

FATORS INFLUENCING THE UPTAKE OF FAMILY PLANNING IN YEMEN DURING CONFLICT

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A thesis submitted in partial fulfilment of the requirement for the degree of
Master of Public Health

By

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Yemen

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Signature:

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LIST OF ABBREVIATIONS

CBPNs	Community Based Protection Networks
CBRH	Community-Based Reproductive Health
EKN	Embassy of the Kingdom of the Netherlands
FP	Family Planning
FSWs	Female Sex Workers
GDP	Gross Domestic Product
IAWG	Inter-Agency Working Group
IUD	Intra Uterine Device
KfW	Kreditanstalt für Wiederaufbau
MENA	Middle East and North Africa
MISP	Minimal Initial Service Package
MSIY	Marie Stopes International Yemen
NGO	Non-Governmental Organization
PAPFAM	Pan Arab Project for Family Health
RAIS	Reproductive Health Access Information and Services in Emergencies
RH	Reproductive Health
SEM	Social ecological model
STI	Sexually transmitted infections
TFR	Total Fertility Rate
THE	Total Health Expenditure
UHC	Universal Health Coverage
UNCHR	United Nations High Commissioner for Refugees
UNFPA	United Nations Population Fund

UNSAID	United States Agency for International Development
USD	United States Dollar
WHO	World Health Organization
YMoPHP	Yemen Ministry of public health and population
YWU	Yemeni Women Union

ABSTRACT

Family planning (FP) is one of the six pillars for safe motherhood and is considered an effective method in preventing unintended pregnancy. Yemeni demographic and health survey reports showed an improvement in the reproductive health indicators over the past 16 years. However, Yemen has been engulfed in violent armed sectarian conflict since 2015, which resulted in a humanitarian crisis and affected the health care delivery in the country.

Therefore, this literature review is conducted using a modified socio-ecological model to explore the influence of the current conflict on the uptake and continuation of FP. Then to review some of the interventions that can improve the uptake of FP.

The study found that the factors used to influence the uptake of FP such as (early marriage, poverty, preference for large families, illiteracy, social and gender norms, family/husband pressure and weak health system) have worsened during the conflict. Added to that, breaking of networks, inadequate funds and contraceptive supply chain dysfunction due to insecurity violence and limited access to human resources have all made the uptake of family planning almost impossible.

The current FP uptake is probably very low. And in order to increase the FP uptake, multiple interventions are needed. As a result, the study recommends: a collaboration between local/international NGOs together with the factional FP providers is essential in the meantime. Franchising / outsourcing, mobile phone-based counselling, value clarification, community engagement, and outreach, may be implemented together in order to increase the FP uptake in Yemen.

Word count 12,534

Key words Family planning, Conflict, Yemen.

INTRODUCTION

During my work in Al-Thawrah Teaching Hospital, in Taiz city, in the gynaecology and obstetrics department, I observed many cases of unwanted pregnancies. Most of the women who deliver repeatedly say "I did not want this pregnancy from the beginning". An 18 year old gravida 2 para 1 lady also told me "this is the second pregnancy I tried to avoid". Unfortunately abortion is neither legal nor socially tolerated.

At that time I asked myself what prevented those women, who wanted to limit births, from using family planning? I realized that there was no single answer to that question; therefore, I needed both the time and additional research skills to address that issue.

My concerns even extended due to the start of war in Yemen. Prior to the war in Yemen, according to the DHS 2013, the contraceptive prevalence rate was 34% among married women of reproductive age (15-49 years). Following the conflict I began to wonder, what is happening to women who want to use family planning; what would be the likely barriers and what could be done to help them.

The opportunity came as part of the requirement for my master degree, as I had to do a research of my choice. From the results of this study I am aiming at making recommendations to the reproductive health officials in Yemen.

CHAPTER ONE: BACKGROUND INFORMATION OF YEMEN

This chapter provides information about the background of Yemen. It includes the health system and the family planning condition.

1.1 Geography

Yemen is located in the southwest part of the Arabian Peninsula. The country occupies 555,000 km² and is bordered to the west and south by the Red sea and the Arabian Sea respectively, and to the north and east by Saudi Arabia and Oman respectively ⁽¹⁾.

1.2 Demographic characteristics

Yemen's population is 25,956,000 where 12,746,000 are females with 23% the reproductive age of 15-45 years. The annual growth rate is estimated at 3% with 41.4% of the population below 15 years and the mean age of 19 years. The average population density is 35 for 1 km², with about 66% of the population living in rural areas ^(1,2,3).

1.3 Socio-cultural characteristics

The tribe is the basic social unit that forms Yemeni society. It plays a significant role in social, economic and political life since ancient times ⁽⁴⁾.

Yemeni culture is dominated by male power. The gender inequity and discrimination in the country has an impact on the women's rights and decisions even with regard to their personal life and health. Most of them don't achieve their full economic, social, political, and cultural rights. Neither of them have freedom to access the health facility nor a decision regarding their sexual and reproductive life ⁽⁵⁾.

Many women are also exposed to different practices of violence and discrimination, such as domestic abuse, deprivation from education, early or forced marriage, limitation of movement, denial of inheritance and female genital mutilation (FGM) ⁽⁶⁾.

For example, Female genital mutilation (FGM) is practiced by the African immigrant's community in Yemen ⁽⁷⁾. However, DHS reported that 19% of women in the reproductive age underwent a form of female genital mutilation (FGM) ⁽³⁾. Studies showed it is mainly performed by small Sunni tribes in the coastal line of the red sea and the southern areas, but it is not practiced among Zaydi and Ismaili Shiites ⁽⁶⁾.

1.4 Khat sessions

Khat *Catha edulis* is a plant with tender leaves that people pluck it and tuck into the cheeks. Chewing of these leaves releases chemicals related to "amphetamines", which give the chewer a "mild high that some say is comparable to drinking strong coffee" ⁽⁸⁾. Yemeni people consider Khat as part of their heritage so that it has become a prominent feature of their daily lives. Khat sessions constitute one of the most pervasive social phenomena in Yemen, as accepted by more than (90%) of adult males, (50%) of adult women, and (10-20%) of children under age 12. They call this a social occasion (Takhzeen), when friends and family meet, and through which they deal with various items of public life, marriages, conclude deals and political opinions and different viewpoints are traded in these sessions.

However, this habit has harmful physical, social, and economic implications among abusers. Physical effects such as depression, hypertension, late night sleep, daytime sleepiness, and low birth weight if the pregnant women was a chewer. Also buying Kat on regular basis deprives the family of some essential food elements. Chewing khat for hours (4-5 hours daily) can separate the family ties and considerable hours lost to productivity and work ⁽⁸⁾.

Planting Khat also devastates the already fragile economy. Replacing fruits and coffee plants (60% of lands) by Khat changed the Yemeni economy from coffee exporters and locally fruit producers into a country that depends on the external products. 20- 30 % of the Yemeni groundwater goes to Khat irrigation and sucking, which leaves the country in dearth of water resources ⁽⁸⁾.

1.5 Religions

Most of the Yemeni population practice Islam. Additionally, a very small Jewish community lives in the northern part of Yemen ⁽⁹⁾. There are two main Islamic doctrines, the Shafii Sunni (56%) which domain the southern and coastal parts and the Zaidi Shia (42%) which domain the northern and eastern regions (see Annex I).

As a result of segregation between women and men, women are not allowed to worship in the public ⁽¹⁰⁾. Polygamy is allowed in Islam for men. However, only 6% of the married women reported that their husband married another woman ⁽³⁾.

1.6 Education

The Arabic language is the official language in the country while The English language is considered the second language ⁽¹⁾. The literacy rate is 65% for the adults while it is 86% for the youths ⁽¹¹⁾; 21% of males and 43% of females

aged 6 and older, have never attended schools. Illiteracy in rural areas is twice as big as in the national urban areas ⁽³⁾.

1.7 Economy and occupation

The country is considered one of the poorest in the Middle East and North Africa (MENA) with a Gross Domestic Product (GDP) of about 926\$ and a poverty rate of 34% ⁽¹⁾ ⁽³⁾. The economy depends mainly on fossilized oil, which accounts for 30%-40% of the GDP and agriculture which contributes 10%-15% of the GDP ⁽¹²⁾

The unemployment rate changed lately from 17.8% in 2010 to 29% in 2012 ⁽¹³⁾, with women mostly affected. Only 10% of all women in Yemen are employed; 50% in agriculture, 21% in professional, managerial, and technical positions and 13% in skilled manual jobs. Half of the employed women are paid while 42% are not paid ⁽³⁾.

1.8 Health system

1.8.1 Health care delivery structure

The health care delivery is organized in three levels: hospitals, health centres, and health units. Although there is no effective gatekeeping system in place, the units are the first point of contact for women seeking family planning services and if necessary, then initiate a referral to the next level. The health facilities cover 64% of the population the, rest are deprived of health services mainly in the remote areas where there is rugged geography. There are 18,180 private health facilities in the country and 4,207 public health facilities. About 23.1% of healthcare is delivered by the public sector and the rest is by the private sector and NGOs. Out of 4,207 public health facilities in the country, 2,584 (representing 61%) provide reproductive health services (RHS) ⁽¹⁾. 80% of all health facilities are in the rural areas ⁽¹⁴⁾.

1.8.2 Human resources for health

There are 40,947 health workers in the country where midwives, doctors and nurses form 70%. The doctor to population ratio is 1.9, with 7.3 nurses and midwives per every 10.000 population ⁽¹⁾. Only 20% of these human resources work in the rural areas, where 65% of the population resides ⁽¹⁵⁾. While 80% are working in the urban areas ⁽¹⁴⁾.

1.8.3 Health financing

Total annual expenditure on health (THE) is 57.41\$ per capita, which include both public and private. About 73% of the health care is privately financed. The out of pocket expenditure is 66.33 % while private insurance is about 1% ⁽¹⁶⁾. There is social health insurance in Yemen which covers around 50% of the Yemeni population (taking into consideration the formal sector members and family membership) (the governmental employee together with their family) ⁽¹⁷⁾.

Maternal and child health programs are free and are funded by the government together with NGOs. Family planning services are free in the public sectors and paid by out of pocket in private sectors ⁽¹⁸⁾.

1.8.4 Health policies

Health policies are formulated by the ministry of health and social welfare and then passed down to the various health offices as a governorate level followed by district levels. Family planning took a high attention in the reproductive health policy as indicated in the National Reproductive Health Strategy ⁽¹⁸⁾. In 2011, Yemen aimed in the national reproductive health policy to improve access to high quality reproductive health services as well.

1.9 Health situation

Although the health system is considered fragile, there is an improvement in the indicators of maternal mortality during the past years ⁽¹⁹⁾.

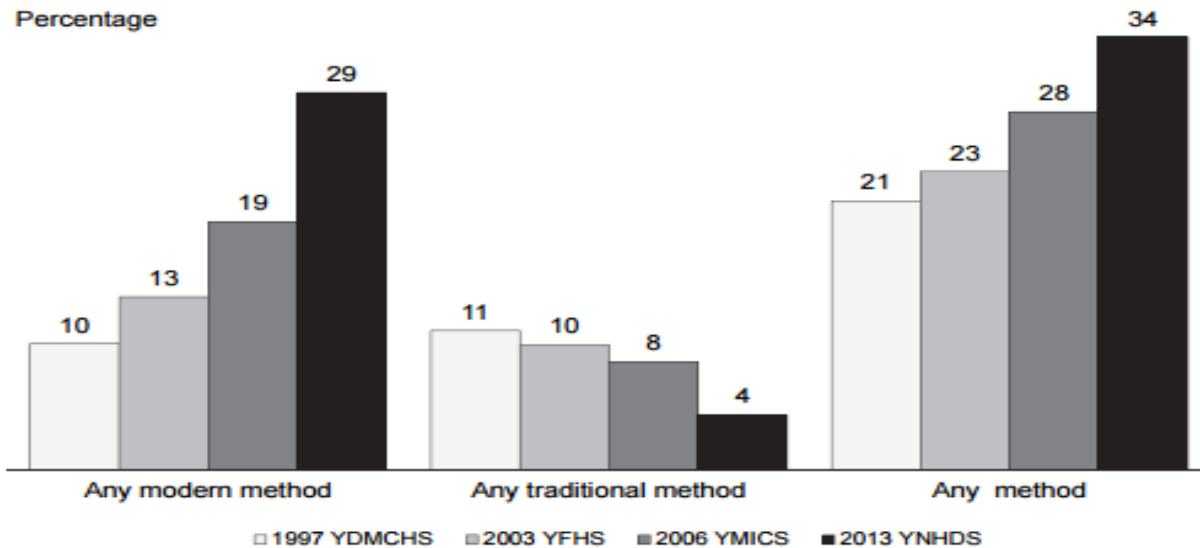
Life expectancy is 60.17 for males and 62.03 for females. The crude death rate, the infant mortality rate, and the maternal mortality ratios are 10/1000 population, 43/1000 live births and 148/100,000 live births respectively ⁽³⁾. It should, however, be noted that both IMR and MMR are based on institutionally recorded data and might actually be more due to under-reporting. A woman's lifetime risk of dying out of maternal complication is about 1 in 90 lifetimes ⁽²⁰⁾.

1.10 General family planning situation

The contraceptive prevalence rate (CPR) is (34%) and the unmet need for family planning is (29%). The demand for family planning is 62%, but about

54% of the demand are met. It is estimated that about 29% of women practice any modern FP method. Figure 1 shows a substantial increase in the CPR for modern methods (from 10% in 1997 to 29% in 2013) compared to the decreased use of traditional methods (11% in 1997 to 4% in 2013) ⁽³⁾.

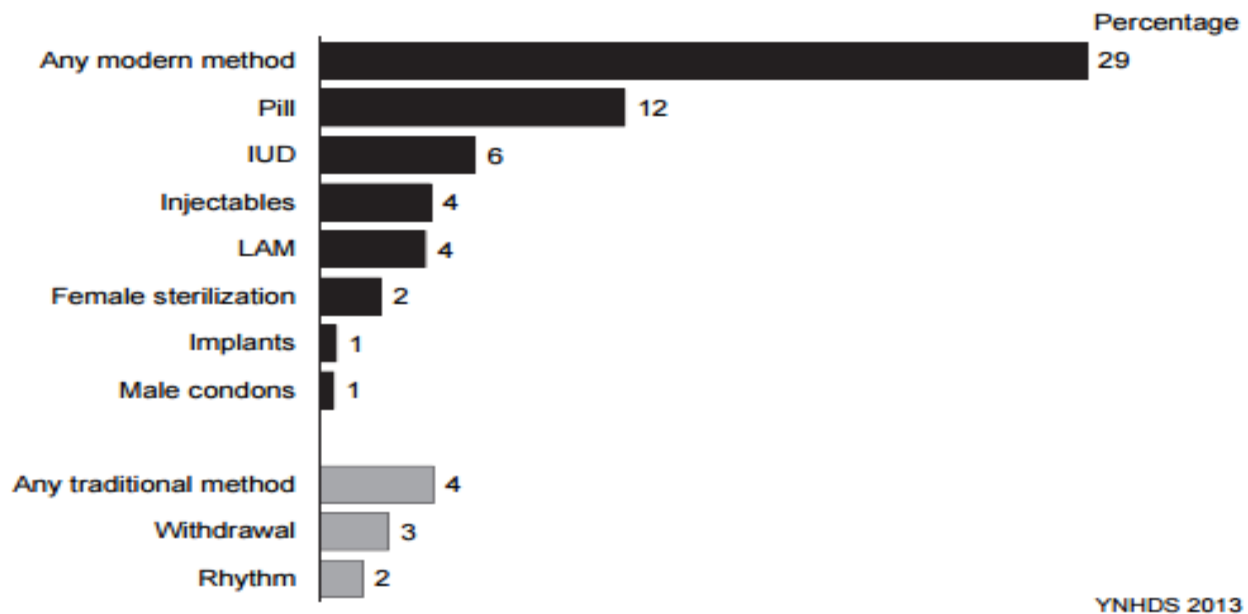
Figure 1 trends in contraceptive prevalence in Yemen among married women from 1997 to 2013



Source: MoPHP ⁽³⁾

Figure 2 shows that male condoms are the least used, which may be an indication of their unwillingness to use contraceptives. It also shows that pills represent the most common method followed by IUD.

Figure 2 percentage of married women (15-49 years) by family planning method



Source: ⁽³⁾

The general fertility rate (GFR) and the total fertility rate (TFR) rates are 146 births per 1000 women of fertile age and 4.4 births per woman. TFR has declined substantially from 6.5 births per woman in 1997 to 4.4 in 2013. Though there are no recent statistical reports about abortions, DHS 1997 reported about 30% women had abortions ⁽²¹⁾.

1.11 Political situation

Yemen is a republican/democratic/Islamic country and Islam laws are the source of all legislation ⁽¹²⁾.

There are twenty-one governorates and more than 112 Yemeni Islands which are governed by a centralized system. The president and the society representatives are being elected directly by the people through election competitions ⁽¹²⁾.

As a result of that a number of Islamic scholars and tribal leaders have held important political positions in the government. The tribes refuse to be subjected to the political orders issued from the centre even though there are members from the tribes represented in significant political positions in the government. That results in both the tribes and the centre work individually and separately in addition to an unstable political situation ⁽²²⁾.

Since 1993, the country's political landscape has been characterized by sporadic conflicts both within and outside. Conflicts erupted in 2004-2007 ⁽⁴⁾, followed by a revolution in 2011 ⁽²³⁾, and currently (2015 to date) a mix of civil war within and an international war with the Saudi coalition. This led to another internal conflict and the division of Yemen militarily into several parts conflicting with each other, as shown in the picture (Annex II).

1.12 Yemen current context

Yemen has been engulfed in violent armed sectarian conflict since 2015, with Saudi Arabia joining the conflict. Media reports show that the conflict has not only created a humanitarian crisis but has affected health care delivery in the country ⁽²⁴⁾. On a daily basis, around 113 casualties occur in addition to 8 killed or maimed children. In March 2016, alone, an estimated 6,000 people were killed ⁽²⁵⁾. It is estimated that 21.2 million people (82 % of the total population) are in need of humanitarian assistance and protection from human rights violations ⁽²⁶⁾.

There are about 12 million people living in the worst affected areas out of which 2.5 million are internally displaced. About half of the internally displaced people are in Taiz, Amran, Hajjah, Sana'a and Abyan governorates ⁽²⁶⁾. It is also estimated that up to 171,277 people have fled the conflict, settling mostly in Saudi Arabia, Djibouti and Oman (Annex III).

The Internally Displaced People (IDPs) live mostly in public buildings (mainly schools) or shelters provided by humanitarian organizations. Most of them lack food, water, and basic healthcare. Health services have also deteriorated, leaving over 14 million people with little or no access to health care. The armed conflict has left several Health facilities destroyed; the few functional facilities do not have essential medicines equipment and staff ⁽²⁵⁾. Humanitarian organizations working in the country estimate that over 522,000 pregnant women do not have access to any reproductive health services, with 15% of them being at risk of labour complications ⁽²⁷⁾. Marie Stopes also reported that their clients find it difficult to access FP services too ⁽²⁸⁾.

CHAPTER TWO: PROBLEM STATEMENT, JUSTIFICATION, OBJECTIVES, AND METHODOLOGY

This chapter discusses the problem statement, justification, objectives, research questions, and methodology of the study.

2.1 problem statement:

Globally, 830 women die every day from pregnancy and childbirth-related causes, with nearly all of them (99%) in developing countries. Over 50% of maternal deaths occur in fragile or humanitarian settings ⁽²⁹⁾. Although the global maternal mortality has decreased by nearly half (43%) since 1990, the maternal mortality ratio (MMR) in less developed countries is 239 maternal deaths per 100,000 live births compared to 12 maternal deaths per 100,000 live births in developed countries ⁽²⁹⁾.

Despite the recent gain in reduction of maternal mortality by more than half (60%) since 2003, Yemen still has a rather high MMR (148 maternal deaths/100,000 live births) ⁽³⁾. Women in Yemen have a 1 in 90 lifetime risk of dying from pregnancy or child birth ⁽²⁰⁾. Maternal mortality is linked to a low birth attendance ⁽³⁰⁾, which is less than half (45%) of pregnant women who are attended by skilled birth attendants (SBAs) during labour ⁽³⁾.

All these figures should be interpreted with caution as there are possibilities of underreporting. In light of the fragile nature of the country, as a result of the on-going conflict, indicators of MMR, skilled attendance and prevalence of family planning may also have worsened due to difficulties in accessing health services ⁽²⁷⁾. The low access to a skilled birth attendant (SBAs) has a negative implication on maternal health ⁽²⁹⁾.

MMR is also linked to low usage of contraception, which is in Yemen the lowest among the Middle Eastern countries ⁽³¹⁾. Although the contraceptive prevalence rate in the country has improved from 21% in 1997 to 34% in 2013 ⁽³⁾, it is still below the recommended level of 60% which is required to achieve the global target ⁽³²⁾. The total fertility rate (TFR) is still 4.4, which is also higher than 2-4 children where the risk of maternal mortality is the lowest ⁽³³⁾. Despite near universal knowledge of contraception (98%), only 34% use any contraceptive ⁽³⁾.

About 35% of pregnancies are unplanned, with an unmet need of 29% ⁽³⁾. Studies show that several factors influence the uptake of family planning such as access to reproductive health services, policies, and cost of family planning service. With the current fragile environment, the question is what factors currently influence the family planning uptake and continuation in Yemen.

2.2 Justification

Family planning is one of the six pillars for safe motherhood ⁽³⁴⁾ and is considered the most cost-effective method in preventing maternal mortality and unintended pregnancy. It is also effective in reducing the risk of getting sexually transmitted infections (STIs) ⁽³⁵⁾. It is particularly necessary in times of conflict when the risk of sexual violence is resulting in risk of pregnancy or high STI infection.

Since the current fragile situation has led to widespread disruptions of normal health services and information flow, it is important that this study is done to show the factors that influence the FP uptake, so that the Yemen health services and NGOs can use it to improve their interventions.

2.3 General objective

The main aim of this study is to explore the influence of the current conflict on the uptake and continuation of family planning in Yemen in order to make recommendations for the policy makers (MoPHP), health service providers, international donors and specialized relief agencies in Yemen.

2.4 Specific objectives

1. Identify the influence of the current conflict on individual factors that contribute to the uptake of family planning.
2. Describe the influence of the current conflict on community norms and social networks affecting the uptake of family planning.
3. Identify the health service delivery related factors influencing the uptake of family planning, given the current context.
4. Explore the influence of the current conflict on health policy affecting the uptake of family planning.
5. Explore strategies from other countries under conflict to make recommendations for policy makers, health service providers, international donors and specialized relief agencies in Yemen.

2.5 Methodology

2.5.1 Search Strategy

The main method of this study was a literature review of published literature. The Google search engine was used to find grey literature - reports, policy documents, books, fact sheets, guidelines, and standards - from, UNHCR, WHO, Relief, MOPHP, UNFPA websites and others.

Databases like Google scholar, PubMed and VU online Library were used in searching for scientific literature. The results were manually scanned and the relevant articles selected. References of some selected articles that were found to be relevant were also searched. Key words such as "conflict, unmet need" were used in different combinations with the name "Yemen" and the term "family planning" to retrieve relevant information. The research table (Table 1) below shows all the key words used in this study.

2.5.2 Inclusion criteria

Although the search was conducted using the English language, literature in The Arabic language that contained essential information for the study was also used. Only documents published after the year 2000 and literature that provided access to full text was included in the study.

Table 1: Search Table

#	Search words per objective: Key words for the search were “Yemen”, “conflict” and “Family Planning” in different combinations with the following terms.				
	Objective 1	Objective 2	Objective 3	Objective 4	
Scientific publications : Pubmed, Google scholar, Cochrane, Vu e-library	Age, marriage, health beliefs, knowledge, awareness, fertility preferences, perception, education, conflict	Gender, peer networks, local organization, Husband/m other, family, religion, premarital sex, media	Availability, affordability, geographical accessibility, health provider knowledge & availability, financial resource, insurance, health	Policy and strategy, conflict	
Yemeni National Official Websites: MoPHP, MoE,	Age, gender, health beliefs, knowledge, awareness, experience with contraception, perception, myths and misconception, financial support, freedom to choice.	Husband/family support, income, media, conflict	Coverage, facilities, human resource for health, contraceptive prevalence, unmet need, insurance	Policy and strategy, conflict	
Other Grey literature: Guttmacher, WHO, IAWG, UNFPA and	Age, gender, health beliefs, knowledge, awareness, experience with contraception, perception, myths and misconception, financial support, freedom to choice.	Husband/family support, income, insurance	Availability, affordability, geographical accessibility, health provider knowledge & availability, financial resource	Policy and strategy, conflict, humanitarian, refugees	

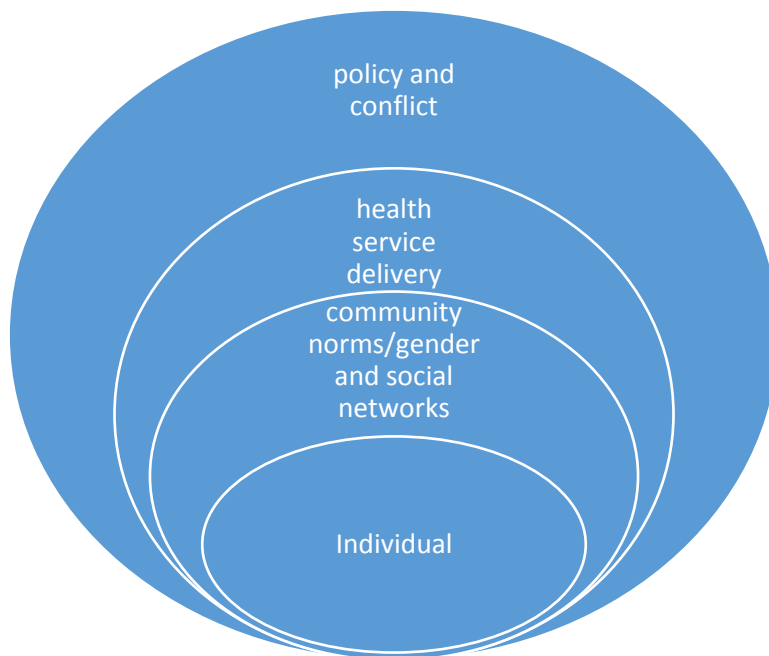
2.5.3 Conceptual framework

A number of frameworks were explored in order to guide the study. The Andersen Framework and the Thaddeus & Maine model were reviewed. Although the Andersen model's emphasizes on predisposing factors, enabling factors and need factors as key in influencing the decision to use services, it failed to explain the role of social and cultural factors that are key in women decision-making ⁽³⁶⁾. On the other hand, the Thaddeus and Maine 3 delays model were found to be suitable in explaining important delays (in deciding to seek care, in reaching the hospital and in receiving care at the hospital) that often contribute to maternal complications and deaths ⁽³⁷⁾. Therefore it was considered unsuitable for this study as it could not be used to explain what influences the family planning decision, which is neither life-threatening nor an emergency.

Finally, a modified version of the social ecological model (SEM) was used in this study (see Figure 3 below). The SEM explains how socio-economic and political environment interact with community networks and social structures, together with other individual factors to influence health behaviour and choices ⁽³⁸⁾. As the influence of the political environment on FP is the core of this study, this model is appropriate to answer this particular question.

The wider social determinants of health behaviour have been modified to reflect a conflict environment. This is necessary because of the ongoing conflict situation of the country which may play an important role in influencing the community networks, the service delivery system, and the individual's choices.

Figure 3 Modified version of the Social Ecological Model (SEM)



Source: ⁽³⁸⁾.

As gender is a crosscutting issue, in this study it is practical to combine it with the community norm and social network part. We can answer how the political situation (conflict), which is the outer level can influence the other determinants (including gender).

The model has been used in similar study by Elizabeth Mason, in Haiti ⁽³⁹⁾.

2.5.4 Limitation of the study

The first limitation of the study is the fact that the Arabic literature may not be translated in according to the author's understanding of the text. This may have led to biases as the exact English word and context of Arabic terms may vary. Secondly, this study relied mostly on online data, which could have resulted in an information bias. Thirdly, family planning issues are considered sensitive in Yemen; as such, data obtained may have been underreported. Finally, due to the existing conflict, up-to-date information is either hard to reach or at best incomplete.

CHAPTER THREE: FACTORS THAT INFLUENCE THE UPTAKE OF FAMILY PLANNING IN YEMEN BEFORE CRISIS.

This chapter explores the factors that influence the uptake of family planning in Yemen before the crisis.

3.1 Individual characteristics factors:

3.1.1 Age

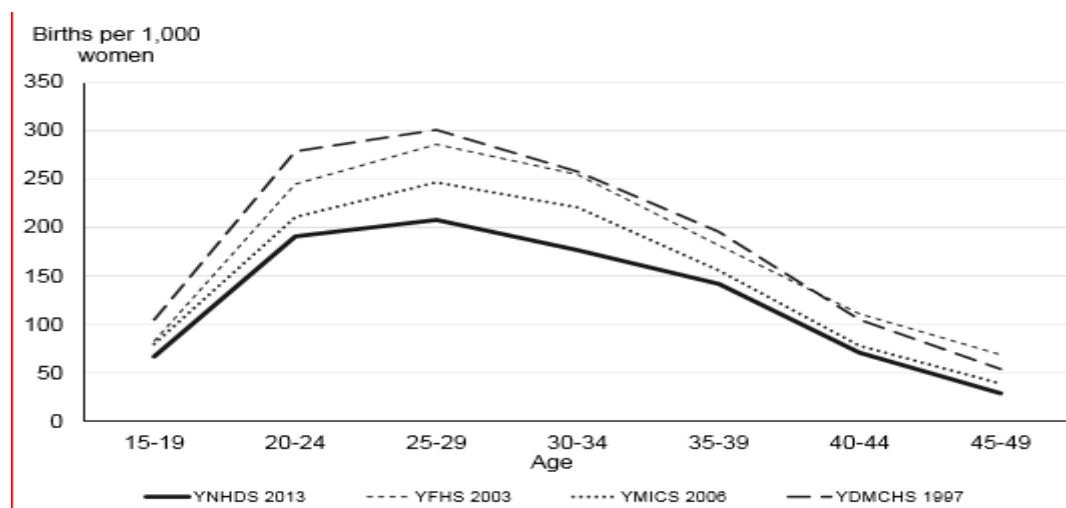
Age is certainly a major determinant of family planning access and use. In most developing countries, this is prevented by laws or social norms that stigmatize adolescent sexuality and contraceptive use ⁽⁴⁰⁾. Age may also determine the number of FP choices available, depending on the type of family planning method ⁽⁴¹⁾. For example, permanent methods such as bilateral tubal ligation and vasectomy are almost never chosen by the younger couple who often want to delay birth rather than limit birth ⁽⁴²⁾. On the other hand, older women (20 years and above) tend to have a wider list of contraceptive choices ⁽⁴²⁾.

According to the YDHS 2013, the average ideal number of children increases consistently with age, from 3.8 children among women aged 15-19 years to 5.2 children among women age 45-49 year. That probably explains why the unmet need for space is highest among young married women than their older counterparts. Married women younger than 20 years have the highest percentage of wanted births: 79.5%. The use of any modern contraceptive method is lowest among married women under 20 years compared to the national average (12.1% against 29.2%). This is probably because most women marry by the age of 18, and by norm, pregnancy is a proof of fertility.

Use of any method of family planning is the highest in the age group 35-39 while the lowest group is among women aged 15-19. It could also be due to the fact that younger women are yet starting their families and therefore have a higher percentage of wanted pregnancies compared to older women who may have need to limit pregnancies ⁽³⁾. For instance, there is an inverse relationship between age of married women and proportion of wanted pregnancies, with younger women (15-19 years) recording the highest rate of wanted pregnancies (80%) and women above 40 year are recording the lowest (40.5% of births). Arwa Al-Rabee (2003), believes that lack of special programs targeting young married women may explain why there is low usage of family planning among them ⁽⁴³⁾.

In Figure 4 below, fertility among women appears to increase with an age peaking at 25-29 and then decline. It also shows fertility has been declining among all age groups for the past 16 years. The apparent low births of women aged 15-19 is partly because most women are unmarried before the age 18 and since the median childbearing age is 21 the majority of them would not have started childbearing. Another caution is the fact that YDHS (2013) assumed that all unmarried young women (15-19 years) had no children, thus possibly underestimating the true fertility ⁽³⁾.

Figure 4 Fertility trend and age in Yemen



Source: ⁽³⁾

3.1.2 Knowledge Family Planning Methods

Knowledge of FP services offered, when and where to seek care and the cultural norms of reproduction are just as important as the availability of the services ⁽⁴⁴⁾.

FP knowledge in Yemen is universal (above 98%) across all categories of age, education, wealth, residence, and governorate. However, women in rural areas reported less knowledge (97.6%) compared to nearly all (99.8%) of those in urban areas ⁽³⁾. According to the survey by Burry (2008), unmarried women are less likely to have knowledge of FP than married women ⁽⁴⁵⁾.

Knowledge of each method has increased within years from the reported DHS 1997. Example is the number of women, who heard about condoms has doubled from 24% in 1997 to 56% in 2013 ⁽³⁾. The pills are the most widely known contraceptive method (97%) among married women and the least known method is the diaphragm and emergency contraception (<12%). However, the least known method is different between men and women,

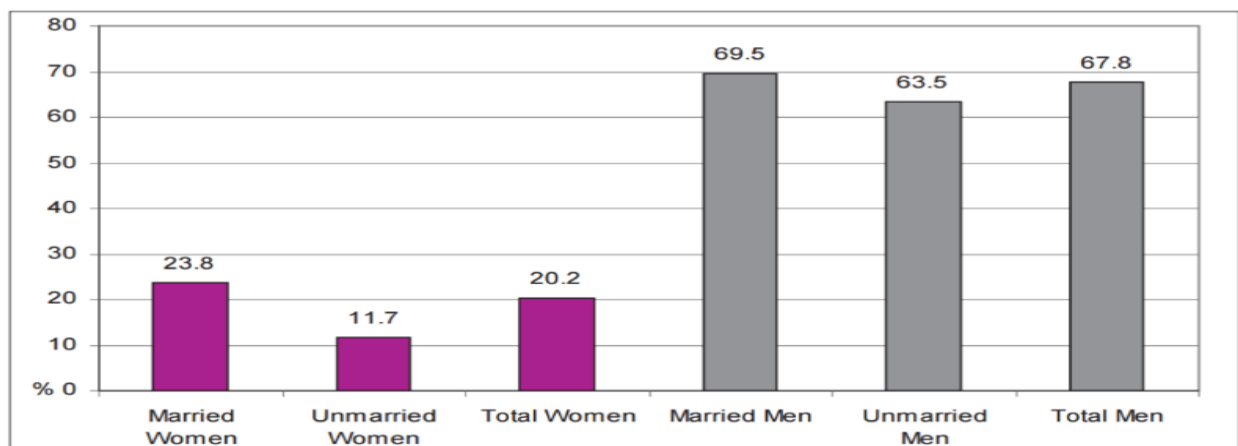
hence the least known method among women is the male sterilization and the least known method among men is the female contraceptive implant ⁽⁴⁵⁾.

A study conducted in Yemen proved that the higher knowledge about the method dose increased utilization ⁽⁴⁶⁾. This may explain why pills are the most widely used method (11.6%) compared to others for example implants (0.6%) ⁽³⁾.

3.1.3 Marital status

Yemeni DHS and national reports present FP data on married women only. However, the KAP study conducted in Yemen revealed that married women and men have more freedom to access reproductive health services by their own, compared to unmarried (Figure 5) ⁽⁴⁵⁾. Unmarried women are twice less likely to access reproductive health services. This suggests unmarried women may have a higher unmet for FP than married women.

Figure 5 Freedom to access health service providers by marital status



Source: Bury 2008 ⁽⁴⁵⁾

Unmet need for family planning among married women is 29% (15% for spacing births and 14% limiting), with about half of them having met their family planning needs. Approximately 1 in 7 births (14%) are unwanted and 21% are mistimed. This might mean that there is also an unmet need for safe abortion services. In addition, a study conducted in Aden among female sex workers (FSWs) showed that 80% reported that they don't use condoms and they don't seek sexually transmitted infections (STI) counselling ⁽⁴⁷⁾. This might be due to the stigma associated with unmarried women seeking reproductive health services.

3.1.4 Perceptions

The individual and community perception can lead to discontinuation of using FP and avoidance to use some ⁽⁴⁸⁾.

A KAP study conducted in Yemen showed that 54 % of women believe that the contraceptives would fail. Up to 64% of women and 72% of men believe that family planning is harmful ⁽⁴⁵⁾. Another study found that, a higher FP uptake in Yemen is attributed to raising awareness on the benefits of FP and correction of such perceptions ⁽⁴⁶⁾. Therefore, including rising of awareness among couples was essential in the FP national programs ⁽¹⁸⁾.

3.1.5 socio-economic status

Studies show that increase in the average income of women increase the likelihood of using FP ⁽⁴⁹⁾.

Variations in the proportion of women who know of any modern family planning method between the richest and the poorest women is narrow (100% against 94%). Nationwide use of modern contraception is 29.2%, but the proportion of the richest women who use any modern contraceptive is more three times (42.2%) that of the poorest women (13.6%) ⁽³⁾.

There is no big difference in the median age of marriage between the wealthiest quintile (19 years) and poorest quintile who will marry a year earlier. In contrast, the total fertility rate among the poorest quintile is more than twice the top rich quintile (6.1 against 2.9 births per 1000 women aged 15-49 years respectively). Wealthier women are also able to space births longer than the poor. Nearly half (43.1%) of the poorest women have unmet needs for family planning compared to 18% of the wealthiest women ⁽³⁾.

Overall, the socio-economic status is probably a major determinant of FP use in Yemen, as the poorest are the least able to access FP. This also might be due to the fact that contraceptives are not covered by any insurance scheme; about 50% of the women buy contraception by themselves ⁽⁴⁵⁾.

3.1.6 Fertility preferences

The desire to get pregnant among women depends on the number of children they already have ⁽³⁾. Many women have the desire to use FP regardless of the number of children ⁽⁴⁵⁾. However, Yemeni women desire large families (4.3) irrespective of socio-economic status. And the average number of children wanted has not changed very much over the years, as it was 4.5 in 1997 ⁽⁵⁰⁾.

Younger, educated and urban women prefer smaller families (3.8, 3.9 and 4 children per woman respectively) compared to their older, uneducated and rural counterparts (5.2, 4.6 and 4.5 children per woman). This may explain the high fertility and low usage of FP among women in rural area ⁽³⁾.

3.1.7 Education

Several studies have revealed that there is a positive association between the women's level of education and FP utilisation, regardless of their socio-economic situations ⁽⁵¹⁾.

The literacy rate of Yemeni women aged 15 years and older increased from 17.1% in 1990 to an estimated 53% in 2015 ⁽⁵²⁾. The literacy rate among young women 15-19 years is about three times higher (73%) than older women of the age 45-49 (20%) ⁽³⁾.

The YDHS (2013) reports that 36% of women aged 15 years and above have attended primary education, 15% attained secondary education and 6% have completed tertiary education. More than 8 in 10 unmarried women and half of the married women aged 15 years and above were educated ⁽³⁾.

With a majority of them unable to read or write, their access to information is even more limited. The lack of information results in several myths and misconceptions regarding family planning. The YDHS (2013) shows that educated women are more likely to use modern contraceptives, desire fewer children and prefer the pill. 72% of uneducated women do not use any contraceptive method compared to half of the highest educated women ⁽³⁾.

Both demand and met need for modern contraceptives are positively associated with the level of education but the unmet need decreases with the level of the woman's education ⁽⁵³⁾. This is probably because educated women are likely to be employed, have independent income or live in wealthier families, have better understanding of the methods and have access to contraceptive information. Educated women are also likely to have used contraception in order to finish their education before childbearing ⁽⁴⁵⁾.

3.2 Community Norms and social network

In low and middle income countries, ensuring a women's access to family planning services is beyond the capacity of the health system alone ⁽⁵⁴⁾. Some of the greatest barriers that women face, in obtaining family planning, are social stigma and cultural norms and practices around gender and sexuality which usually deter them from seeking the services ⁽⁵⁵⁾. Some of the factors are discussed in detail below.

3.2.1 Gender

The female gender is often associated with procreation, motherhood and caregiving. For unmarried women, especially adolescents, chastity and purity are most valued ⁽⁵⁶⁾. Therefore women who choose to prevent or terminate pregnancy are sometimes seen as social deviants and stigmatized ⁽⁵⁷⁾.

In Yemen, women generally get pregnant soon after marriage ⁽⁴⁵⁾. That probably explains why the majority of younger married women, have a higher percentage (78%) of wanted pregnancy ⁽³⁾. On one hand family planning and contraceptive use is often left to the women; even men who are not against family planning tend to be ambivalent towards contraceptive use. On the other hand pregnancy of a woman proves the virility of the man and the woman's fertility ⁽⁴⁵⁾.

Although, most decisions on family planning are decided by the couple, the husband has the final say ⁽⁵⁸⁾. Studies also show that even when the decision, to use family planning, is made, women are usually the initiators of contraceptive use in Yemen ⁽⁴⁵⁾. In addition, women have less freedom to access reproductive health (RH) facilities compared to men ⁽⁴⁵⁾. This results from gender norms that limit the movement of the women ⁽⁵⁾.

3.2.2 Local organizations and peers

Local organizations are essential in the implementation of FP programs, including education, training and distribution of the commodities, because they are trusted by the families ⁽⁵⁹⁾. They are also important for transferring responsibility from the international consultant to a Yemeni institution in order to maintain sustainability of the programs ⁽⁶⁰⁾.

Examples like the Yemen Family Care Association (YFCA), Charitable Society for Social Welfare (CSSW) and Yamane foundation played an important role in Contraceptive Social Marketing (CSM), to understand the local culture and to be able to communicate effectively ⁽⁶⁰⁾. They contributed in selling commodities and contraception at subsidized prices to both public and private institutions ⁽⁶⁰⁾.

In addition, local male and female social networks such as Yemen Family Care Association has been an important source of family planning information for men and women in low income and rural areas ⁽⁶¹⁾.

For example Bury 2008, found that the main sources of knowledge, about contraception for both females and males, are their friends (60.8%) and relatives (44.9%) ⁽⁴⁵⁾. Men and women who are involved in peer networks are

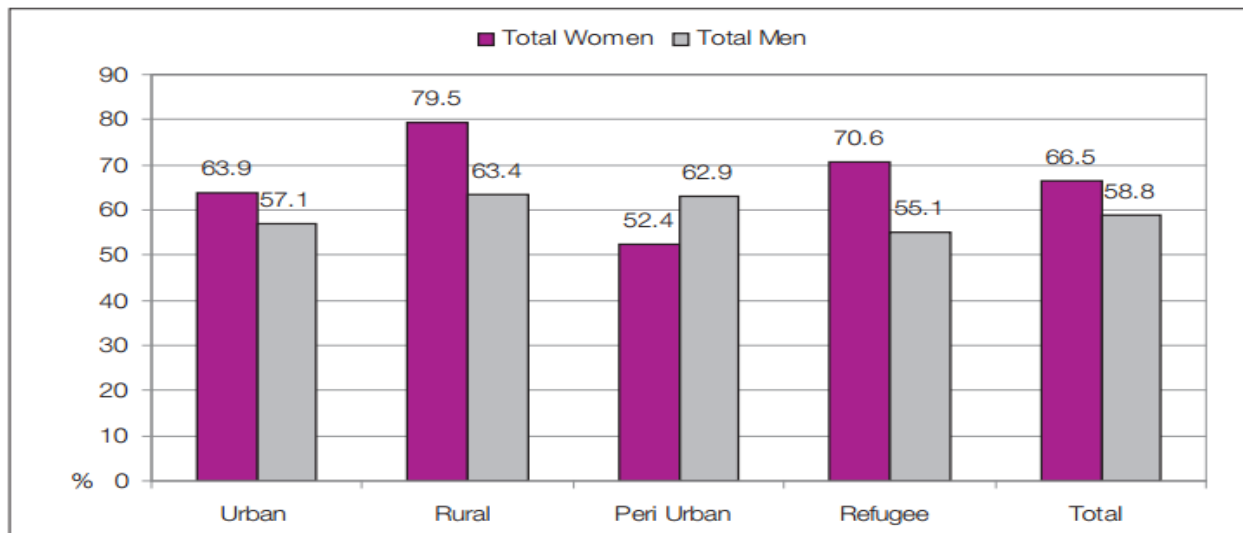
most likely to use family planning as Shattuck, and co found out ⁽⁶²⁾. According to the YDHS, nearly half of Yemeni women (43.8%) get their information from sources - other than Radio, Television, Newspaper/ magazine - including peers ⁽³⁾.

3.2.3 Family/Partner involvement

Due to the subordinate position of the women in the family ⁽⁵⁸⁾, other members of the family, most particularly the husband’s mother, still can influence the decision of the uptake.

Figure 6 show that irrespective of the gender, locality or refugee status, more than half of the married people are influenced by the older members of the family, namely the mothers/mothers-in-laws to start early childbearing after marriage.

Figure 6 Percentage of men and women who said that their mother/mother-in-law wanted them to produce a child quickly after marriage –Yemen.



Source: Bury 2008 ⁽⁴⁵⁾

In rural areas and in refugee settings (79.5% and 70.6% respectively) women are particularly pressured to produce children. This may be because in such environments women are less employed and are likely to be at home all day long with the elderly women. The figure also show that overall, more women are influenced by their mothers-in-law than men ⁽⁴⁵⁾.

In addition, most husbands have a preference for larger families (5 children) than women (4), which might influence their willingness to accept family planning, especially in Yemen which is a patriarchal society ⁽⁴⁵⁾. Even though couples may discuss family planning together, the man usually has the final word and more often they oppose contraceptive use ⁽⁶³⁾.

3.2.4 Religion

Religion has been shown, by several studies, to affect family planning positively ⁽⁶⁴⁾. In some religions including Christianity and Islam, childbearing is a divine command hence interfering in fertility is termed a sin. Among Catholics, use of modern contraceptives is unacceptable hence it has an adverse effect on family planning. In Iran, religious support for family planning is believed to have contributed significantly to the increase in family planning usage and reduction in fertility ⁽⁶⁵⁾. In some Sub-Saharan countries such as Ghana, where faith-based facilities provide significant proportion of health services, opposition to family planning can affect service availability ^(64, 66).

In Yemen, almost all of the population practices Islam and in some cases family planning is stigmatised depending on the interpretation of the sect/leader. In areas where the religious leaders take a stand against family planning, it could also discourage the service providers from providing and users from seeking family planning services. Usually, unmarried women are forbidden to have sexual intercourse according to Islamic doctrines ⁽⁶⁷⁾. Therefore service providers will most likely not provide family planning information or services to a young unmarried couple, including emergency contraception.

According to the YDHS (2013), about 10.4% of married women aged 15-49 did not specify their ideal number of children instead giving responses such as "It is up to God". This shows religion probably playing a role in deciding the family size, hence the decision to use family planning ⁽³⁾.

In most countries of the Pan Arab Project for Family Health (PAPFAM) and demographic and health survey (DHS) in their data collections suggest that, religion is not a major influence that prevent women from seeking services of family planning ⁽⁵⁸⁾. In Yemen DHS and other survey studies resulted that, the voice of religion doesn't have a significant direct influence (0.1%) on the family planning using decision ^(3,45). So it was effective to use the religious leaders for the FP outreach program in order to help to transfer the FP messages to public ⁽⁶⁸⁾.

3.2.5 Media

Studies showed that the exposure to FP messages through media is positively associated with the uptake of contraceptives, number of desired children and the changing of the misconception about family planning. ^(69,70)

Although about 19% of Yemeni women have no access to any media – especially in rural areas, still the available media did an effective job in transferring the FP messages ⁽³⁾. YDHS (2013) report and KAP studies show that the most effective media in transferring FP messages are the TV (46%) followed by radio 29%, and finally the newspapers 11%. And the number of people who received this messages are increased since 1997 ^(3,45).

3.3. Family planning service delivery factors

3.3.1 Accessibility of Family Planning services

Accessibility is defined by Penchansky and Thomas (1981) to include 5 “As” of accessibility: acceptability, accommodation, availability, affordability and geographical accessibility ⁽⁷¹⁾. This study will attempts to describe family planning availability in Yemen along with those 5 As, however accommodation will be discussed under quality of FP services.

3.3.1.1 Availability of Family planning services (Health Workers, Facilities and FP supplies)

Health workers According to the WHO, at least 28 doctors, midwives and nurses per 10,000 populations are required to ensure the family planning service availability ⁽⁷²⁾. Health workers are also essential in providing information on available FP methods to the population ⁽⁷³⁾. Studies have also shown that there is a positive relationship between the number of FP providers and the uptake of FP ⁽⁷⁴⁾.

In Yemen, prior to the war, in 2009, the number of (doctors, nurses and midwives) per 10,000 populations was 3 and 7.25 respectively and 1.05 Pharmacist per 10,000 population ⁽⁷⁵⁾. While in 2014, the number of (doctors, nurse and midwives) per 10,000 populations is 1.9 and 7.3 respectively and 4.0 Pharmacist per 10,000 population ⁽¹⁾. The numbers show insufficient numbers of health workers in the country which is well below the recommended threshold, this stands as a barrier against the uptake of FP.

The scarcity of the human workforce -especially in the rural areas had led to the recruitment and training of community health workers ⁽⁷⁶⁾. About 2763

community health workers (Murshed/Murshedah) (1009 male, 1463 female) have been trained to provide family planning in remote areas ⁽¹⁾. A comparative study, conducted on community-based reproductive health (CBRH) approach in rural areas, showed a significant increase in the utilization of the contraception in the intervention areas by 51.1% compared to the non-intervention area 23.4%, (OR= 3.4, 95%CI (1.4, 8.3) ⁽⁷⁶⁾

Facilities There are 4,207 public health facilities in Yemen. A majority (72%) of them are health units, 21% health centres and the rest are hospitals (6%) and posts (0.8%). There are also 3,340 private pharmacies, 181 private hospitals and 1,054 private clinics and centres ⁽¹⁾. With the exception of bilateral tubal ligation and vasectomy, all the other family planning methods can be provided in any health facility provided there is a trained person ^(1,3).

Supplies A secure, reliable stream of RH supplies of contraceptives, is crucial in preventing unwanted pregnancies ⁽⁷⁷⁾. It has been proven in low and middle-income countries that there is an increased risk in stock out, a high cost in the beginning of the chain due to the delay at any point in delivering the supply chain ⁽⁷⁸⁾.

Yemen receives the logistics through two freights. Ocean freight through the port of Hodeidah and then directly to Sana'a. The other is air freight, which is directly through Sana'a airport. After that the procurement and supply is managed centrally by the Population Sector after that contraceptives are distributed to all governorates twice annually, mainly in January and July ⁽⁷⁹⁾

Weakness in the supply system in the country, including delays, was blamed for contraceptive shortages in most of the facilities ⁽⁶⁰⁾. As a result, some pharmacies have been noted with a poor reputation of nonprofessional and high cost of family planning services ⁽⁴⁵⁾. The rational choice and use medicines by suppliers also determine the cost of services. In one study, 50% of the women reported that they changed their family planning method due to cost, while 14% cited high cost as the main reason for stopping contraceptive use ⁽⁴⁵⁾.

3.3.1.2 Affordability

The cost of the method can be a barrier or subsidization for the methods used ⁽⁴⁹⁾. Most of the Yemeni women (50%) purchase the method themselves.

In KAP study, 50% of the women reported that they are satisfied with the cost of the last used contraception. And 14% said it was high. And very few reported that they changed their method into the cheapest one ⁽⁴⁵⁾.

Although FP methods are provided for free in all primary levels, still the patients have to pay the counselling costs. Unavailability of all methods stands as another factor that makes women pay additional costs in order to get the needed method from the nearest health facility. That may discourage the patient from seeking the facility ⁽⁴⁹⁾. Available information show that the majority of young women in Yemen lack an independent income, which may partly explain why wealthier women use contraceptives more than poor women ^(3,80).

3.3.1.3 Geographical accessibility of family planning services

The WHO report, on human resource for health, indicates an inequitable distribution of health services among and within countries with the rural areas often as the most deprived ⁽⁸¹⁾.

FP methods are provided by almost all the levels of the health services. Majority of Family planning users (53%) obtain their methods from the public healthcare facilities while the rest are from private providers including 1% from NGOs ⁽³⁾. In addition to the inadequate number of FP facilities, about 80% of them remain in the urban areas ⁽¹⁴⁾.

As a result women in rural areas often do not have adequate access to FP services. Dureab, et al (2015) suggest that residents who live further from the health facilities, would be better served with long acting contraceptives such as injectable, IUD or implants ⁽⁷⁶⁾. However, the DHS (2013) shows that the majority of Yemeni women prefer the pills, which require a restock every month. But to eliminate the need for frequent revisits, the pills are often prescribed or distributed for half a year or a year to clients, and that could be a barrier, if service providers are unable to provide at least 3 months of pills in a visit ⁽⁷⁶⁾. In addition, although the YMoPHP policy provides free access to health facilities, 57% of the population does not have access to the public healthcare facilities ⁽⁸²⁾.

3.3.1.4 Acceptability and Accommodation: Quality of FP Services

Staff perceptions and attitudes are known to affect the quality of family planning services ⁽⁸³⁾. Health providers in Yemen are also part of the Yemeni culture and community. The majority of nurses are females, but doctors are dominantly by males. Still staff in RH services lack the expertise and skills to meet the patient needs, which limited the women's confidence in the health system ⁽⁸⁴⁾.

FP services in Yemen were found to be of good quality regarding the commodities and trained staff ⁽⁸⁵⁾. However, with a conservative society as Yemen, women prefer the services of females ⁽⁸⁶⁾.

Although FP is mostly provided by nurses/midwives in Yemen, still the YMoPHP guidelines prohibit the training of midwives for providing the implants even if the commodity is available in the health facility. Therefore women can't access the implants in the absence of the gynaecologist even if the logistics are available ⁽⁸⁷⁾.

Some staff are also known to be biased and judgemental against providing family planning to young and unmarried young women. Young people who can not officially marry for several reasons tend to enter a kind of unofficial marriage called (Urfi) where the resulted pregnancy of this relationship is always unwanted ^(43,88,89).

3.3.2 Financing

The WHO recommends a pool fund (such as insurance) as the most sustainable way to achieve the universal health coverage (UHC) ⁽⁹⁰⁾. Excluding the family planning in the health insurance package, or failing to eliminate or reduce service fees for poor women and adolescents creates a financial barrier preventing access and utilisation ⁽⁹¹⁾.

FP in Yemen is totally donor funded. International and bilateral organisations such as the Embassy of the Kingdom of the Netherlands (EKN), Kreditanstalt für Wiederaufbau (KfW), the World Bank, and UNFPA provide funding for FP to the Yemen government ⁽⁷⁹⁾.

Beside the public providers, NGOs such as Mariestops and Yamaan, who provide a significant portion of family planning services in Yemen also depend mostly on donor funds ^(92,93). The cost of the service may influence the choice of the provider; for profit private family planning, services tend to cost more than public and not for profits services ⁽⁴⁵⁾. In Yemen, where facilities are inadequate, both service providers are likely patronised with the rich being able to afford more services than the poor.

3.4. Policy

Supportive policy is considered one of the ten elements toward successful family planning programing ⁽⁹⁴⁾.

The rapid population growth of 3% per annum and the expected doubling of the number of the Yemeni population by 2030 prompted the government to

consider this growth family planning as a key development issue ⁽⁸²⁾. However, the national policy in Yemen is trying to make pro-poor strategies, by providing free service access. This does not seem to yield the needed results, largely because of problems with geographical accessibility and the societal barriers such as early marriage, gender and income disparities ⁽⁸²⁾. Therefore, the policy in Yemen aimed to provide friendly services to involve the men in their strategies. ⁽⁸²⁾.

Supply of contraception is still totally donor funded and vertically implemented as a separate commodity form the rest of the reproductive health commodities and other essential drug systems ^(79,82). Activities between the government and the donors are coordinated by the Reproductive Health Commodity Security (RHCS) subgroup, which are responsible for decisions on procurement and distribution of contraceptives. Reports have shown that the lack of political will and weakness of the executing agencies have made the provision of family planning services inefficient and ineffective ⁽⁶⁰⁾.

CHAPTER FOUR: FACTORS THAT INFLUENCE THE UPTAKE OF FAMILY PLANNING IN YEMEN DURING CRISIS

This chapter explores the factors that influence the uptake of family planning in Yemen during the crises. As much is not exactly known about this impact in Yemen, information of similar settings were sought from different countries that had a comparable context like Yemen.

4.1 Individual characteristics factors:

4.1.1 Age

The fact that age is a known determinant of access to family planning is well documented ^(40,41,95). In conflict settings, restriction based on age is still one of the barriers against family planning utilization ⁽⁹⁶⁾. Reports reveal that the expectation that girls should marry in a younger age and have to produce children is still a norm in a conflict environment ⁽⁹⁶⁾. Another suggestion revealed that child marriage is a major concern among Syrian refugees ⁽⁹⁷⁾. This implies that there may be younger brides among Yemeni refugees or displaced people, who may not be able to access or negotiate contraceptive use ⁽⁹⁸⁾. Refugees younger than 20 years are also less likely to know of any contraceptive ⁽⁹⁹⁾. However, Marie Stopes Yemen and Yamaan reported that currently youths represent the highest seekers for RH consultation (through phone calls) ⁽¹⁰⁰⁾.

4.1.2 Knowledge

Awareness of the availability of FP services has a positive influence on the uptake of FP ⁽¹⁰¹⁾.

Although data about the current level of knowledge of contraception in Yemen is not available, studies among refugees show relatively high knowledge of at least one FP method, but had little knowledge of a service location ⁽¹⁰²⁾. This condition may be because of the fact that in conflict environments, both people and service providers change places very often and it may take time to establish communication.

In a study among Iraqi refugees, Connelly reported that about 92% of women know of pills. However, the majority of them used the withdrawal method, which might partly be because of the fact most facilities within the camps don't provide sufficient FP services and facilities located outside their camps are unknown to them ⁽⁹⁹⁾. Among the same population the youth were the group who reported less knowledge of the methods compared to the adults. And

parents remain the source of information regarding any sexual or reproductive issues. This may be attributed to the social norm that prohibits sex outside marriage and education for younger people ^(99,103).

4.1.3 Marital status

Marriage is also a key determinant of FP access in a conflict environment. Connelly, explains that due to the cultural norms, that prohibit premarital sex, knowledge about FP is found to be low among unmarried adolescents as they are not given FP education ⁽⁹⁹⁾. In a conflict environment, where the contraceptive supply may be limited, FP providers discriminate in favour of married women. For example Krause et al. noted denial of access to emergency contraception contributed to the high proportion of unsafe abortions among unmarried women ⁽⁹⁷⁾.

Since Yemeni culture shares similar norms, it is likely that the conflict has increased the difficulty for unmarried women in obtaining FP services than before. It is also likely that, the additional risk of rape and unintended pregnancies and abortions may increase the need for contraceptives among married and even unmarried women.

4.1.4 Socio-economic status

Displacement by the conflict adds strain on the already scarce resources. In Yemen many IDPs are living with relatives or renting shelter at high prices which increases the opportunity cost for contraception ⁽¹⁰⁴⁾.

Most displaced females and refugees do not have an independent income to pay for the available FP services ^(97,102). Due to the devastation of the public sectors, they may have to contend with the high prices of the private FP providers. Purchasing of FP is economically difficult at the moment especially among the poorest quintile who reported previously with the highest unmet need (23.8%) and lowest utilization of the methods ^(3,97).

The unaffordability of living results in many women, entering prostitution for mere survival, and to an increase in child marriage, which both remain a barriers against seeking FP due to the conservative social norms ^(97,102).

4.1.5 Perceptions

Krause et al., reports that among Syrian refugees, they do not want to get pregnant due to the security and economic uncertainties in the conflict ⁽⁹⁷⁾. It is, however, perceivable that after the conflict families would likely want to replace their lost members by delivering more children ^(97,99).

Generally, women in conflict environments have the same perception as women in non-conflict environments. Most women have fears of side effects of contraceptives and the lack of information in conflict settings may increase these fears ⁽⁹⁵⁾.

4.1.6 Fertility preferences

It is unlikely that women would want larger families during the conflict compared to the period before the conflict ⁽⁹⁷⁾. Any realised increase in fertility may be attributed to an unmet need for FP as Connelly suggests ⁽⁹⁹⁾. Iraqi women refugees explain that the poor financial and security situation drive the women to seek contraceptives and limit their fertility preference ⁽⁹⁹⁾.

4.1.7 Education

Conflicts usually negatively affects the educational level of women as educational institutions are either damaged, occupied by armed groups or used to shelter displaced people ^(105,106,107). For example, currently (2016) about 3.4 million students in Yemen are out of school, the majority of them likely to be female ^(97,106,108). This implies that compared to pre-conflict Yemen, more women now, will be unable to read or write, which could hinder their access to adequate FP information and services.

4.2. Community Norms and social network

4.2.1 Gender

Although women have an increased risk of rape, their ability to regulate their fertility may be curtailed as a power relation shaped by conflict often increases male dominance ⁽¹⁰⁹⁾. Reports show that gender remains a barrier to access FP services, even in areas where there is geographical access ⁽¹⁰⁴⁾. Sofan, a UNFPA gender expert, states that women and girls are the most vulnerable groups in conflict-affected parts of Yemen ⁽⁹⁸⁾.

In addition, there have been increased reports of rape, honour killing and unsafe abortions during this conflict. Just like before the war, providers need the consent of male partners before they can provide FP, Safe abortion care, normal delivery or a caesarean section ⁽¹¹⁰⁾.

On the other hand, UNFPA notes that some women may have increased autonomy in seeking FP services as their male partners are often in the battle field. The participation of some women in fighting may also be a sign of shifting

gender norms under conflict, which could be an opportunity for women to seek FP services ⁽¹⁰⁹⁾. The majority of women still prefer the services of female FP providers, who are often limited under the conflict situation and could still be a barrier to access ⁽⁸⁶⁾.

4.2.2 Local organizations and peer networks

In Yemen the on-going conflict has broken down the social networks and created new networks that may be suitable for discussions on family planning ⁽¹¹¹⁾. Local organizations such as the Yemeni Women Union (YWU), the Yemen Family Care Association, Red Crescent Society, National Safe Motherhood Alliance and Yemeni Midwives Association partners with multilateral and international organisations to deliver family planning services ⁽¹¹²⁾.

There are different community engagement networks created this time. Such as a communication humanitarian call/text centre, Community Based Protection Networks (CBPNs) and social media platforms. Which they use one-way or two-way of communication and delivering information as well as the humanitarian needs ⁽¹¹¹⁾. Taking into consideration that the critical communication networks such as radio, internet and mobile services, are shut down or not operating fully ⁽¹¹¹⁾.

Separation of people from their familiar networks, from which they used to receive information and encouragement, could limit their access to and their utilization of FP services. This may also explain why most displaced and refugee women often cite difficulty in locating Family planning services as their main reason for not using the methods ⁽⁹⁹⁾.

4.2.3 Family/Partner involvement

In general, the disruption of family and social support systems may present yet a challenge to unmarried adolescents who are equally at risk for unsafe sex but have inadequate access to contraceptive information and services ⁽¹¹³⁾. Studies show that parents remain the main source of FP information for young people ⁽⁹⁹⁾. Known barriers such as cultural resistance, and men disapproving of FP may have increased in Yemen as reports show GBV against women has increased ^(98,104,114). It is also likely that IDPs who live with families/friends face increased pressure on trying to seek FP services without offending the host family ⁽¹⁰⁴⁾.

4.2.4 Religion

Muslim religious leaders in many conflict settings do not oppose FP, in fact they encourage it ^(99,115). Tober et al (2016), in their study revealed how differences of fatwah legislation between Shi'ism and Sunnis reflected the acceptance of family planning among both groups ⁽¹¹⁶⁾. This difference explains why some Afghan (Sunnis) refugees refuse to take contraceptives during their residency in Iran (Shi'ism) ⁽¹¹⁷⁾.

The current war in Yemen between both Islamic groups may change the support of family planning among Sunnis religious leaders that follow their own legislation apart from the Shi'ism legislations. Quotes from Sunnah, such as "Marry the one who is fertile and loving, for I will be proud of your great number before the nations on the Day of Resurrection" ⁽¹¹⁸⁾, may be used to encourage the women to give births in order to compensate the number of deaths due to the conflict.

4.2.5 Media

The role of the media is proved to be effective in delivering FP awareness and service information.

In areas affected by crises, IDs whether unaware of the benefits of FP or do not know where it is available from ⁽¹¹⁹⁾. The demand for FP information is increased in the conflict settings, due to the continuous change of the people and the provider's places. This may be a challenge because networks are shutting down or not functioning in full capacity ⁽¹¹¹⁾.

4.3 Health service delivery factors

4.3.1 Accessibility of Family Planning services

4.3.1.1. Availability of Family planning services (Health Workers, facilities, supplies)

Health workers: The conflict and displacement of the population affects both health workers and the general population alike. For example, about 30 health workers are believed to have been killed or injured, many are displaced or migrated from Yemen ^(120,121). Of those health workers that remain, the majority are likely to be males, which reinforce the existing gender barrier to accessing FP ⁽¹²²⁾. Hence girls and women especially in rural areas are disadvantaged from the current lack of reproductive health providers ⁽¹⁰⁴⁾.

Facilities: As explained further it is estimated that about 600 health facilities are closed and more than 100 have been destroyed in the conflict, which makes the already few facilities even scarcer ^(123,124). However, some private providers are still operating ⁽¹⁰⁰⁾.

Supplies: Before the conflict, Yemen had no reliable contraceptive supply chain, which is likely to have worsened in the conflict. The centrally managed system may not have been able to supply contraceptives to all governorates as violence and disorder may be a barrier ⁽¹⁰⁰⁾.

The UNFPA collaborates with other partners to ensure that donated contraceptives reach the population. Contraceptive shortages and supply delays are likely to be more frequent during the conflict than before ⁽⁶⁰⁾. The UNFPA is facing delays in receiving contraception from the logistics hub in Djibouti and then passes it through to the Al- Hodeidah port, which resulted in an increase of the lead time of these supplies ⁽¹²⁵⁾. Even though they now have changed the direction to be ordered directly to the port in Al- Hodeidah, it takes a long time to reach Sana'a. It may take 3 months average lead time for contraception including condoms ⁽¹²⁵⁾.

Now about 72% of the districts in the country face low access constrain as in Taizz, Marib, Al Bayda, Hajjah and Sa'ada, which makes it difficult in supplying the logistics and difficulty to access women and girls in these areas ⁽¹⁰⁴⁾.

4.3.1.2 Affordability

Study among Iraqi refugees in Amman revealed that cost was a predominant barrier (35%) behind seeking the RH services ⁽¹⁰²⁾.

Since the start of the conflict, Yemen totally depends on imports for all (100%) its medical supplies. However due to the scarcity of food and fuel the prices of basic commodities become higher and remain out of reach to the local people ⁽¹²⁶⁾. The conflict also resulted in devastation of the health facilities, but still some private sectors are working under the current weak quality of the service ⁽¹⁰⁰⁾. In addition, many IDPs currently are living with host families, which put pressure on the already scarce resources. Also living become challenging if they rent a place, as the rental prices increase and displacement becomes prolonged ⁽¹⁰⁴⁾.

In a country where more than 35% of its population are living under the poverty line ⁽¹²⁷⁾, this will change the priority of purchasing the needs and it may stand as a barrier against seeking modern FP due to unaffordability.

4.3.1.3 Geographical accessibility

It is probable that FP methods are provided by almost all the levels of the health system. Prior to the conflict, about half the Yemeni population had no access to public healthcare facilities ⁽⁸²⁾ and about 20% of health facilities were located in rural areas. As more facilities are destroyed by conflict, it is likely that more people will have no access to FP services ⁽¹⁰⁴⁾. Roads blocked by rebels and the insecurity of the situation will further make it difficult for women to physically access the service.

4.3.1.4 Acceptability and accommodation

The attitude of the staff is not expected to be better either, as stress could amplify their existing biases and judgemental attitude towards younger and unmarried clients ⁽⁹⁹⁾. Misconception and little knowledge about the Minimum Initial Service Package (MISP) and the authoritarian attitude of health providers also influence the patient's choice of contraceptives ^(97,115).

It is also likely that the staff's workload may be higher than before as fewer staff may have to cope with larger numbers and different medical conditions ⁽¹²²⁾.

4.3.2 Financing

The Women's Refugee Commission recommends that contraception be a part of the package of aid response in a crisis situation guided by the MISP. However, due to financial and logistical constraints, FP is often the least priority among aid providers ^(128,129,130). And conflict affected settings receive 57% less funding compared to the normal settings for reproductive health programming.

Since services usually rely on donor funds, service users are often asked to pay for part of the cost in order to sustain it. For example the USAID reports that beside informal fees, some communities in Sierra Leone pay 0.17 USD for a pack of condoms and 0.51 USD for a cycle of oral contraceptives ⁽¹³¹⁾. In the context of Yemen it is likely that FP services that were subsidised or free may no longer be available, as the health system is unable to function effectively ⁽¹³²⁾. The cost of FP services from drug peddlers and other private services that might be available may be out of reach of the poor. High cost of

FP services may create inequities in access as poorer women may be unable to afford the fees ^(133,134).

4.4. Policy

Currently the policy environment is unclear as the health system is directed by different factions of the conflict. Reports from USAID show that family planning policies may not be followed or implemented in full, during a conflict situation. For example, there is no dominant authority in Yemen to impose the free or subsidised contraceptives that were in place. Instead bilateral organisations and NGOs each implement what they can with what they have ^(82,131,135).

Some organisation report working directly through health offices due to the lack of coordination between them and the ministry of health, as most government personnel left the country ⁽¹⁰⁰⁾.

CHAPTER FIVE: INTERVENTIONS TO IMPROVE FP UPTAKE IN CRISIS ENVIRONMENT

This chapter discusses relevant evidence of informed interventions that may be adapted for improving Family Planning uptake in Yemen. Experiences of other countries under conflict that may improve the uptake of FP in the context of Yemen is also reviewed.

5.1 Using Outreach to Increase FP Accessibility

A common strategy used in most resource-poor settings is the outreach program. In Afghanistan, CHWs volunteers deliver family planning service to clients in their homes. The volunteers also provide information on contraception in rural areas using catchy phrases in order to generate demand. Reports show the intervention may have improved the contraceptive uptake but additional studies may be needed to draw conclusions. In Yemen, outreach can benefit women who cannot access FP services due to fighting. It may be implemented with the help of the security agencies, or within the so-called safe zones. However, the current state of insecurity may be too high to send people to remote communities. With the limited staff numbers, outreach may also deprive people who attend the facilities for services since most facilities may be inadequately staffed ⁽¹³⁶⁾.

5.2 Use of Mobile Technology to Increase Access to FP Information

Although telemedicine is still new, studies among women who terminate unwanted pregnancies through telemedicine suggest it is acceptable, safe, effective and feasible ⁽¹³⁷⁾. In a crisis environment such as Yemen, accurate information delivered by telephone might prevent unnecessary maternal deaths due to unsafe abortions. It might also be used to direct women with access to telephones to FP and safe abortion care providers near them.

In Sierra Leone, using mobile phones to train reproductive health providers and using SMS messages for family planning information in Kenya and Tanzania were other successful initiatives in case of lack of geographical access ^(138,139).

In Yemen, Yamaan is already using the technology to provide direct telephone-based reproductive health information. And they reported significant interaction with young people ⁽¹⁰⁰⁾. This may be a sign of feasibility, but further studies are needed to determine its effectiveness and acceptability and sustainability in Yemen. It is likely to leave out majority of displaced

people who do not have access to mobile phones, hence increasing the inequity in access to FP information and services.

In Kinshasa (DRC), the Kinshasa School of Public Health in collaboration with Tulane School of Public Health and Tropical Medicine used an online interactive mapping technique to locate the service delivery sites. The platform acted as a centralized information centre for all those who could access the internet to refer when in need of service. The map also helped potential providers to target areas that are not served, thereby avoiding duplications ⁽¹⁴⁰⁾. In Yemen this intervention could be useful mainly to international aid providers rather than the FP users due to poor access to internet services and the high illiteracy rate among the population.

Other emerging technologies such as the Outernet Light house device (a portable battery-powered wireless projector), which can stream educational materials without internet can also be used to help in public education. This cost effective connection is used in rural areas and places that experience shortage in mobile phone and internet coverage. As it has one way type of communication, it is found to be useful for collection of data, delivering information, training of health workers and school education. Countries such as Malawi, Uganda and the Za'atari refugee camp in Jordan are presenting a good example of using such technology ⁽¹⁴¹⁾.

5.3 Social franchising to increase FP uptake

In many conflict affected states, social franchising programs together with voucher programs have been used to ensure equitable access to family planning services. By this strategy, private for profit and not-for-profit providers are given the right (accredited/licensed) to provide quality family planning services at an agreed affordable fee. Usually the franchisor provides (Donor/government) staff training and other technical support in return for a small fee from the franchisees (implementing organisations). This builds the capacity and skill of the providers to maintain quality of contraceptive and FP services. To ensure equity in access, the poorer population were given coupons, to be presented at any of the franchised facilities for FP services free of charge ^(142,143,144). In Sierra Leone for example, the strategy was used to provide FP services during and soon after the conflict and it yielded promising results. Between 2006 and 2008 for instance, about 12,000 (37% of FP clients of franchises) received acting contraceptives from franchise outlets ⁽¹⁴²⁾. Furthermore, the majority of FP clients were uneducated, which suggests that the franchise outlets might be providing effective education at the grassroots level. Afghanistan and Malawi also used social franchising, with promising results ⁽¹⁴³⁾.

5.4 Outsourcing/Contracting Out to Increase FP Uptake in Fragile Environments; the Case of Afghanistan

Outsourcing has been used in both crisis and peaceful environment to improve access to vital health services. In countries such as Afghanistan, Bahrain, Islamic Republic of Iran, Jordan, Lebanon, Pakistan and the Syrian Arab Republic they have outsourced the health services ⁽¹⁴⁵⁾. For example, in 2003, Afghanistan outsourced FP services to local/international NGOs and private healthcare providers. The providers were awarded yearly contracts (lump sum) based on several criteria including cost, coverage, and quality of services. Renewal of the contract was based on performance. To ensure universal access, the government and the international partners such as USAID, World Bank and European Commission paid for the services. The contracts included the types of services defined under the Basic Hospital Service Package (BHSP) policy and the quality of services as per the Essential Hospital Service Package (EHSP) policy. Users received FP services free of charge ^(146,147,148). Although no rigorous scientific study was carried out to determine its impact, data available shows an increase in health service coverage and FP uptake. For example, according to the 2010 Afghan Mortality Survey, contraceptive use doubled from 10% in 2003 (baseline) to 20% in 2010 ⁽¹⁴⁹⁾. In addition the 2015 Afghanistan Demographic and Health Survey (2015) shows that the CPR is about 22.5% and 19.8% of currently married women who use modern contraceptives ⁽¹⁵⁰⁾. It is still however unclear how much of the apparent increase was due to the outsourcing. Empirical research may be needed to establish its effectiveness.

Outsourcing may be feasible in Yemen because there are still numerous local NGOs that can provide FP services if their capacity is built through provision of contraceptives, funds and training. Organisations such as the Yemen Family Care Association ⁽¹⁵¹⁾ and the Yemen National Midwifery Association ⁽¹⁵²⁾ can even provide emergency contraception and safe abortion care to women.

In camps FP, can be integrated into aid and other maternal healthcare. Other organisations such as MSIY/Yamaan may be able to deliver transport commodities and aid logistics to different factional strongholds using their personal networks and experience. They may also be able to provide education and counselling services to women in need of FP. According to Badr (2015), MSglaIY/Yamaan already offer counselling sessions to people as part of their activities ⁽¹⁰⁰⁾. Outsourcing is likely to increase FP acceptability as local NGOs understand the cultural context and can provide gender sensitive services. Local NGOs have experience through their networks to reach areas that the government cannot reach or has no infrastructure. In rebel held areas, the people tend to trust the local NGOs and some international organisations as

they may not be party to the conflict. The contracts can be maintained even when peace is restored as is the case of Afghanistan, Iran, Jordan, Lebanon and Syria ⁽¹⁴⁵⁾.

The likely challenge is that it requires proper monitoring to ensure that services are provided according to standards, which is almost impossible during conflicts. In addition, in the event of funding failure, providers may withdraw services or introduce user fees for them, which will become a barrier. There may also be under-the-table charges as experienced in Afghanistan. To ensure compliance and to reduce illegal charges, other competent local/international organisations can be contracted to monitor and supervise the service providers.

5.5 Interventions to remove stigma and other social barriers to FP

The availability of services and the reduction/removal of cost alone may not necessarily guarantee access. Young and unmarried people may be denied access to FP by health workers due to fear of attack from the community or due to personal values. Value clarification training for service providers may be helpful in changing the provider's attitude towards special populations. For community wide behaviour change, it might take a combination of strategies. For example, unlike Yemen, Jordanian policy mandates service providers to provide all women with FP methods of their choice without discrimination. As a result, some service providers in Jordan's Zaatri Refugee Camp do not ask female refugees for third party endorsement such as parent or a husband's consent before providing FP ⁽⁹⁷⁾.

In Yemen, however, beside implicit policy discriminating against unmarried adolescents' access to FP, service providers may be at risk of violent reprisal if they are discovered providing FP to unmarried adolescents. Opportunities do exist to provide contraceptives to unmarried women without male family members, female combatants, sex workers and married women whose husbands are in the battle field.

This also means that the community engagement to remove social and cultural barriers to FP is essential. Usually parents have an uninformed perception that provision of contraception to adolescents could lead to premarital sex. That perception is not supported by scientific evidence ⁽¹⁵³⁾.

In addition gender norms which make men household heads limit women's decision making space and their ability to seek FP. In South Sudan for example, an initiative was launched by the Royal Tropical Institute (KIT) to improve utilization of reproductive health services through male involvement.

The strategy included an appeal to men to use their position as responsible decision makers to improve the reproductive health of women. Although the strategy did not reinforce the existing gender parity, the fact that men were engaged positively appears to show promising results such as the decrease in existing gender gaps and improvement in RH access⁽¹⁵⁴⁾. The strategy is likely to be feasible in Yemen because, local organisations such as the Yemen Family Care Association can also be trained to engage men and communities in dialogue to reduce gender gaps and remove stigmatising norms. Other research findings suggest even in peaceful countries, rights-based approach may not always appeal to men in male-dominant societies such as Yemen⁽¹⁵⁵⁾.

In Kenya, Nepal and Uganda diverse stakeholders including the disabled, married/unmarried young people, and service providers were engaged in RH programs. Married, unmarried and disabled young people were sensitised on the social barriers to FP, early marriage and the RH needs of disabled and young people^(156,157).

5.6 Collaboration a crosscutting theme

In all interventions, irrespective of the strategy, collaboration is necessary to avoid duplication and maximize resources. The Reproductive Health Access Information and Services in Emergencies (RAISE) Initiative program used the strategy of integrating RH services to the humanitarian response, with encouraging results. In North and South Kivu, Democratic Republic of the Congo (DRC), RAISE collaborated with local partners to collect data for evidence-informed implementation of FP services. The participation of non-state providers in policy development, funding and implementation of RH programs may be effective in conflict areas where a government is virtually absent. For example, in South Sudan and Myanmar, Marie Stopes International (MSI) collaborates with other humanitarian and development agencies, to provide reproductive health services^(158,159). The advantage of collaboration is that it presents activists with stronger negotiation power and a network of resources. The drawback usually is, poor coordination, delays and insufficient funds.

CHAPTER SIX: CONCLUSION AND RECOMMENDATIONS

This chapter contains the discussions of the findings and the feasibility or opportunities to implement the reviewed interventions in Yemen.

6.1 Conclusion

The findings show that Yemen already had a weak health system before the conflict. Prior to the conflict, factors that contributed to the low uptake of family planning, included early marriage, poverty, preference for large families, illiteracy, social and gender norms, family/husband pressure, limited access to services and unprofessional attitude of service providers.

As a result of the war, the factors that hindered family planning uptake had worsened. Funds are likely inadequate, the contraceptive supply chain dysfunction due to insecurity, violence and limited access to human resources have all made the uptake of family planning almost impossible.

Although there is a paucity of quality scientific information on the effect of different interventions in conflict settings on family planning uptake, the experience of several countries and organisations present important lessons that can be used in Yemen. From the review of interventions it is clear that there is no single independent intervention that can increase the FP uptake in a crisis environment like Yemen. Interventions such as franchising/outsourcing, mobile phone-based counselling, value clarification, community engagement, and outreach, may be implemented together in order to increase FP uptake in Yemen.

The evidence also shows that innovations such as appealing to the male responsibility to provide RH access to women may be necessary to achieve significant results. Collaboration, both between local and international organisations and with women's networks, is key to increase FP uptake.

Currently, the policy environment is unclear as there is no central authority in Yemen to enforce the free or subsidised contraceptives that were in place before the conflict. Since, the health system is directed by different factions of the conflict and bilateral organisations and NGOs, that implement what they can, the recommendations will be directed to them instead. It is also noteworthy that family planning policies may not be followed or implemented in full, during conflict situation.

6.2 Recommendations

Based on the findings and the current context, the following recommendations are made.

1- To the Bilateral/Multilateral Organisations (Donor Agencies/ suppliers/ implementers)

- Collaborate or outsource contraceptive supply and FP services to local NGOs and community groups and sign an agreement to provide FP services all women/men.
- Train partners and other FP providers on value clarification to enable them to provide non-discriminatory and non-judgemental services to all irrespective of marital status age or tribe.
- Increase funding for FP activities in Yemen, and ensure that every aid supply includes contraceptives and family planning supplies and equipment.
- Subsidise contraceptives and FP methods for all or use the coupon system to provide free FP services for the poor, displaced women and young people to ensure equity in access and utilisation.
- Use the UNCHR to provide leadership and coordination of contraceptive supplies to Yemeni women and plan towards integrating FP in reproductive health programs when peace is restored
- Create interactive maps showing locations and contact numbers of all service providers at different zones of the conflict to enable potential suppliers to avoid duplication; and for clients to contact the nearest supplier.

2- To Service Providers (local NGOs and the YMoPHP)

- Involve male partners in FP education and use innovative community engagement techniques to dialogue for change in gender norms that hinder FP access and utilisation.
- Use the MISIP to help guide the implementation of FP services in the country.
- Experiment with the use of mobile phones to provide accurate information to people in remote areas and those who cannot leave their homes due to violence.

- Maintain accurate data of services and stock of contraceptive commodities for evidence-informed initiatives and future planning.
- Provide emergency contraception for all rape victims and safe abortion care for pregnant women who need it.

3- To the Factional health authorities

- Advocate for increased funding for contraceptive and FP services by lobbying, and dialoguing with the different authorities.
- Advocate for cessation in targeting of health facilities and civilians, especially health personnel, women and children.
- Assist aid agencies and NGOs to secure passage through checkpoints and provide security for outreach teams and all health facilities and personnel.
- Purchase telecommunication equipment using satellite communication and radio, such as an outlet light house, in order to overcome the frequent fuel shortages, power outages of electricity and internet and use it for information delivery, data collection and training.

4- To the Author

- Conduct a field research on the influence of conflict on family planning, to throw more light into plight of Yemeni women.

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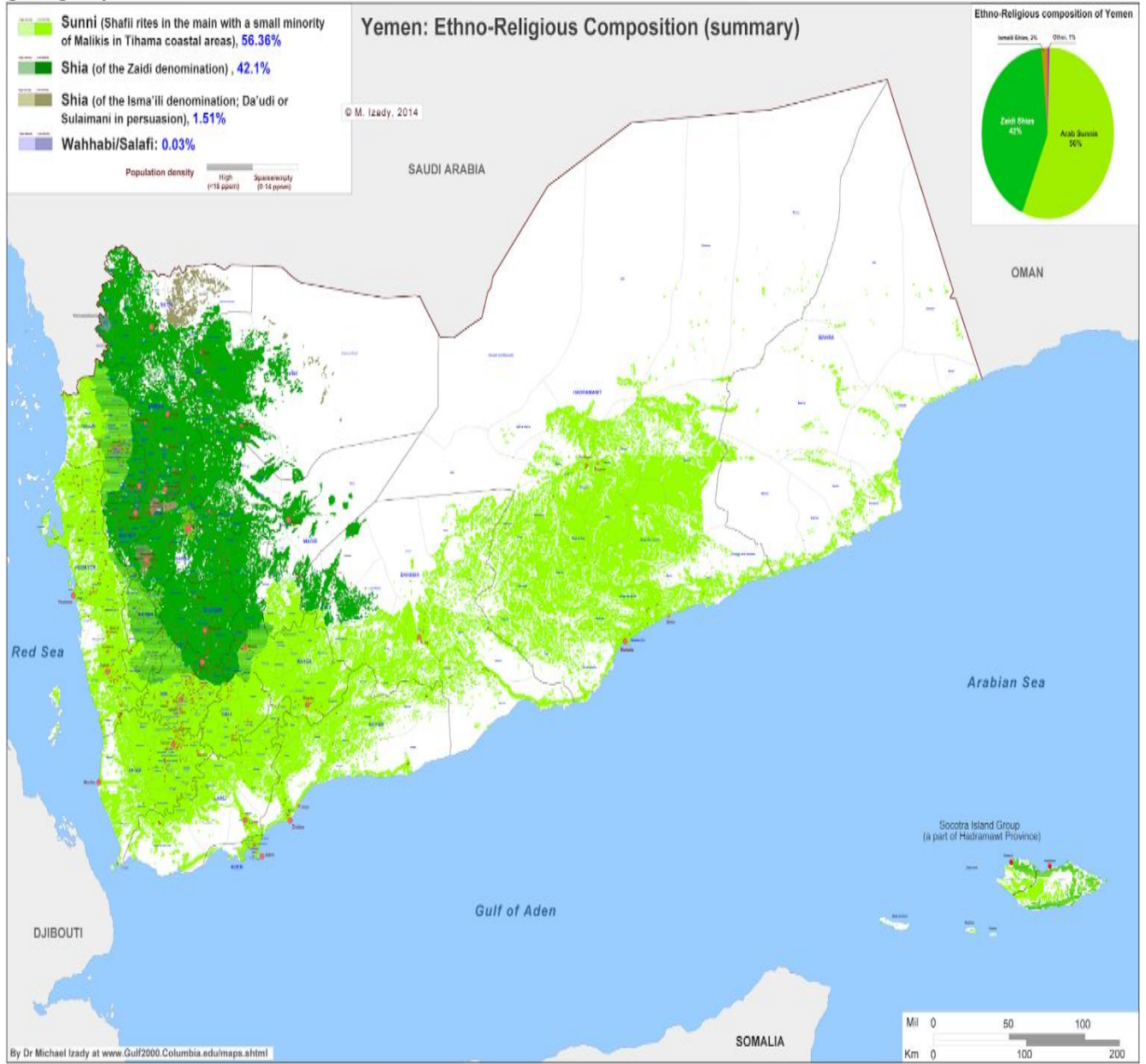
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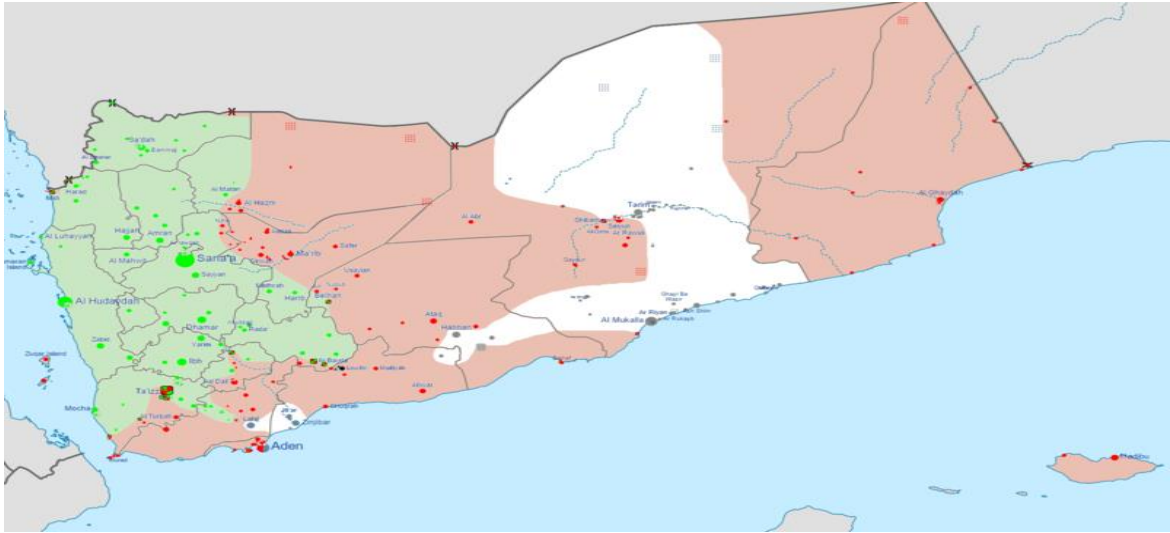
ANNEXES

Annex I: Map of Yemen showing the major Islamic doctrines and their geographical locations



Source: (160)

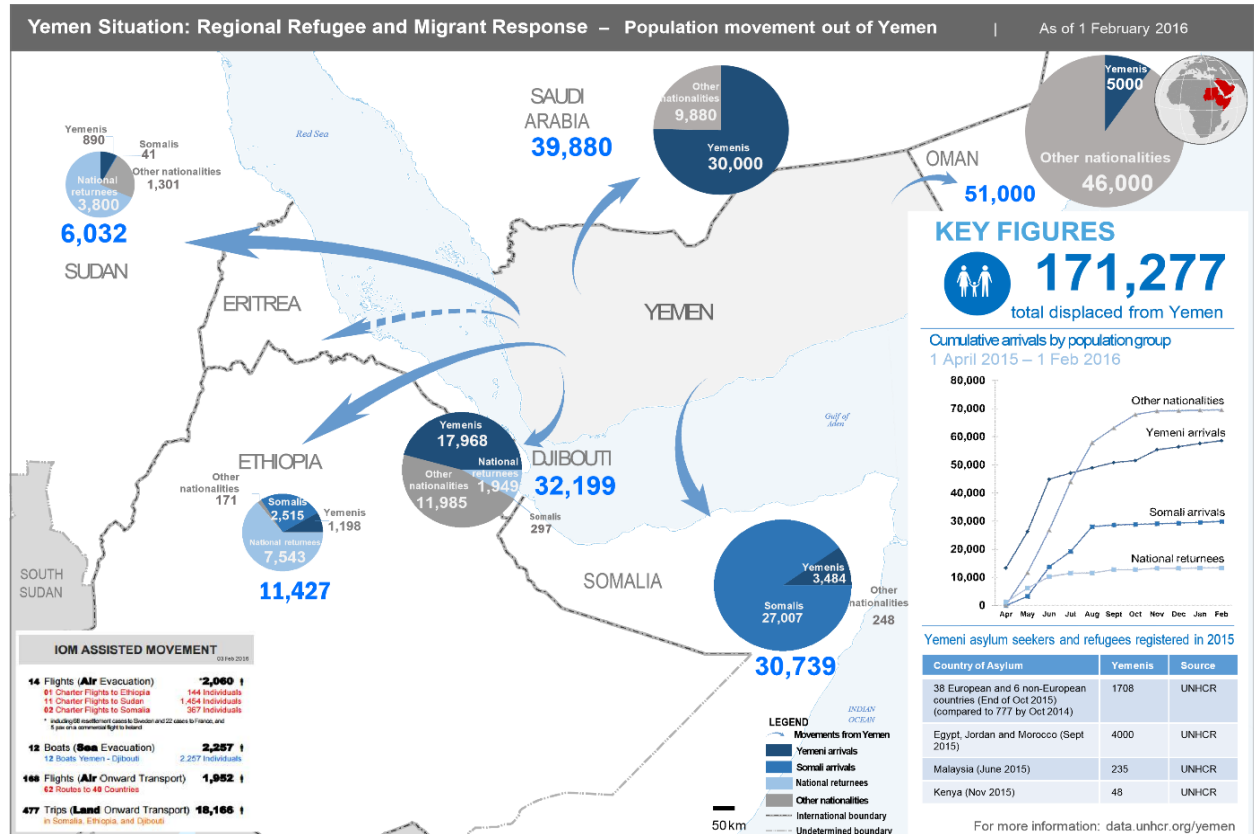
Annex II : Map of Yemen Showing conflict zones



Key: Controlled by Revolutionary Committee Controlled by Hadi-led government and the Southern Movement Controlled by Ansar al-Sharia/AQAP forces

Source: (161)

Annex III : Population Movement out of Yemen



Source: (162)