more focus on different aspects of the healthcare system includes both generating the demand and strengthening the supply side.

Like the survey in India, another DSF scheme was implemented in Nepal named as Safe Delivery Incentive Programme (SDIP). By introduction of SDIP, women lived in the least developed districts who gave birth in the government's HFs received cash. In addition, Health Care Workers (HCWs) were entitled to receive an incentive. After the implementation of SDIP, the results showed that SDIP positively contributed to utilization of SBA. T. Powell-Jackson and K. Hanson (2012) concluded that financial incentive is effective to encourage women to give birth in HFs if amount of incentive and cost of the services are consistent and if the quality of services meet clients' expectations on the quality of services.

Another financial intervention was introduced in Kenya. The purpose of the intervention was to increase utilization of RH services in Nairobi through provision of a voucher to women. After implementation of the scheme a significant rise of SBA and ANC coverage was observed. However, the positive effects were mostly significant for women in their first parity and

for the least poor families who were able to purchase the voucher. Bellows B, et al. 2012 concluded that to make program more effective, the poorest should be targeted appropriately (B Bellows et al., 2012).

Likewise, Kenya's voucher scheme, another scheme was introduced in Pakistan in Jhang district. The aim of this scheme was to increase access to RH services including SBA, ANC, PNC, and family planning. The programme had several components and activities; such as, social marketing for purchasing voucher by people, provision of free abovementioned services for those who have a voucher, provision of transportation vouchers, and finally provision of social support by outreach workers via home visits. The results were consistent with Kenya's experiment, except for family planning services for the poor. Agha (2011) explained cultural issues and no provision of training for social workers about the importance of family planning as the possible factors for the failure. He concluded that the DSF's interventions can reduce inequality of RH services, and at the same time, he recommended the payment of HCWs to be linked with quality of the services (Agha, 2011).

Similar project was implemented in Cambodia which introduced another voucher system. The voucher covered round transportation cost, referral costs for services and free ANC, SBA, and PNC. The initiative also targeted supply side by contracting the mentioned services is called Performance Based Contracting (PBC). The results showed an increase level of ANC, SBA, and relatively PNC services (V. De Brouwere et al., 2010).

4.1.2 Supply Side Financing (SSF):

A Performance Based Financing (PBF) scheme was implemented in Rwanda. Via the scheme, after adjustment for a quality composite score, on number of services units HCWs were paid. During implementation of PBF between years 2006 and 2008, the coverage of SBA increased to 78%. In addition to an increased services' coverage, BPF also brought some improvement in the quality assurance process, cohesive supervision, and more clarification on the roles and responsibilities of each partners which may the factors contributed for the improvement (V. De Brouwere et al., 2010).
In Philippine, a national Safe Motherhood Programme, funded by World Bank, was designed. The project aimed to improve availability and quality of essential health services, strengthen governance, and improve human resource development through formation of village based women health team. The modality of the project was based on two financing modalities - RBF and social health insurance. Thus, synergetic positive effects of investment, either on the technical or on the financial aspects of health system functions were observed. Therefore, the level of SBA was increased. Overall maternal health status in the targeted area improved (Dale Huntington et al., 2012).
Moreover, incentivizing HCWs are one of the innovative approaches proven to be effective for improvement of RH services' coverage; Hussein J et al.

(2009) reviewed some interventions in three countries. In Afghanistan, CHWs were incentivized when referring pregnant women to give birth in a HF. Whereas, in Pakistan, FHWs in rural areas were incentivized through provision of financial support and provision of on the job training. And in Tamil Nadu, India, working in remote location was mandatory requirement to apply for a postgraduate program. Thus, all three interventions reported to be effective to increase availability and use of RH services specifically SBA and EMoC (Hussein J et al., 2009).

Furthermore, DR of Congo, PBF was implemented by introducing two arms districts, one intervention district in which health managers were autonomous to manage service delivery and another control district which use a traditional health service provision. So, a set of predefined services with unit costs were contracted with an autonomous HFs' manager so he/she was paid based on number of services they provided. At the same time, the managers were authorized to utilize the revenues for renovation of clinic, purchase equipment and material and to improve the quality of the services. In addition, health managers were free to discuss the services' fees with community and adjust it accordingly. Results showed that PBF in DRC improved affordability of the services and increased quality and efficiency of the services. Author concluded that PBF is also beneficial in challenging environments and contexts (R Soeters, PB Peerenboom., 2011).

4.2 Group Learning and Community Participation

Audrey P et al. (2013) undertook a systematic review and meta-analysis of interventions implemented in LMICs to measure effects of women's participatory learning and acting in groups in improving maternal health. Findings show that group learning led to improvement of maternal and neonatal health. For instance, utilization of SBA and ANC increases as much as coverage of women's group increases.

Ministry of Health and Medical education of Iran introduced a model of group prenatal care in which HCWs facilitated the groups' discussion on per and postnatal issues and encouraged group's members for self-care activities to track changes associated with pregnancy by pregnant women themselves. Thus, the increased women's satisfaction and feeling confident, more empowerment, more decision makings through knowledge and information sharing and through better relationship with HCWs were noted. The authors conclude that social support during pregnancy not only improves satisfaction level of the clients for ANC but also improves utilization of ANC (Jafari et al. 2010).

Aiming to mobilize community to take control of maternal and child health, Malawian Ministry of Health and its partners started a project called MaiMawani in 2003. Community mobilization was the central focus of the

project; thus, a four-step process was introduced. Firstly, women groups formed; then the groups identified the problems, the root cause, and the strategies to overcome the problems. Later they implemented the strategies, and finally they evaluated the implementation. Addressing and acting the health concern, MaiMawani emphasized on participatory approach to build the capacity of the individuals and establish a community network as an asset of community empowerment to social and political actions. However, the results of the project were not presented in the paper (Rosato et al. 2010).

4.3 Maternity Waiting Home

Maternity Waiting Homes (MWHs) are housing facilities primarily aimed to reduce maternal and parental deaths by promoting SBA and emergency obstetric cares mostly in remote and rural settings (WHO, 1996); MWHs are expected to be utilized mostly by the pregnant before giving birth in a hospital or a HF.

Several countries implemented MWH projects and provided some insights about their usefulness. For instance; Wild K, et al. (2012) studied MWHs in Timor-Leste, the results show that the pregnant living closer to MWHs are more likely to utilize the facility which is consistent with Timor- Leste's DHS (2010) reported distance and transportation as the two top hindering factors in using health services. Authors concluded that MWHs in Timor-Leste did not bring HFs closer to the clients.

Aiming to promote SBA, and overcome distance barriers, MWHs project was implemented in Nicaragua. During the implementation, level of clients' satisfaction increased significantly; however, low level of community awareness on availability of the MWHs, financial sustainability, which may be addressed by provision of regular support by government and complementing by communities, and strengthening the local stakeholders; were reported as the bottle neck in effective use of MWHs (Garcia, Cortez., 2011).

In Lao PDR, another MWH project was implemented to overcome potential barriers in accessing SBA services. The results showed that women perceived the MWHs safe and free; thus, they were willing to use the MWH (silk homes) for SBA. Also, results showed that silk homes (MWHs) partially succeeded to overcome financial and access barriers, yet traditional and cultural barriers still existed. For instance; altering traditional giving birth position, giving birth alone without presence of family member, no 'smoking' the baby and the mother after birth, etc. were the traditional issues hindering the use of SBA in WMHs (Eckermann & Deodato, 2008).

Chapter Five: Discussion, Conclusion and Recommendations

5.1 Discussion

In this chapter, usefulness of the framework, findings and some examples from other countries - which may be feasible in the context of Afghanistan - are going to be discussed. First, the framework used to structure formation of the findings was found to be very useful. The framework is comprehensive enough to address different steps in initiating decision making toward actual receipt of RH services. It also covers both aspects of the clients and the responsiveness of the healthcare system. In addition, based on the model, gender is a standalone topic, but it was found a cross-cutting issue which needs to be part of discussion in different topics and different dimensions. Some limitations were there which was due to research methodology or due to the scale of studies. Due to the limitations, the findings cannot be generalized. For instance, some of the research used as evidence for this review were facility-based where the respondents were the clients which may have resulted to more access to the HFs.

5.1.1 Approachability

In Afghanistan, inequitable access to outreach interventions like provision of RH messages through media and healthcare system itself determines the level of knowledge on availability, importance and perceived needs of RH services among individuals and households. Past experiences are also another important factor to encourage seeking RH services. Unpleasant experiences like unavailability of FHW, low privacy and the low quality of RH services can indirectly affect decision making process in seeking RH services. As a result, individuals should be targeted in increasing their awareness on availability, needs and importance of RH services; and on the other hand, availability and quality of culturally accepted RH services to be assured through improving privacy of RH service. Poor knowledge and awareness on availability of RH services is prevalent in rural settings and in small cities but it is not an issue in Kabul capital and other big cities. This matter can be addressed by expanding coverage of RH messages through different available channels including media, well-organized community and facility health education sessions. Taking into consideration the lessons from other countries, the group learning via community mobilization seems to be beneficial in the context. It does not only increase awareness on perceived needs of RH services but it also increases the knowledge and awareness of clients on availability and importance of RH services. The people under-target for the sessions are pregnant women who are poorest, less educated or illiterate and living in the rural areas. Furthermore, it creates sense of ownership of healthcare system specifically on RH services among the communities. It may create some resistance from communities

considering it as imposing western culture. Therefore, it may take time to first deliver the message properly to the communities on objectives of the project to create demand also to own the project by the communities themselves. Through the use of media, it's easier to deliver messages promoting use of RH services to increase RH knowledge and awareness. However, accessibility to media especially in rural area and among poor households is still a challenge to be considered during planning phase.
Surprisingly, the results from this research show no or a negative association of availability of CHW with the utilization of RH services. Considering the fact that a huge number of CHWs are readily available and tremendous amount of monetary and technical resources were invested on them. Thus, it is imperative that MoPH should conduct a qualitative study to identify the underlying causes of these negative impacts and to introduce new feasible strategies to target them.

5.1.2 Acceptability

Acceptance level of RH services is influenced by individuals' characteristics and communities' traditional beliefs and cultural norms and also from quality of BPHS services delivery.

Considering the individual factors, women autonomy is linked to their education and their employment status which results in affecting their ability to make decisions on their own choice and in their ability to use modern RH services without considering any cultural barriers. The more the women gets educated, the more it increases the chances of their employment and makes them more autonomous where they can decide on their own choice and making them less influenced by traditional beliefs. In addition, education associated with higher level of RH knowledge puts the pregnant women in the position of influencing the families too to use RH services.

Expectedly, the results from this paper also show that unavailability of FHWs and low privacy discourages the use of RH services. Insecurity, family disagreement – a female working in a HF or working outside the house is still a taboo in some areas of the country - lack of proper housing, lack of basic social services in the rural areas result in high turnover rate of FHWs. The unavailability of FHWs in BPHS HFs is still a big challenge to be considered. Thus, modified versions of Malawi's practice may improve the acceptance level of the services. It mobilizes the communities to take control of their RH needs and to be involved in the planning process of healthcare provision. It requires continuous coordination to strengthen partnership between MoPH and other line ministries such as ministry of rural rehabilitation, ministry of religious affairs and others which is a time-consuming process and may conflict with the priorities the ministries. Lack of separate room for women, no specific waiting room for women, low auditory and visionary privacy for RH services are among those factors

which can be addressed by mobilizing and involving people in BPHS planning at both community and health facility levels. It can be done through BPHS implementing partners as they are autonomous on operations in their targeted provinces and can handle it easily if MoPH clearly marks it as a critical bottleneck.

However, age is found to be another impacting factor in the use of RH services in the country. The evidence is not enough to make educated prompt decision; thus, there is a need to do more research to find in which contexts and which age groups the RH services have been negatively impacted.

Another factor is gender contributing to the level of use of RH services both on the supply and on the demand sides. On supply side, performance of FHWs for provision of RH services is affected. On the demand side, sex and number of children in family determines the utilization of RH services. More girls in a family discourages the use of FP services. Consequently, no study suggests the role of polygamy in use of RH services. It is believed that the polygamous husbands care more to favorable wife which spreads inequality and competition in between the wives resulting in less access to RH services. Moreover, early marriages, more prevalent in the rural and among less educated families, results in limited mobility and ability of the young women to leave home. It is worth to mention that in urban settings specifically in capital and other big cities like Herat and Mazar, most of discussed barriers are not prevalent.

5.1.3 Availability

Inadequate resources including human resources, drug, supply and distribution of HFs are the main barriers in the healthcare system of LMICs (Lunze et al., 2015). In Afghanistan, inequitable distribution of BPHS and limited working hours of BPHS HFs, despite the 24-hours service-provision-policy, has resulted in limited access to 24-hours RH services. The limitation of working hours is due to limited movement of staff and clients during the day due to insecurity, poor transportation infrastructures and no motivating factors for HCWs. In addition, lack of a proper mechanism for midwife duty at night also affects the level of availability of BPHS services. Considering experiences from other countries, as incentivizing FHWs, can improve availability of FHWs in the provision of 24- hours service delivery. The incentive can be financial, career development or capacity building. Likewise, incentivizing FHWs to work in the remote areas in Pakistan and making post graduate trainings compulsory in Tamel Nadu, India, have been successful experiences, which has impacted the utilization of RH services, can be taken into consideration. But it has cost implication therefore, it requires strong justification and advocacy with MoPH and donor communities to mobilize resources for this kind of initiatives taking into consideration the sustainability aspect as well.

Moreover, community midwifery is a promising approach and it can assure availability of FHWs in a more sustainable manner. Technically, it looks easy to be expanded as it is part of new MoPH's strategy. But financially, the availability of monetary resources is a bottleneck requiring MoPH's strong advocacy to the donor communities.

Women are the most disadvantaged group in the country because of less access to education, lower access to media, lower level of employment rate especially in rural settings and more vulnerable for pregnancy complications due to weak access to RH services. Distance does not affect the utilization of emergency maternal services which clearly confirms that perceived need can overcome most of the other access barriers. Still, our findings show that distance and transportation are two main barriers of access to RH services. These two can be addressed by establishment of MWHs in rural and remote areas; However, based on Nicaragua's and Lao PDR's lesson learns, the communities to be informed through different channels about the availability of MWHs and to take into consideration the Socio-cultural factors for offered MWHs' services. To identify the location of MWHs, communities has to play a big role in planning stage which needs MoPH's commitment to build the capacity of the communities in this regards thus the timeline for such kind of interventions are long term

5.1.4 Affordability

Despite free health services in Afghanistan, people pay for medicine and tests. Indirect cost is another discouraging factor for the poor which pushes them to prefer TBA rather than SBA, informal payment after successful delivery in a HF as a gift (Nazrana) and transportation expenses (is doubled if a woman to be accompanied by a family member due to cultural norms). Some services are also unaffordable because they need several follow-up visits like ANC. In addition, travel time and waiting time especially when a male who accompany the pregnant can cause loss of productive activities and as a result, it leads to the loss of income. On the other hand, income, asset and social capital determine economic status of the households which influences the level of ability of people to bear different costs of the services, in case if the free health services policy is completely applied, still these indirect costs negatively affects the decision-making process to initiate in seeking RH services. At the community level, residency is a key factor which determines the level of people's affordability of the services. As the wealth status is significantly varies in urban and rural settings, 70% and 3% respectively. Also, employment, which is correlated with education level, determines economic status. While free-services policy to be enforced, financial scheme also to be considered carefully in designing and introducing different voucher schemes and conditional cash transfer or in establishment of MWHs to enable communities reach available services with an affordable cost. All the proposed interventions have cost implication thus MoPH to be convinced, also the sustainability of the proposed interventions

to be addressed during advocacy process. In addition, as it is not part of MoPH's strategy thus It is difficult to be implemented at large scale. But it can be started as a pilot phase then based on the results it can be expanded.

5.1.5 Appropriateness

Technical quality refers to the actual quality of the services themselves like having proper resources which includes competent staff, quality drug and equipment. These resources can affect the usage of RH services. On the other hand, perceived quality of services either affects health seeking behavior or decision making process. It also determines the level of availability of RH services. In addition, long waiting time, poor knowledge of danger signs of pregnancy, due to poor quality of RH (ANC), are other reasons for the perception due to weak outreach services and weak media messages on RH awareness. Furthermore, inappropriate behavior and attitude of health staff with clients which is caused by de motivating factors like poor living condition in rural setting and load of work. This can be addressed by incentivizing the services. To improve the technical quality and perceived quality of RH services, the MoPH should involve the communities in the planning process of BPHS HFs, meanwhile motivate HCWs by introducing performance based financing scheme which have cost implication as discussed earlier.

5.2 Conclusion

In Afghanistan based on the findings of this review, it is obvious that inequity is a big issue in front of access to and use of RH services; out of which socioeconomic characteristics of individuals and households such as education, households' economy, and residency are the main hindering factors. Weak RH awareness specifically on perceived need and knowledge on importance and availability of RH services are other factors. Furthermore, at the community level, cultural norms are the driver of use of the services. While, at the healthcare delivery system, the location and distance of BPHS HFs, quality of RH services including privacy and 24-hours availability of technical staff are other factors determining the access and use of RH services. Therefore, to address the challenges, a national-wide strategy targeting most disadvantaged people including the poor, the less educated ones and the rural population should be the focus. Also, Interventions for improving the situation is required to target each level including individual, households and communities and focus on the key factors at that level to optimize the effects of the intended intervention. So, the other countries lessons should also be part of these efforts. To assure 24-hours RH services, deployment of community midwives should be the main strategy. Meanwhile, performance based financing is another approach which resources to be allocated. Then awareness raising to be part of the strategy. Build the capacity of communities to be able taking

part at planning phase of BPHS is another area to be focused. These priorities to target most disadvantaged population including hard to reach, poor communities. MoPH also to establish MWHs in remote areas to ensure access to RH services. Finally, still there are limited country-specific evidence regarding some factors affecting RH services coverage which needs to be explored and researched more.

5.3 Recommendations

1. To improve RH awareness and knowledge, outreach activities via BPHS to be reinforced. In addition, mass media campaign should be a part of awareness rising specifically in the rural settings.
2. To improve the privacy of the RH services, it is imperative that MoPH should relocate the maternity ward where it is culturally acceptable.
3. To improve availability of FHWs, first the community midwives to be trained and deployed in rural areas. In the meantime, provision of RH services to be incentivized and working in the rural to be mandatory after graduation.
4. To overcome physical and financial barriers in rural area, MoPH to introduce modified versions of voucher schemes or conditional cash transfer for using RH services in the different contexts. While free-services policy to be reinforced.
5. MoPH should establish culturally accepted MWHs to make RH services closer to the communities; while government should widely disseminate information on the availability of MWHs.
6. To improve acceptability of RH services, MoPH should mobilize the communities to take part in the planning process of BPHS services thus take control of their communities' RH needs.
7. To identify underlying cause of weak performance of CHWs, a qualitative study to be conducted.

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Annex 1: Searching Words

Sexual and reproductive health services, Afghanistan, and Low middle-income countries, LMICs, utilization, coverage, access, maternal health, consequence, cause, maternal mortality, ANC, SBA, Impact, Reproductive Health, cause, social, cultural, economic, education, insecurity, gender,