ISSN 2320-5407

International Journal of Advanced Research (2018)



ISSN NO. 2320-5407

Journal homepage: <u>http://www.journalijar.com</u>

INTERNATIONAL JOURNAL OF ADVANCED RESEARCH

Barriers for the use of contraceptives among married women in Parwan province, Afghanistan

M. Phill Dissertation submitted to

Maulana Azad University, Jodhpur

In partial fulfillment of the requirements

For the award of the degree of

MASTER OF Public Health

BY

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Dedication

To all people of Afghanistan and those who make efforts to realize the Afghans' right to health

Acknowledgement

First of all, I must thank the almighty of Allah for his continuous mercy and favor upon me. Secondly, I am deeply grateful to my thesis supervisor Dr. Mohammad Najeeb Baleegh MD, MPH for his attentive supervision in the whole process of study, starting from conception of idea to the completion of thesis. Without his academic emotional and technical support and encouragement I could not have come this far. He enabled me to think critically and act scientifically. He also helped me a lot in refining my statistical analysis and also made me understand the conceptual basis of it. Ialso thank Dr. Wrishmeen Sabawoon, MD, PhD Epidemiologist, who not only served as my official task team member in the place of my work, but also encouraged and challenged me throughout the thesis process and this thesis could not have been completed without his professional and skillful instructions from Public Health point of view.

It is an honor for me to appreciate Ms. Bhawna Sati, Assistant Professor, Dr. Abhishek Lohra, Assistant Professor for their friendly attitude, supporting manner and precious advices in the whole periodof my master degree. They were always open to the student's suggestions and requests.

I would like to thank Maulana Azad University Public Health Faculty members for their continuous support and assistance.

Finally, I am sincerely grateful to all the participants in the study, who willingly gave us time and shared their knowledge, and without whose consent this study would not have been possible. It is my sincere hope that the results of the study be of benefit them and their families.

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Abbreviations and Acronyms

AMS	Afghanistan Mortality Survey
ADHS	Afghanistan Demographic and Health Survey
AHS	Afghanistan Health Survey
BHC	Basic Health Center
BPHS	Basic Package of Health Services
CHC	Comprehensive Health Center
COCs	Combined Oral Contraceptives
CSO	Central Statistical Office
DH	District Hospital
EPHS	Essential Package of Hospital Services
FP	Family Planning
GoIRA	Government of Islamic Republic of Afghanistan
HF	Health Facility
IDI	In-Depth Interview
IRB	Institutional Review Board
IUD	Intrauterine device
MAU	Maulana Azada University
MoPH	Ministry of Public Health
MRR	Maternal Mortality Rate
NGO	Non-Governmental Organizations
OPD	Outpatient Department
OR	Odds ratio
PH	Provincial Hospital
PI	Principal Investigator
PPHD	Provincial Public Health Directorate
RMNCAH	Reproductive Maternal and Newborn Child and Adolescents for Health
UN	United Nation
VAS	Visual Analogue Scale
WCBA	Women Child Bearing Age

1. Research Question

What are the barriers for use of contraceptives amongmarried WCBA in Parwan Province, Afghanistan?

2. Abstract

Introduction: Afghans have been coping with the high level of maternal mortality ratio over the past three decades. One of its causes is under-utilization of contraceptive methods. Its usage was 7.0% in 2003, 11.3% in 2012, and 23% in 2015. In order to address the issue, Ministry of Public Health (MoPH), Afghanistan, has integrated family planning services into the basic package of health services (BPHS) since 2003, and integrated the services in the essential package of hospital services (EPHS) since 2005. National level studies carried out in the country has described utilization of the services in the country. However, the information was only from respondent perspectives and had limited information on the topic for Parwan province.

Objectives: This study aims to:

- describe knowledge, and awareness regarding contraceptive methods,
- describe health seeking behaviors following occurrence of adverse effects of contraceptives,
- use and attitude of the married child bearing aged women (WCBA) regarding contraceptive methods,
- perception of health care providers regarding under-use of contraceptive methods; complains of married WCBA; and suggestion for improvement of family planning services.

Methods: This is a cross-sectional study describing barriers for the use of contraceptives amongmarried WCBA attending out-patient department (OPD) of 12 health facilities and perceptions of health care providers in Parwan province of Afghanistan. A total of 370 married WCBA and 24 health care providers were interviewed by trained surveyors using semi-structured questionnaire. Data was collected between November 2017 and January 2018. Data was entered in Ms. Excel 2016 and triple checked. Data was transferred to STATA version 14 and then analyzed. Each variable in the dataset was described.

Key result: A total of 370 married WCBA were interviewed in 12 health facilities including Parwan Provincial hospital (42%), Bagram CHC (9%), SyaGird CHC (8%), Qashqal CHC (6%), Bayan CHC (6%), AqtashCHC (6%), Jabal Seraj CHC (5%), Lolinj District Hospital (5%),

Totumdara CHC (4%), Sayadan CHC (4%), Shikh Ali CHC (3%) and BaghiMaidan CHC (3%). The study subject was65 (17.57%) in 15-20 age group, 209 (56%) in 21-35 age group and 96 (26%) age group. However, as observed the Knowledge on modern FP method as dissenting order; Pills (65.14 %), Injectable (61.08), Condom (46.49), IUD (37.3%), didn't know 26.22%, while; 54% of women who did not use/ were not in the favour of using of contraceptives believed that contraceptive have significant side effects, 36 % believed that it was prohibited as per religion and 25 % didn't use any method regardless of any reasons and followed by age category of 21-35 years were the major users of contraceptives.

Conclusion:There were serious gaps in knowledge, perception and use of FP. We observed gaps in the use of contraceptive methods regarding multiple use of one condom, timings for taking pill, ideal time for insertion of IUD. We also found that married WCBA believed that contraceptive have significant side effects, prohibited as per religion and it doesn't work or space birth. 28% of married WCBA didn't use any contraceptive method at all. Health care providers perceived that ineffective awareness raising programs, religious believes, decision makers at home, misbelieves, demand for more children were the main reasons for not using/low coverage of family planning methods and weight gain, irregularity of menstrual period, mood changes, headache, nausea, breast tenderness, missing the periods, impaired vision, decreased libido and vaginal discharges are the main reasons that married WCBA discontinued the use of FP methods. So, it is strongly recommended that policy for both public and private sectors (NGOs, MoPH, private practitioners) and other institutions that are involved in family planning programs should be designed in a way to enhance knowledge, attitude and practice on the use of modern contraceptives among married WCBA and home decision makers such as husband. We also recommend that other decision makers of the family like father, mother -in -law etc. should also encouraged to promote small family with adequate spacing.

Keywords: knowledge, awareness, use, contraceptive method, health care provider's perceptions, Afghanistan

3. Introduction

Population growth has been a major concern globally, but especially in developing countries because it has had a wider impact on the socio-economic development. Higher fertilities conjoined with the declining mortality rates have resulted in a larger gap between birth and death rates across the globe and subsequently in higher annual population growth rate. As result of high population growth, many countries had to adopt population policies aimed at reducing the prevailing of high birth rate. Family planning—the ability of individuals and couples to attain their desired number and spacing of their children through contraceptive use—is one of the most cost effective public health interventions and is pivotal to reducing the country's fertility (Graff, 2014).

Fertility decline is a means of achieving a demographic dividend, with the consequent potential of reducing poverty, boosting economic growth and contributing to the overall well-being of families and societies (Cleland et al. 2006; Graff and Bremner 2014; Gribble and Bremner 2012). Contraceptive use reduces the pregnancy rate, the number of unintended pregnancies and associated induced abortions and the proportion of high-risk pregnancies, therefore causing a reduction in maternal mortality and an improvement in maternal and child health. Studies have estimated that 30% to 40% of maternal deaths (Ahmed et al. 2012; Cleland, Ndugwa, and Zulu 2011; Collumbien, Gerressu, and Cleland 2004; Singh et al. 2009) and 90% of induced abortion related maternal deaths (Cleland et al. 2006) could be averted if all women who desired to use

contraceptives had access to them. In addition, contraception makes significant contributions to reducing levels of infant, neonatal and under-five mortality (Tsui and ACreanga 2009). It is estimated that in developing countries as many as 1.8 million child deaths could be averted if all pregnancies were spaced by at least three years (Rutstein 2008). In the past few decades, investments in family planning programs have raised the level of contraceptive use from 19% to 62% in the developing world and contributed to an estimated 75% decline in fertility (Greanga et al. 2011). However, despite the increase in supply of and demand for family planning services, gross inequities exist both between and within countries in the use of contraceptives, posing challenges to health policy and programming. Use of modern contraceptives in developing countries remains comparatively low. In many countries, the demand for contraceptives is still not being fulfilled.

Unlike rest of the world, there hasn't been recent nationwide and acceptable census to know that exact population profile of Afghanistan. (CSO, 2015-2016)However, Central Statistical Office (CSO) provides the population profile of Afghanistan on annual basis. These reports also reflect increased population every year passes. As per the recent statistical yearbook 2016 - 2017, Afghanistan has a population of roughly 29.2 million. Of the population 49% is females and among them 6.2 million are during the reproductive ages (15 – 54 years). Furthermore, the yearbook signifies that the most striking feature of the Afghan population has been its very young age structure as 46.2% (12.8 millions) is under 15 years, which indicates a built-in momentum for future growth. 75% of Afghanistan's settled populations lives in rural areas with poor access to health and educational services. Gross population density is 39 persons per square kilometer, but some of the areas have population density of over 900. Therefore, under such alarming population, the available resource particularly environment have been under immense pressure, which ultimately results in compromised agricultural output and outcomes further exacerbating the vicious effects of the population growth.

Women have been the most seriously affected members of the population. Frequent pregnancies and childbearing expose women to high risks of maternal morbidity and mortality. MMR over the preceding 3 years is 276/10,000 live births. It is a fact of admiration that the maternal mortality and morbidity have taken a downwards slope since 2003. (ADHS, 2015). However, still the fertility rate is 5.3 which might risk mother's health and account for further maternal mortality if unwanted or mistimed pregnancies are observed.

Right after establishment of the new administration and launching of the Basic Package of Healthcare Services (BPHS), Government of Islamic Republic of Afghanistan (GoIRA) especially Ministry of Public Health (MoPH) has initiated policies to improve reproductive health status of Afghan women. Resulting in expansion of the reproductive health services (including contraception) to community level, where contraception prevalence gradually increased. As per the findings of the recent ADHS, the use of the any family planning method has increased to 23%, while use of modern methods of contraception have surged from nearly nil to 20%. However, only, an estimated 16.3% of women reported having used a modern method of contraception.

The extracted data from the AHDS represent viewpoints of nationwide collective for already specified indicators associated with family planning and contraception. Currently, family planning services are provided by both the public and private sectors, with the commodities provided free in public health facilities. In spite of the various investments in family planning programs in the country, contraceptive prevalence has not shown any sign of increasing. (All MoPH research depatment, 2015)According to the 2015 ADHS, while knowledge of contraceptives is generally high, uptake is low; only 20% of married women of reproductive age are using any contraceptive method and, as mentioned, only a small proportion is using a modern family planning method, while unmet need for contraception was found to be 25% during ADHS 2015.

However, the use of contraception has a great deal of contribution to the family planning efforts the Afghan Ministry of Public Health (MoPH) put in place also ultimately leading to reduction in maternal and infant mortality and morbidity. As documented, there is a high level of awareness among the public on the modern methods of contraceptives counting for 92 % of the population being ware of at least one modern method of family planning. Although the level of contraception use has improved from 10% in 2003 to 15% in 2007, to 20% in 2010 and although there are no changes have seen in 2016 and stacked to 20%, there is still a huge gap between the knowledge and practice of family planning that highlights a considerably low level of contraception use compared with high level of contraception knowledge. This is perceived as a major public health concern when it comes to effective use of family planning and reproductive health strategies at large in Afghanistan. As such, there is an immense need to explore contributing barrier to the low use of contraception against such a high public awareness on the

availability of different modern methods of family planning. Therefore, this study would present data on current level of knowledge, attitudes and practices related to family planning in the Parwan province.

3.1. Rationale

Afghanistan is one of the fastest growing populations in the world with annual average (2010-2015) rate of 3.0 percent (UN). According to Afghanistan Demographic Household Survey (ADHS, 2015), Women have been the most seriously affected members of the population. Frequent pregnancies and childbearing expose women to high risks of maternal morbidity and mortality. MMR over the preceding 3 years is 276/10,000 live births. It shows the fact of admiration that the maternal mortality and morbidity have taken a downwards slope since 2003. However, as the survey says that; still the fertility rate is 5.3 which might risk mother's health and account for further maternal mortality if unwanted or mistimed pregnancies are observed. Wherever, among the total 29.3 million population of Afghanistan, 49 percent arefemales and among them 6.2 million at reproductive age (15-49 years), (Afghanistan, Statistical yearbook 2016-2017). Though, one of the biggest challenges that Afghanistan is facing today is the high mortality rate because of the high birth rates.

Furthermore, there were no specific similar study in the country level to assess barriers for the use of contraceptives among married women in Parwan province, Afghanistan; however, other studies explored the use of contraceptives among women in reproductive age in Afghanistan that reveals some improvement from 10% in 2003 to 15% in 2007 and to 20% in 2010 with no changes in 2016(20%). Findings of study carried out by my research will help the RMNCAH department of MOPH to play advocacy role in intra-ministerial collaborations for strengthening of current policies & strategies with discovering the barriers preventing women in reproductive age from effective utilization of modern family planning methods.

3.2. Objectives

Primary objective:

- 1. To describe the prospective of subject (Married WCBA)on the Family planning methods.
 - a. To describe knowledge and awareness regarding contraceptive methods.
 - b. To describe health seeking behaviors following occurrence of adverse effects of contraceptives.
 - c. To know the attitude of married WCBA regarding contraceptive methods and its usages.

Secondary objectives:

- 1. To describe the prospective of health care providers on the use of family planning methods by Married WCBA.
 - a. To know perception of health care providers regarding underuse of contraceptive methods; complains of married WCBA; and suggestion for improving of FP services.

3.3. Literature review

Similar huge gap with variable degrees was observed between knowledge and practice of family planning methods in studies conducted in different places particularly in developing countries. Although the level of knowledge found in nearly all of the conducted studies is more than 90%, the percentage of those practicing family planning rages form 20%-50%. These studies reveal that knowledge and awareness don't always lead to the use of contraceptives and there are other barriers which determine contraception use by women (Prachi, 2008).

This study reveals that 98% of the women had knowledge about family planning and 94.2% of them had knowledge about contraceptives. Over 50% had gained information from media. Majority (98%) thought that contraceptive use was beneficial but only 55.2% had used contraceptives and 84% of them were satisfied. Sixty-two percent were currently using contraceptives, 37.9% of them were using oral contraceptives, 37.9% of them were using oral contraceptives, 37.9% of them were using oral contraceptives, 37.9%.

In a study done by Jobert Richie et.al also suggests that; ninety-six percent of these women had already heard about family planning. Almost all respondents (98 %) were aware of at least one contraceptive method, the most cited being the male condom (96 %), the safe period (86.1 %), injectable (76.2 %) and oral pills (75.2 %), Sixty-six women (65.3 %) were currently practicing at least one contraceptive method, and the three prevailing methods used were: the safe period (50 %), the male condom (34.8 %), and injectable (12.1 %). The main reasons precluding women from practicing contraception were lack of knowledge (31.4 %), uselessness (31.4 %) and unbearable side effects (8.6 %). Fourteen of these women (42.4 %) expressed the willingness to start practicing contraception if they received more information about the subject. Decision on the number of children to have was made by both the man and the woman in 59.5 % of cases. The practice of contraception had been decided by the couple in 39.6 % of cases, and 9.4 % of men were not aware that their wives were currently practicing contraception. (Jobert Richie N. Nansseu, 2015).

Another KAP study showed that; 82.2% women were aware of the existence of a contraceptive method, only 44.2% ever used one. The most commonly used contraceptive was condom (34.5%). 82.6% were willing to undergo tubectomy in future whereas only 20.3% were willing to accept an intrauterine contraceptive device. The study highlights that awareness does not always lead to the use of contraceptives. A lot of educational and motivational activities and improvement in family planning services are needed to promote the use of contraceptives and reduce the high fertility rate. (Srivastava Reena, 2005).

Out of 100 interviewed women with mean age of 29.7 years, in a study done by Rozina Mustafa in 2008;81(81%) had some knowledge about family planning methods. The media provided information of contraceptives in 52 out of 81 (64%) women. Regarding the usage of contraceptive methods, only 53 (53%) of the respondents were using some sort of contraception. Barrier method (condoms) was in practice by 18 (33.9%) and 12 (22.6%) of women had already undergone tubal ligation. The women using injectable and intrauterine contraceptive devices were 10 (18.8%) and 7 (13.2%) respectively. Six were using oral contraceptive pills (11.3%). Positive attitude towards contraception was shown by 76 (76%) of them, while 41(41%) stated their husbands' positive attitude towards contraception. In the present study, there was a low contraceptive use among women of rural origin despite good knowledge. Motivation of couples

through media and health personnel can help to achieve positive attitude of husbands for effective use of contraceptives. (Rozina Mustafa, 2008).

Women empowerment (OR = 1.4; 95% CI: 1.13 - 1.63), male-female age difference of less or equal to nine (OR = 1.6; 95 CI: 1.01 - 2.66), and advice given at health care facilities on family planning (OR = 1.6; 95 CI: 1.37 - 1.96) were predictors of modern contraceptive use. Woman sexual violence was not associated with modern contraceptive use. The predictors of modern contraceptive use in our study correspond with previous studies in low and middle income countries. Women empowerment, male-female age difference, and child desire were important predictors for modern contraceptive use. This highlights the need to promote contraceptive use among women of reproductive age. (Paulo Lino Kidayi, 2015).

Socio-economic and demographic characteristics of women, access to family planning (FP) information and women's empowerment were associated with the variance of modern contraceptive use between the regions. Women's empowerment was positively associated with modern contraceptive use in all regions. Access to information was associated with modern contraceptive use in all regions except in the North region (AOR: 1.24, 95%CI: O.8- 1.92). This study highlights that the variance of modern contraceptive use may due to the way in which FP factors are associated with modern contraceptive use vary between regions and how different FP factors occur among regions. Further researches are needed to investigate potential factors on supply side that influence such variance. (TUYISHIME, 2016).

Combined oral contraceptives (COCs) were the commonest method used < 29 years of age while intrauterine methods were more common later in life. Condom use increased successively over time. Current contraceptive use in 19-year old women from the 82-cohort was higher (78%) and the number of women \leq 19 year who had been pregnant was lower whereas repeated abortions were higher compared to the 62- and 72-cohorts. Common reasons for cessation with COC's were mental side effects and weight increase. Smoking decreased over time and BMI increased over time and was higher in low socio-economic status areas in the 82- cohort. At 44 years of age there was a difference in contraceptive use and pregnancies between women who had been pregnant \leq 19 years of age compared to those who had not been pregnant as teenagers. The only predictor found for weight increase was age resulting in a gain of 0.45 kg/year. COC use was not a predictor of weight increase (0.072 kg/year). Smokers decreased their weight by 1.64 kg per 15 years. Women from the 82-cohort reported a greater severity of dysmenorrhea. The efficacy of COCs to relieve dysmenorrhea was evaluated using a verbal multidimensional scoring (VMS) system and a visual analogue scale (VAS). COC use and increasing age independently of each other reduced dysmenorrhea. (Sciences, 2011).

In western Africa, the subjective need for contraception remained unchanged; about 46% of married or cohabiting women reported a desire to stop and/or postpone childbearing for at least two years. The percentage of women who approved of contraception rose from 32 to 39 and the percentage with access to contraceptive methods rose from 8 to 29. The proportion of women who were using a modern method when interviewed increased from 7 to 15% (equivalent to an average annual increase of 0.6 percentage points). In eastern African countries, trends were much more favorable, with contraceptive use showing an average annual increase of 1.4 percentage points (from 16% in 1986 to 33% in 2007). (sub-Saharan, Novemebr 2010).

This study examined the knowledge and practice of contraceptives among potential women in south west, Nigeria. The quantitative data used for this study were obtained from the 2008 Nigeria Demographic Health Survey (NDHS). The survey collected information from a nationally representative sample of about 33,385 women age (15-49) of which 6790 women of reproductive age were sampled and interviewed in southwest Nigeria. Also, the qualitative information used was carried out in Ife/Ijesa senatorial district at which the in-depth interview was carried out in Ile-Ife to buttress the quantitative strength of this study. The findings revealed that more than 4 in every 10 respondents have intention of using the contraception in the future, while more than 3 in every 10 respondents do not intend to use it in the future. Also, majority of the respondents have knowledge about the side effect of contraception. It was observed that respondent's source of knowledge of any family planning method have a direct relationship with the contraceptive usage among women of reproductive ages in south west, Nigeria. (Adeyemo Adeyinka, 2012).

The results showed that knowledge of modern contraceptives among the respondents is universal, with 99% of women being aware of at least one modern method of contraceptive. The respondents and stakeholders showed a positive attitude in their support of family planning programs, and more than half of the respondents knew where to obtain contraceptive methods. Around 56% of the women were practicing family planning at the time the survey was conducted, with their main reasons being fertility desire despite the side effects of some methods, and to maintain their standard of living. (Graduate Student, 2008).

Similar huge gap with variable degrees was observed between knowledge and practice of family planning methods in studies conducted in different places particularly in developing countries. Although the level of knowledge found in nearly all of the conducted studies is more than 90%, the percentage of those practicing family planning rages form 20%-50%. These studies reveal that knowledge and awareness don't always lead to the use of contraceptives and there are other factors which determine contraception use by women (Prachi Renjhen, 2010).

Although the link between low level of formal education of both men and women and non-use of contraception is established by Afghan Mortality Survey (Afghan Public Health Institute, 2011), and low use of contraception was also observed with high level of education due to lack of men's involvement in family planning programs (Kshama Vishwakarma, 2014).

A substantial proportion (33.0%) of women were ignorant of the existence of emergency contraception. Only 10.0% of women had used emergency contraception before and only 2.5% had used it in an attempt to prevent this pregnancy. Of the 134 women who knew about emergency contraception, the main reason (41.8%) for not using it was risk-taking behavior. More nulliparous women (88.5% versus 57.6%; P<0.001) and women younger than 20 years (84.0% versus 61.3%; P<0.01) had heard of emergency contraception. Women who were educated beyond secondary school level (71.0% versus 37.5%; P<0.01) and unmarried women compared with married, cohabiting, or divorced women (87.1% versus 49.5%; P<0.001) were also more likely to have heard of emergency contraception. Women younger than 20 years were more likely to have used this form of birth control in the past (18.0% versus 7.3%; P<0.05). (Department of Obstetrics and Gynaecology, No 4 December 1999).

It is generally believed that women's lack of decision-making power may restrict their use of modern contraceptives. However, few studies have examined the different dimensions of women's empowerment and contraceptive use in African countries. Data came from the latest round of Demographic and Health Surveys conducted between 2006 and 2008 in Namibia, Zambia, Ghana and Uganda. Responses from married or cohabiting women aged 15–49 were analyzed for six dimensions of empowerment and the current use of female-only methods or couple methods. Bivariate and multivariate multinomial regressions were used to identify associations between the empowerment score and method use. Positive associations were found between the overall empowerment score and method use in all countries (relative risk ratios, 1.1–1.3). In multivariate analysis, household economic decision making was associated

with the use of either female-only or couple methods (1.1 for all), as was agreement on fertility preferences (1.3-1.6) and the ability to negotiate sexual activity (1.1-1.2). In Namibia, women's negative attitudes toward domestic violence was correlated with the use of couple methods (1.1). Intervention programs aimed at increasing contraceptive use may need to involve different approaches, including promoting couples' discussion of fertility preferences and family planning, improving women's self-efficacy in negotiating sexual activity and increasing their economic independence. (Development, Volume 38, Number 1, March 2012).

Nigerian women are known to have high fertility rates and a low utilization of modern contraceptives. Understanding the factors affecting the use of contraceptives using a nationally representative data is crucial to tackling the low prevalence of contraceptive use in Nigeria. Secondary dataset of 33,385 women aged 15-49 years, who participated in the 2008 National Demographic and Health Survey was analyzed. Researcher calculated contraceptive prevalence rates for various population sub-groups, and examined the association between sociodemographic characteristics and current modern contraceptive use, using multiple logistic regressions. Mean age of the respondents was 31.1 ± 8.8 years. Current contraceptive prevalence rate was 13.2%, while that of modern methods was 9.4%. The significant factors associated with the utilization of contraceptives were urban residence (OR=1.22, 95%CI=1.11-1.35), being a working-class woman (OR=1.22, 95%CI=1.11-1.35), being educated (OR=1.22, 95%CI=1.11-1.35), parity (OR=1.22, 95%CI=1.11-1.35), being wealthy (OR=2.62, 95%CI=2.14-3.21). Importantly, the likelihood utilization varied across the gradient of wealth. Women in richest (OR=2.62, 95%CI=2.14-3.21), richer (OR=2.44, 95%CI=2 .02-2.94), and middle (OR=1.78, 95%CI=1.48-2.14) wealth quintiles were more likely to use modern method compared to women in the poorest category. Prevalence rates were very low across virtually all segments of the population. Concerted efforts are required to increase use of modern methods of contraception. (Utilization of Modern Contraceptive among Women of Childbearing Age in Resource Constraint Setting: Evidence from 2008 National Demographic and Health Survey in Nigeria, 2016)

Thirty-five percent of women in stable marital relations reported to be using contraceptive methods. Highest (58%) use of contraceptives was reported among women in formal employment. Factors found to be significantly associated with contraceptive use were: education level, occupation, traditional cultural beliefs, and support from husband/partners and access to

information while religion, decision maker on desired number of children in the family were not found to be significantly associated with the use of contraceptive methods. (Esabella Jobu Michael, November, 2012).

The results revealed that the contraceptive use was found higher among employed women (67%) than that of unemployed women. Women's age, education, region, number of living children, and child preference were found to be significantly associated with current use of contraception among employed women. On the other hand, women's age, education, husband's education, region, residence, religion, number of living children, ever heard about family planning, and child preference were identified as the significant predictors of contraceptive use among unemployed women. (Ahmed Zohirul Islam & 2 Md. Rafiqul Islam, 2016).

4. Methodology

4.1. Study design

The design of the study was adopted cross-sectional quantitative research. The design was appropriate and enabled us to represent the existing barriersfor use of contraceptive among married WCBA in Parwan province, Afghanistan.

4.2. Study methods

Interviews and semi-structured questionnaires were used for data collection. Interviews were done as planned with healthcare providers and ever-married women by using semi-structured structured questionnaires.

4.3. Study setting

The study has been conducted in outpatient departments of one PH, one DH and 10 CHCs in Parwan province. Out of them four health facilities are located in Char-e-Kar district and its suburbs while the other eight health facilities are located in semi-rural and rural districts of Parwan province. Health facilities located Char-e-Kar district (the provincial capital) and its suburbs are CharikarPH, Bayan, Totumdara and Sayadan CHCs. The remaining health facilities are located in Jabal Seraj, Salang, Shinwary, Siagord, Bagram, Shikh Ali, Said Khil and Surkh Parsa districts. Selected women from all health facilities located in urban, semi-rural and rural districts of Parwan helped us to have both the rural and urban perspectives on the issue.





4.4. Study subjects

The key informants for this study as inclusion criteria:

- Ever married women (aged 15 49 years) attending the 12 selected health facilities for the following purposes:
 - o ANC
 - o PNC
 - Delivery
 - Family planning
 - Accompanying a patient
 - o Gyn/Obs OPD
 - Other disease OPD
- Female health staff associated with women's health especially reproductive health.

The exclusion criteria for the study:

- Ever married women aged below 15
- All unmarried women
- Women from outside catchment area of the selected HFs
- Women unwilling to participate in the study

4.5. Study teams

In order to ensure proper data collection, six local teams each consisting of two female data collectors were hired to independently undertake data collection. The data collectors were selected among medical doctors and those with social science background who were familiar with the health care system inAfghanistan, who had working experience with organizations

delivering health services and who were also involved in conducting household surveys and qualitative studies.

All data collectors were fluent in both spoken and written local languages. The local teams conducted the interviews and transcribed them.

Principle Investigator (PI) was in charge of coordinating the activities, training of the data collectors, managing the data and controlling the quality of the whole process.

4.6. Data collection

Each data collectors carried out a minimum of 32 to 33 interviews with women of reproductive age, interviewed with a female doctor and conducted an interview with a midwife in each health facility. In total, 370 interviews with women and 24 interviews with female health staff were conducted in 12 Health Facilities (HFs) of Parwan Province. The data collection and analysis were performed simultaneously and the interviews were continued with the subjects till reaching the point of saturation. This was when the data collected from participants were redundant and no new information were given by any new participant.

Sample size Determination:

Total Number (N)	28530
Margin of Error (e)	0.05
Target Sample (n)	n=N/(1+Ne2)
e2	0.0025
Ne2	71.325
1+Ne2	72.325
Target Sample	394

The sample size was determined using the formula below: Slovin's formula. $n=N/(1 + Ne)^2$

Sampling frames per health facilities (HFs)

No Facility type type Total ANC ANC PNC PNC Total Potal FP Target for Each

	Total	11090	11085	6355	28530	394
12	Comprehensive Health Center	460	312	314	1086	15
11	District Hospital	471	538	329	1338	18
10	Comprehensive Health Center	463	476	274	1213	17
9	Comprehensive Health Center	1310	607	277	2194	30
8	Comprehensive Health Center	956	468	344	1768	24
7	Comprehensive Health Center	438	287	172	897	12
6	Comprehensive Health Center	900	336	348	1584	22
5	Comprehensive Health Center	704	483	409	1596	22
4	Provincial Hospital	3163	6002	2919	12084	167
3	Comprehensive Health Center	722	612	80	1414	20
2	Comprehensive Health Center	1232	757	449	2438	34
1	Comprehensive Health Center	271	207	440	918	13

Study duration: The study was completed within six months' period starting from Decmber 2017 and ended in May 2018. The study timeline was as below summarized and the main study activities and their proposed times.

Activities/Months	M1	M2	M3	M4	M5	M6
Develop and submit draft outline proposal	X	-	-	-	-	-
Revise and submit the final outline proposal	X					
Application for ethical approval	Х					
Submission of questionnaire		Х				
Ethical approval		Х				
Data collection and initial analysis			Х	Х		
Draft methodology and result chapters					Х	
Draft discussion chapter					Х	
Final draft						Х
Final submission						

4.7. Analysis

Principle Investigator (PI) carried out the analysis manually by taking the following steps:

- 1. Reviewed all the data repeatedly to ensure about the content of each interview sheets.
- 2. Information were organized into two sections including description of women's knowledge on application of the family planning methods they were familiar with; and their reasons for not using family planning methods.
- 3. Themes were identified and labeled.
- 4. Each of theme was searched for identification of the specific and most frequently mentioned reasons for not using contraception by each group of participants. Moreover, we searched for common reasons among both groups of participants i.e. the women of reproductive age and the health staff.
- 5. In order to avoid information bias; we only focused on married women and women living with their partners because sexuality topic among unmarried women in all Afghanistan, particularly in Parwan province is a sensitive issue.

4.8. Ethical Considerations

The study was carried out after receiving ethical approval from Ethics Panel ofInstitutional Review Board (IRB) of the Ministry of Public Health (MoPH), Afghanistan.

Since the study intended to deal with human data, verbal informed consent was taken from each participant. The consent forms were translated to local language (Dari) and the interviews were conducted in Dari language.

We ensured that the participants voluntarily took part in the study and provided them with the option to withdraw from the study at any time they felt uncomfortable. For the observing confidentiality, we did not record any names or addresses of the participants. We used specific codes for each health facility, type of study subjects i.e. women attended the selected health facilities, female doctors and midwives, and each individual participant. All information waskept in a safe place so that no one except the Principal Investigator can have access to it.

We ensured privacy during all interviews by conducting the interviews in a place within the health facilities that was convenient for the study subjects and that no one else was able to hear the dialogue.

The study merely involved the semi-structured questioner with target groups and since we did not record their voices or written down their names or address, so they agreed to have interview with us with feeling of no treats. The investigation team observed for the privacy, confidentiality and safety measures to ensure that the respondents were not exposed to any risk as a result of information they share with the study team.

The study provided direct benefits neither to the subjects, nor to the society to which the subjects belong. However, the study was identified the barriers hindering use of family planning methods by sexually active married women of reproductive age. This, in turn, contributeto the formulation of effective policies and strategies to improve practice of family planning method and thus effective population control and improved maternal and child health indicators.

Except taking 10-15 minutes of time of each individual study subject during the interview, the study imposed no other monetary and non-monetary costs to the participants. Therefore, no compensation or incentive wereprovided to the participants.

4.9. Data Management and Quality Control

The principle Investigator (PI) oriented the data collectors on data collection methods and interview guides and organized regular meetings with the study teams on a daily basis before their departure to the field. The teams shared their experiences and the problems they faced in the field. Possible solutions or refinements in the process were also been discussed.

The teams were responsible for conducting the interviews and transcribing them while the Principle Investigator (PI) was in charge of compiling the data collected by the teams and filing them. Interviews data were kept in separate files for each health facility and type of participants. The files were updated on daily basis and kept in a save place. Nobody except him, and the team members in case of need, waspermitted to have access to them and were also reviewed all the filled checklist were collected by data collectors during interviews, checked all transcriptions and translated them from local language to English.

4.10.Limitations

The interview with unmarried womenwas not planed due to cultural barriers because the contraceptive use is considered a sensitive matter that the unmarried child bearing women ageare not supposed to take or inform someone about it.

5. Result Section

This section presents the data as captured from the questionnaires of married WCBAthatattended in 12 selected health facilities OPD and fromtwohealth care providers of each individual health facility.

Numeric data was analyzed through the use of descriptive statistics, and the output was then presented through the use of table and chart(s). We targeted 394 female respondents.

The response rate was 100% since we wereable to reach 394 female respondents. This was reasonable and adequately taken from initial random sample and ensured that all the cases had equal opportunity in the study.

5.1. Respondent Characteristics.

Out of 370 married CBA women respondent, majority of the sampled respondent were in the 21-35 years' age bracket with 56% (n=209) with only 26% (n=96) were in the age bracket of 36-49 years and 18% (n=65) was in the age bracket of <20 years.

Table 1.: Age wise distribution of related data to the respondent characteristics in Parwan province 2018, (n=370)

Age group	Number	%
<20	65	17.57
21-35	209	56.49
36-49	96	25.95

Method	Number	Yes (%)
Pill	241	65.14
Condom	172	46.49
IUD	138	37.30
Male Sterilization	51	13.78
Female Sterilization	63	17.03
Injectable	226	61.08

Table 2.: Knowledge and awareness regarding contraception, (n=370)

Natural	66	17.84
Don't know	97	26.22
Times use from same condom,(n=370)		
Single use	163	44.05
Multiple use	5	1.35
Don't know	202	54.59
Consult with health providers before taking pills,(n=370)		
Yes	188	50.81
No	32	8.65
Don't know	150	40.54
Times taking pill,(n=370)		
Once a month	6	1.62
Once a day	203	54.86
Before having six	16	4.32
Don't know	145	39.19
Taking action while forget to taking pill,(n=370)		
Taking action while forget to taking pill,(n=370)Take two the next day	14	3.78
	14 41	3.78 11.08
Take two the next day		
Take two the next day Stop taking the pills until she gets her period	41	11.08
Take two the next day Stop taking the pills until she gets her period Whenever remember continue taking pills next day	41 117	11.08 31.62
Take two the next day Stop taking the pills until she gets her period Whenever remember continue taking pills next day Don't know	41 117	11.08 31.62
Take two the next day Stop taking the pills until she gets her period Whenever remember continue taking pills next day Don't know Period start taking pill,(n=370)	41 117 198	11.08 31.62 53.51
Take two the next dayStop taking the pills until she gets her periodWhenever remember continue taking pills next dayDon't knowPeriod start taking pill,(n=370)First day of menstrual period	41 117 198 4	11.08 31.62 53.51 1.08
Take two the next dayStop taking the pills until she gets her periodWhenever remember continue taking pills next dayDon't knowPeriod start taking pill,(n=370)First day of menstrual periodLast day of menstrual period	41 117 198 4 151	11.08 31.62 53.51 1.08 40.81
Take two the next dayStop taking the pills until she gets her periodWhenever remember continue taking pills next dayDon't knowPeriod start taking pill,(n=370)First day of menstrual periodLast day of menstrual periodAny day of the cycle	41 117 198 4 151 41	11.08 31.62 53.51 1.08 40.81 11.08
Take two the next dayStop taking the pills until she gets her periodWhenever remember continue taking pills next dayDon't knowPeriod start taking pill,(n=370)First day of menstrual periodLast day of menstrual periodAny day of the cycleDon't know	41 117 198 4 151 41 103	11.08 31.62 53.51 1.08 40.81 11.08 27.84
Take two the next dayStop taking the pills until she gets her periodWhenever remember continue taking pills next dayDon't knowPeriod start taking pill,(n=370)First day of menstrual periodLast day of menstrual periodAny day of the cycleDon't knowOther	41 117 198 4 151 41 103	11.08 31.62 53.51 1.08 40.81 11.08 27.84
Take two the next dayStop taking the pills until she gets her periodWhenever remember continue taking pills next dayDon't knowPeriod start taking pill,(n=370)First day of menstrual periodLast day of menstrual periodAny day of the cycleDon't knowOtherIdeal time for insertion of the IUD,(n=370)	41 117 198 4 151 41 103 71	11.08 31.62 53.51 1.08 40.81 11.08 27.84 19.19

Don't know	256	69.19			
Determine the proper position of IUD,(n=370)					
Thread stays	47	12.7			
Thread hangs outside	19	5.14			
None of the above	22	5.95			
Don't know	282	76.22			
Period that IUD being used,(n=370)					
Five to ten years	97	26.22			
More than ten years	13	3.51			
Lifestyle	20	5.41			
Don't know	240	64.86			
Seeking immediate care,(n=370)	Seeking immediate care,(n=370)				
Experience sever pain or bleeding during periods	102	27.57			
Fever with abdominal pain	81	21.89			
Both of the above	147	39.73			
Don't know	40	10.81			

Looking at table 2 we found that seventy-four percent of the women were familiar with modern and traditional methods and only 26% were not familiar with any modern contraceptive method. Wherever, the respondents were subjected to general questions on contraceptives to capture their knowledge level, as result 65.14% (n=241) knew pill as a method, 61. 08% (n=226) knew injectable method, 46.49% (n=172) knew condom and 37.3% (n=138) knew IUD, while only 26.22% (n=97) of married WCBA didn't name any methods of contraception, 17.03% (n=63) knew female sterilization, 17.84% (n=66) knew natural methods, and 13.78% (n=51) knew male sterilization and had poor knowledge on contraceptives.

The results thus indicate that the higher the knowledge level is, the more likely that a respondent will have known need for family planning. This result demonstrates the fact that improved knowledge on contraceptives may increases the uptake of contraceptives.

Almost all 44.05% of them knewsingle use from same condom, 50.81% were receiving the consultation of their health care providers before taking oral contraceptives, 54.86% were aware about taking pills once per day, while 39.19% of them did not disclose about times to taking pill,

53.51% of respondents didn't mention about their actions while forgetting to taking pills, about 27.84% of married women didn't know the period to start taking pill. Most of them did know about the ideal time for insertion, proper position and time period of Intrauterine device (IUD) to be used.10.81% of them were unaware of seeking immediate care wherever they need.

Contraceptive method	Number	Yes (%)
Pill	113	30.54
Don't know	102	27.57
Injectable	65	17.57
IUD	39	10.54
Condom	23	6.22
Natural	21	5.68
Female Sterilization	19	5.14
Male Sterilization	6	1.62

 Table 3.: Utilization of contraceptive and birth-spacing methods (n=370)
 1

As illustrated in table 3, the most common contraceptive method reported to be currently used was modern contraceptives 30.54% (n=113) Pill, 17. 57% (n=65) Injectable, 10. 54% (n=39) used IUD method and only 6.22% (n=23) had used Condom, while the least reported types were 1.62% (n=6) male sterilization, 5.14% (n=19) female sterilization, 5.68% (n=21) natural methods and 27.57% (102) married WCBA didn't use any methods.

Barriers of contraceptive methods	Number	Yes (%)
Contraceptive have significant side effects	52	54.17
Religion prohibits the use of contraceptive	35	36.46
Don't know	24	25.00
The process of acquiring contraceptives is often embracing	12	12.50
Contraceptives are only for who's are much more children	9	9.38
Contraceptives use leads to infertility	7	7.29
Advertisement and information about contraceptive use immoral	6	6.25

Table 4.: Barriers to using contraceptives (n=370)

Contraceptive is not effective in avoiding pregnancy	4	4.17
Who's are using contraceptives are bad	3	3.13
Contraceptives are expensive	1	1.04

Reference to table four , 54.17% (n=52) of married women were not using contraceptives due to its significant side effects, 36.46% (n=35) were not using contraceptive due to religious beliefs, 25% (n=24) of married women did not disclose the reason for not using contraceptives, 12.50%(n=12) were not using contraceptives because of its process is often embracing, 9.38% (n=9) of married women were not using modern contraceptive methods because they think that contraceptives are only for couples who have more children, 7.29% (n=7) of married women believed that contraceptives use leads to infertility, while 6.25% (n=6) were not using because of the advertisement and information about contraceptive use is immoral, 4.17% (n=4) did not have knowledge about contraception with assuming that contraceptive is not effective in avoiding pregnancy, 3.13% (n=3) women thought that contraception are using by bad people and only 1% said that they are not using contraceptives due to its expensiveness.

Any method practices	Age groups (%)		
	<20 Years	21-35 Years	36-49 Years
Oral Contraceptive Pills	14	66	19
Condom	35	57	9
Intrauterine Device (IUD)	3	67	31
Male sterilization	0	50	50
Female sterilization	0	42	58
Injectable	32	55	12
Natural method	5	52	43
Don't know	19	45	36

Table 5.: Practiced contraceptive methods among married WCBA, by age group (n=370)

To obtain the use of any methods among age group of respondents of the married women we categorized the respondents into three age groups. Women aged 21 to 35 were mostly using IUDs (67%), oral contraception (66%), condom (57%) and injectable (55%).

Both the knowledge and practice of modern contraceptive were observed better in 21-35 age groups in comparison to other age group categories.

It was found that mentioned age group had good knowledge of any method of contraception

In-depth interview for health care provider in 12 health facilities:

A total of 24 health service providers were interviewed in order to provide an insight of contraceptive utilization, availability of methods and what should be done to improve access and further utilization.

Majority of health service providers said that availability of contraceptive methods is not a problem but still they suggested enough stock for some specific methods like injectable should be made, distribution of contraceptive methods in all health facilities including private health facilities was mentioned by services providers as one way of increasing accessibility.

Majority of service providers thought that delivery of family planning education and training should be strengthened including rural areas in order to increase utilization of contraceptive methods.

Most of health service providers mentioned that religious, race and ethnicity, client discomfort, wrong culturalbelieves, spouse refusal and sometimes unavailability of contraceptive methods as challenges that hinders utilization.

Above information from the in-depth interviews complements the other studies on barriers for the use of contraceptive methods.

Perceived barrier	Number	(%)
Training	19	79.17
Religion	17	70.83
Race/ethnicity	14	58.33
Client discomfort	14	58.33
Most of the time they are on something	12	50.00
Client desire for pregnancy	12	50.00
Lack of knowledge	12	50.00

 Table 6.: Perceived barriers regarding usage of contraceptive methods reported by health

 care providers, (n=24)

Age	11	45.83
Client method preference	11	45.83
Cultural background not allow to certain types of birth control	11	45.83
Already on birth control	10	41.67
Gender	9	37.50
Client risk assessment	9	37.50
They are not open to asking about FP methods	8	33.33
Confidentiality	8	33.33
Outside influences	5	20.83
Resources	3	12.50
Sexual activity	2	8.33

Looking to above table, 79. 17% (n=19) of health care providers think that lack of training for married WCBA is the main reason for low use of contraceptives, 70.83% (n=17) health care providers said that it relates to religious misconception , 58.33% (n=14) showed its relation with race/ethnicity, 58.33% (n=14) said that married WCBA feel discomfort, 50% (n=12)said that client desired for pregnancy and most of the time the women simply don't want any contraceptive methods without any reasons , 45.83% (n=11) of health care providers pointed out lack of knowledge of women in reproductive age and client methods preferences, 41.67% (n=10) health care providers said that it is due to gender and client risk assessment, 33.33% (n=8) said that client are not open to asking about FP methods and their confidentiality, 20.83% (n=5) said it is due to outside influences, 12.5% (n=3) said it is due to lack of resources, while only 8.33% (n=2) said that married WCBA have had barriers with sexual activities.



Figure 2.: Perception of health care providers regarding conceptive methods from which

clients don't have concernon its side effects, (n=24)

Figure 2.

This figure shows that majority of health care providers have perception that 24% of female condom and lactationamenorrhea, 22% rhythm withdrawals, 16% implants, 6% male condom and folk methods and only 1% injectable and pills of married CBA women don't think about side effects of listed family planning methods in willing use of its, while they have concern on use of IUD, male sterilization, female sterilization and emergency contraceptive methods.

Complains	Number	(%)
Weight gain	24	100.00
Intermenstrual spotting	23	95.83
Mood changes	23	95.83
Headaches	16	66.67
Nausea	13	54.17
Breast tenderness	12	50.00
Missed periods	10	41.67

Table 7.: Perception of health care providers regarding the most shared complaints by married WCBA for not using of FP by them, (n=24)

Visual changes contact lens	3	12.50
Decreased libido	2	8.33
Vaginal discharge	2	8.33

Table 7.: Shows that the majority of service providers though that weigh gain, intermenstrual spotting, mood of changes, headaches, nausea, breast tenderness and missed period are the main reasons for not using of contraceptive among married women while few of them mentioned that impaired vision, decreased libido and vaginal discharge hinder the utilization of contraception among married women.

Table 8.: Perception of Health Staff about the worries, barriers of married WCBA for starting of FP methods, (n=24)

Most worries of married women in starting a FP methods	Number	%
Side effects	19	79.17
Bad for health	2	8.33
Dose not work	4	16.67
Barriers hampering use of FP methods		
Family planning related supplies	4	16.67
Travel time to facilities	20	83.33
Partner support	8	33.33
Sources of information	0	0.00
Suggestion to improve contraceptives use by married women		
Lack of insurance or family planning coverage	0	0.00
MoPH to work with the insurance company	12	50.00
Access to methods that require fitting or insertion	18	75.00

Based on health serviceprovider's perception more than 79% of married women had serious concerns of family planning side effects, while only 8.33% of them did not useit due to misperception.

By the perception of health care providers, the travel time to health facilities is a factor that will hinder 83.33% use of contraceptives while 33.33% on non-users reported it was because of refusal by husband or partner. Unavailability of family planning related supplies for users
(16.67%) was also reported as factor that will hinder the use of contraceptives. As more 60% of health care respondents suggested government particularly Ministry of Public Health should work with the insurance companies for timely access to any methods, specially, fitting or insertion one. There was a significant association between issues hindering use of family planning methods and health care provider suggestion to improve contraceptives use by married women as shown in Table 8.

6. Discussion Section

Description of knowledge and awareness of married WCBA regarding contraceptive methods.

Key findings of current study:

Knowledge on modern FP method as dissenting order; Pills (65.14 %), Injectable (61.08), Condom (46.49), IUD (37.3%), didn't know 26.22%.

55% of women however knew the condom, but they didn't know and they were in doubt that how many times a single condom can be used. However, 65% of women knew pills as a method, but 39% of them didn't know when to take the pills and 54 % of them didn't know what to do if they forget to take the pills. Only 37 % of respondents knew IUD as a method and 69% of them didn't know the ideal time for insertion of IUD and 65% of married WCBA didn't know the protection time of one IUD.

Perception of married WCBA on the use of family planning methods:

54% of women who did not use/ were not in the favor of using of contraceptives believed that contraceptive have significant side effects, 36 % believed that it was prohibited as per religion and 25 % didn't use any method regardless of any reasons.

Use of contraceptive methods by married WCBA:

The age category of 21-35 years were the major users of contraceptives.

30% of respondents used pill as method of contraceptive, 17% were using injectable, 11% IUD, 6% were using condom while the knowledge of women about condom was 46%. 6 % of respondents were using natural methods. 28% didn't use any contraceptive method at all.

Describing the perception of health care providers on the use of family planning methods by married WCBA.

Previously conducted studies such as ADHS did not have any information on perception of health care provides for the low coverage of contraceptive. In this study most interesting findings came out of the experience of health care providers which are described below:

Based on health care providers lack/ ineffective awareness raising programs, religious believes, decision makers at home, misbelieves, demand for more children were the main reasons for not using/low coverage of family planning methods.

Based on health care providers' perception the married WCBA think that female condoms, lactation, withdrawal, implants, male condoms are safe methods while they have concern on IUD, m/female sterilization and emergency contraceptive methods.

Perception of health care providers for discontinuation of FP methods by married WCBA:

Weight gain, irregularity of menstrual period, mood changes, headache, nausea, breast tenderness, missing the periods, impaired vision, decreased libido and vaginal discharges are the main reasons that married WCBA discontinued.

Perception of health care providers that why some clients don't start using of contraceptives by married WCBA: The women think it is major side effects on health, methods don't work. and

Less supplies of FP related supplies, travel times to health facilities were also another barriers toward low coverage of FP.

7. Conclusions Section:

Afghanistan at the moment is experiencing a lot of pressure on its resource due to a tremendous increase in population growth especially in urban settlements. This has brought about a significant challenge for the country as more and more populated develop in major cities in Afghanistan.

• As result of this study, it is clear that, married WCBAare not willing for the family planning use, and is still very high in Parwan province and therefore, needs urgent need

for the Afghanistan government, non-governmental organizations and other stakeholder in reproductive health to act swiftly towards reducing the total fertility rate of its citizens in order to realize the Afghanistan 2030 vision and health SDGs.

- We observed that, married WCBA not willing for the family planning method is dominant among young women of between 15-20 years and fecund women of advanced ages and this makes age a factor for consideration during programmatic interventions. Easy access of family planning commodities for married womenin their areas of residence also play an important role in the determination of women intention to use FP methods, as study shows 63% of married women are not using family planning methods due to travel time to health facilities based on perception of health care providers. Education level of the women and their spouses also determines their uptake of contraceptives according to the finding of the study.
- Health professionals especially field staff should be trained to provide an informed choice to women of reproductive age and also adequate knowledge should be imparted regarding family planning and contraceptive uptake.
- Decision making by husbands /in lows, fear of women for adverse effects and taboos about contraceptive use are other barriers for low coverage of FP. Therefore, husband's involvement in FP counseling should be seriously taken into consideration.
- Similar studies to be done on respondents from post primary learning institutions, unmet need for family planning among men of reproductive age living in the study area with more studies to also explore how the demographic, socioeconomic and cultural variables can influence family perception about contraceptives which directly affect the outcome of unmet need for family planning.
- Lastly, there should be coordination between public and private sector to provide adequate family planning services and supplies.

8. Annexure

Annex 01: Checklist for Document Review

- 1. Afghanistan Demographic Household Survey2015
- 2. Afghanistan Health Survey 2015
- 3. Afghanistan Mortality Survey 2010
- 4. A Basic Package of Health Services for Afghanistan 2010
- 5. Afghanistan National Health Policy 2015-2020
- 6. Afghanistan National Health Strategy 2016-2020
- 7. Reproductive Maternal and Neonatal Child Health Policy 2016
- 8. Activity Reports available in RMNCH Department

Checklist for Review:

- Services/Activities
- Service providers
- Beneficiaries
- Reports

Annex 02: Questioners for Interview with Married WCBA

- > Welcome and thank the participant
- Introduce yourself
- Introduce topic of research
- > Read the consent form and take the verbal consent
- > Start the questions

Interview Code:	Health Facility Code:
Participant(s)' Code(s):	Date:
Time Interview Started:	Time Ended:
Codes of Interviewers:	

1. How old are you?

< 20
21-35
36-49

2. Are you married? Yes

3. Do you know any methods by which to limit or space births? If yes, then specify

- I. Oral Contraceptive Pill
- II. Condoms
- III. Cu-T
- IV. Male sterilization
- V. Female sterilization
- VI. Injectable
- VII. Natural method & Emergency contraceptives
- VIII. don't know
- 4. Are you currently using any methods to space or limit your births?
 - I. Oral Contraceptive Pill
 - II. Condoms
 - III. Cu-T
 - IV. Male sterilization
 - V. Female sterilization
 - VI. Injectable
 - VII. Natural method & Emergency contraceptives
 - VIII. don't know

- 5. Could you please explain how the method(s) you have previously mentioned is (are) applied? (refer to the answer given to the methods explained above:
 - a. How many times do you use a same condom?
 - I. Single use
 - II. Multiple use
 - III. I don't know
 - b. Due consult your doctor before taking pills?
 - I. Yes
 - II. No
 - III. I didn't
 - c. how often will you take a pill?
 - I. Once a month
 - II. Once a day
 - III. Before having six
 - IV. Don't know
 - d. What will you do if you forget to take a pill?
 - I. Take two the next day
 - II. Stop taking the pills until she gets her period
 - III. Whenever you will remember continue taking pills next day
 - IV. I didn't
 - e. When will you start the pills:
 - I. First day of menstrual period
 - II. Last day of menstrual period
 - III. Any day of the cycle
 - IV. I don't know
 - V. Other
 - f. What is the ideal time for insertion of the IUD?
 - I. During the cycle
 - II. after the menstrual cycle
 - III. When you are pregnant
 - IV. None of the above
 - g. How will determine the proper position of IUD?
 - I. Thread stays
 - II. Thread hangs outside
 - III. None of the above
 - IV. I didn't
 - h. How long an IUD can be used?
 - I. Five to ten years
 - II. More than ten years
 - III. Lifestyle
 - IV. I didn't
 - i. When do you seek immediate care?

у	

	I. II. III.	Experience sever pain or bleeding during periods Fever with abdominal pain Both I and II	
	IV.	I didn't	
6.	Are you willing	g to space or limit your births at the moment? Yes No	
7.	Could you tell please specify:	me don't you use any methods of family planning? if Yes	
	I.	Contraceptives are only for who's are much more children	
	II.	Contraceptives are expensive	
	III.	Who's are using contraceptives are bad	\square
	IV.	Contraceptives use leads to infertility	
	V.	The process of acquiring contraceptives is often embracing	
	VI.	Contraceptive is not effective in avoiding pregnancy	
	VII.	Advertisement and information about contraceptive use immoral	
	VIII.	Contraceptive have significant side effects	
	IX.	Religion prohibits the use of contraceptive	
	Х.	I didn't	
8.	What are the th	ings you think are required in order for you to be better able to use	famil
	1 1 .1		

8. What are the things you think are required in order for you to be better able to use family planning methods for the purpose of spacing or limiting births to be much considered and provided by MoPH?

I.	Female sterilization	Male sterilizati
II.	Pills IUD	
III.	InjectableImplants	
IV.	Male condom Female condom	
V.	Emergency contraception Rhyth	m Withdrawal
VI.	Folk method Locational amenor	rhea (LAM)
VII.	Other	
VIII.	I don't know	

> Close the interview and thank the participant

Annex 03: Questioners for Interview with Married WCBA in Local Language

سوالنامه مصاحبه فردى با خانم هاى متاهل بارور

		 به اشتراک کننده خوش آمدید گفته و از او تشکر کنید. خود را معرفی نمائید. موضوع تحقیق را بیان نمائید. رضایت نامه را قرائت کرده و رضایت شفاهی اشتراک کا سوالات را آغاز نمائید. در صورتیکه خانم دارای شرایط ذیل باشد بااو مصاحات 	> > >
	كود مركزصحى:	صاحبه:	کود م
	تاريخ:	متراک کننده:	کود اث
	زمان ختم مصاحبه:	شروع مصاحبه:	زمان ا
		صاحبه کننده:	کود مد
		. شما چند ساله هستید؟	1
	20 -35 -49		
		ي آيا شما متاهل هستيد؟	2
انید نام	یا توقف دادن ولادت ها می دانید؟ اگر بله، می توا	یا شما کدام روشی را برای فاصله دادن بین ولادت ها و بگیرید؟	3
I.	Oral Contraceptive Pill		
II.	Condoms		
III.	Cu-T		
IV.	Male sterilization		
V.	Female sterilization		
VI.	Injectable		
VII.	Natural method & Emergency contract	eptives	
VIII.	don't know		

4. آیا شما در حال حاضر از کدام روشی بر ای فاصله دادن بین و لادت های تان و یا توقف دادن و لادت های تان استفاده می نمائید؟





- XII. Male condom Female condom
- XIII. Emergency contraception Rhythm Withdrawal
- XIV. Folk method Locational amenorrhea (LAM)
- XV. Other
- XVI. I don't know

مصاحبه را اختتام داده و از اشتراک کننده تشکر کنید.

Annex 04: Questioners for Interview with HF's Female Staff

- > Welcome and thank the participant
- > Introduce yourself
- > Introduce topic of research
- > Read the consent form and take the verbal consent
- > Start the questions

\checkmark	Interview Code:	()	v	/	Date: Time Interview Started:()
\checkmark	Health Facility Code:()	٧	/	Time Ended: ()
\checkmark	Participant(s)' Code(s):	()	٧	/	Codes of Interviewers: ()

1. Could you please share your perception, as a health care provider, with regard to? barriers on the use of family planning methods by women of reproductive age in Afghanistan?

	a.	Age				
	b.	Gender				
	c.	Race/ethnicity				
	d.	Patient method pref	erence			
	e.	Outside influences	to the p	oatient		
	f.	Already on birth co	ntrol			
	g.	Most of the time the	ey're or	1 some	thing.	
	h.	They're not open to	changi	ing or a	asking about family planning methods	
	i.	Patient desire for pr	regnanc	сy		
	j.	Religion				
	k.	Cultural backgroun	d may i	not all	ow her to use certain types of	
		birth control				\square
	1.	Patient discomfort				\square
	m.	Sexual activity				H
	n.	Confidentiality				H
	0.	Patient risk assessm	nent			H
	p.	Lack of knowledge				H
	q.	Training				
	r.	Resources				
	s.	Peopledon't think li	ike the	side ef	fects of:	
XVII.		sterilization		VII.	Male sterilization	
XVIII.	Pills			VIII.		
XIX.	Injectal			IX.	Implants	
XX.	Male co			Х.	Female condom	
XXI.	-	ency contraception			Rhythm Withdrawal	
XXII.	Folk m	ethod		XII.	Locational amenorrhea (LAM)	

- 2. What are the most frequently shared complaints by women of reproductive age concerning use of family planning methods that you think are responsible for discontinuation or non-use in the future?
 - Intermenstrual Mood changes I. VI. VII. Missed periods spotting II. Nausea VIII. Decreased libido III. IX. Breast tenderness Vaginal discharch IV. X. Headaches Visual changes with contact V. Weight gain lens
- 3. What are the most important concerns/worries of women of reproductive age in starting a family planning method while being advised by you?
 - I. Side effects
 - II. Bad for health
 - III. Dose not work
- 4. What issues, relating with service delivery, do you think might hamper use of family planning methods by women of reproductive age?
 - I. Family planning related supplies
 - II. Travel time to facilities
 - III. Partner support
 - IV. Sources of information
- 5. What do you suggest the health sector or other sectors should do to improve? contraceptives use by women of reproductive age in Afghanistan?
 - I. Lack of insurance or family planning coverage
 - II. MoPH to work with the insurance company because, a lot of times they'll call back and they don't cover it
 - III. Access to methods that require fitting or insertion

> Close the interview and thank the participant

Annex 05: Questioners	for Interview with HF's Female Staff
in	n Local Language
، مراکز صحی	سوالنامه مصاحبه فردي با كاركنان اناث
	🖌 به اشتراک کننده خوش آمدید گفته و از او تشکر کنید.
	🖌 خود را معرفی نمائید.
	🖌 موضوع تحقيق را بيان نمائيد. 🕨
دریافت کنید.	🖌 رضایت نامه را قرائت کرده و رضایت شفاهی اشتراک کننده را
	🖌 سوالات را آغاز نمائید. 🖌
كود مركزصحي:	كود مصاحبه:
تاريخ:	کود اشتر اک کنندہ:
زمان ختم مصاحبه:	زمان شروع مصاحبه:
	كود مصاحبه كننده:

 آیا ممکن است که منحیث یک عرضه کننده خدمات صحی دریافت و درک خویش را در مورد موانع که بر سر استفاده از روش های تنظیم خانواده توسط زنان بارور در افغانستان وجود دارد، با ما در میان بگذارید؟ a. سن b. جنسیت c. مليت d. میتود را که مراجعه کننده ترجیح میدهد فشار های بیرونی بالای مریض .e ازقبل تحت كنترول بوده .f دیدگاهای متفاوت میداشته باشند .g ديدگاهي باز ندارند تا درمور د فكر كنند وسوال داشته باشند .h خانم توقع داشتن اطفال زيادى را دارد .i مسایل مذہبی ·j مسایل عنعنوی اجازه نمیدهد شان تا از میتودهای تنظیم خانواده استفاده کند .k خانم از باعث ناراحتى كه نزدش پيدا ميشود نميخواهد ميتودها را استفاده كند .1 m. از باعث فعالیت های جنسیتی n. از باعث محرمیت از باعث کنترول خطرات p. از باعث كمبود دانش q. نبود برنامه های آموزشی ازباعث كمبود منابع .r مردم در مورد عوارض جانبی میتود های زیرین فکر نمیکنند: .s عقيم سازى خانم كاندم .Х I. زنانه تابليت II. زرقى .III ميتود .XI كاندوم مردانه .IV ريخت ميتودهاي عاجل .V ن به ميتودهاي قومي وطني .VI بيرون عقيم سازى مردان .VII ميتود .XII وسيله داخل رحمي .VIII شيرد .IX غرس ھى

....

2. زنان بارور كدام شكايت ها را به طور مكرر در ارتباط با استفاده از روش هاى تنظيم خانواده با شما در ميان مي گذارند كه به عقيده شما مسئول قطع استفاده و عدم استفاده از این روش ها در آینده می باشد؟ .I بينظمي هاي جريان عادت ماهوار دلبدی شخی ثدیه ها .II .III. سردردی .IV گرفتن وزن .V تغير عادت .VI تغیر مزاج افزایش سویه لبیدو .VII .VIII افرازات وژن .IX





يە	ه شما خانم های بارور را به استفاده از روش های تنظیم خانواده توص	زمانيك	.3
این روش ها دارند؟	ئید، این زنان بیشتر کدام نگرانی ها و تشویش ها را پیش از استفاده از	می نما	
	ں جانبی		.I
	برای صحت مضر اهست	.II	
	فایده ندار د	.III	
از روش های	ه شما كدام مسائل مرتبط با عرضه خدمات ممكن است تا مانع استفاده	به عقيد	.4
	نانواده توسط زنان بارور شود؟	تنظيم خ	
	مر تبطه در بخش تهیه وتدارک میتود های تنظیم خانواده	موارد	.I
	مدت زمان رفتن الي مركز صحي	.II	
	عدم همکاری زوجین	.III.	
	منابع معلومات		
	شما برای بخش صحت و سایر بخش ها برای بهبود استفاده از روش	بيشنهاد	.5
	نظيم خانواده در افغانستان چيست؟		
		-	
	كمبود وسيله هاي ميتود تنظيم خانواده	.Ι	
	·		
همیشه	وزارت صحت عامه بالاي شركت هاي بيمه كار كند، بدليلي اينكه	.II	
	موارد را با خود یاد داشت کردند اما در قسمت اجر اات نداشتند		
	میتود زرع مورد بررسی صورت گیرد خوب خواهد بود	.III	

مصاحبه را اختتام داده و از اشتراک کننده تشکر کنید.



Annex 06: Consent Form for Interviews with MarriedWCAB and Health Staff

Introduction

I am Dr. Mohammad Taleb Noori, student of Master of Public Health at University of Maulana Azad. I am the Principal Investigator of current research on "Barriers for use of contraceptives amongmarried WCBA in Afghanistan". You need to understand the following information to make an informed choice about participating in this research.

Background information

Family planning is one of effective strategies undertaken by MoPH to improve women's reproductive health and thus to reduce maternal and child mortality in Afghanistan. Recent mortality survey indicated a remarkable decrease in the mortality rate among mothers and children in Afghanistan. Although the knowledge of women or reproductive age on family planning methods is shown high, the practice of family planning is still low and there is a huge gap between the levels of knowledge and practice of family planning in Afghanistan.

Purpose of this research study

The study aims to find out the reasons for existing huge gap between knowledge and practice of family planning among women of reproductive age in Afghanistan.

Procedures

In addition to interviewing 370 women, we will conduct in-depth interviews with 24 female staff in Parwan province HFs. You are invited to take part in this research because we feel that your information and experience as a woman of reproductive age/health care provider can contribute to our understanding of practices in this field. The interview takes 10-15 minutes of your time. If you feel comfortable, we will start the interview and recording the information but we do not take any photo of our session.

Possible risks or benefits

Except granting your time, there is neither risk nor direct benefit to you in this study. However, the results of the study may help us to develop more effective policies and strategies to improve family planning



practice and consequently to further improve maternal and child health in Afghanistan including you and your children's health.

Sharing the Results

If you agree we will take your contact address to send you summary of the findings before it is made available to the public.

Right of refusal to participate and withdrawal

You are free to choose or to refuse to participate in the study without any loss of benefit which you are otherwise entitled to. You may also withdraw any time from the study or refuse to answer questions if you don't feel comfortable.

Confidentiality

Nobody except Principal Investigator will have an access to information provided by you. Your name and identity will also not be disclosed at any time.

Available Sources of Information

If you have any questions you may contact the Principal Investigator Dr. Mohammad Taleb Noori at University of Maulana Azad by using following options:

Cell #: +93(0) 700 294 741

Email: noori2016@gmail.com

Authorization

I have understood this consent form. I volunteer to participate in this research. I understand that my consent does not take away any legal rights in the case of negligence or other legal fault of anyone who is involved in this study. I further understand that nothing in this consent form is intended to replace any applicable national or local laws.



Annex 07: Consent Form for Interviews with Married WCBAand Health Staff in Local Language

رضایت نامه برای مصاحبه فردی با خانم های متاهل بارور و کارکنان انات مراکزصحی ولایت پروان

معرفى:

اينجانبداكتر محدطالبنور بيانشجويفو قليسانسصحتعامهدر دانشگاه مولاناآز ادهندوستان يياشمكهپاياننامهتحصيليخويشر ابالاييافتتعو املقائير گذار ب ر استفادهاز ر و شهايتنظيمخانو ادهتو سطخانمهايبار و ر در افغانستان،انجامميدهم.

جز ئياتاينتحقيقدر ادامهاينسندذكر شدهاست. فهميدناينمعلوماتبر اير ضايتآگاهانهشمابهاشتر اكدر اينتحقيقمهماست.

مقدمه:

تنظیمخانو ادهیکیاز را هبر دهایموثر اتخاذشدهتو سطوز ار تصحتعامهافغانستانبر ایبهبو دصحتبار وریو در نتیجهکاهشمر گومیر زنانو اطفالدر افغان ستانمیباشد. باآنکهدانش آگاهن نانبار و ر در مو ر در و شهایتنظیمخانو ادهبسیار بالانشاندادهشدهاست،سطحاستفادهاز اینر و شهابسیار پاییناستو تفاو تبز رگیبینسط حدانش، آگاهی استفادهاز ر و شهایتنظیمخانو ادهدر افغانستانو جو ددار د.

هدف تحقيق:

هدف این تحقیق دریافت دلایلی است که تفاوت قابل ملاحظه موجود میان دانش ، آگاهی و استفاده از روش های تنظیم خانواده را در میان زنان بارور در افغانستان توجیه نماید.

طرزالعمل:

در اینتحقیق، بهعلاو همصاحبهبا370 تناز کار کنانانانشر اکز صحیدر و لایتپر و ازدایر خو اهیمنمود. ماشمار ابهایندلیلبر ایمصاحبهانتخابنمو دیمکهبهعقید همادانش، آگاهی تجربهشمابهعنو انیکخانمبار و ر/عرضهکنند هخدماتصحیمیتو اندمار ادر در کعو املمو ثربر استفادهاز روشهایتنظیمخانو ادهکمکنماید. ماممکندر حدو د10 تا 15دقیقهاز و قتشمار ادر جریانمصاحبهبگیریم. در صور تیکهشمااحساسر احتیکنیدماجریانهصاحبهر اباشماآغاز بهمنظور تامینکیفیتکار و پر هیز از سوءتفاهمو از دستدادنمعلو مادیاداشتخو اهیمنم و د. مااز جریانمصاحبههیچ عکسینخو اهیمگر فت.

خطرها و فوايد احتمالى:

خطری در سهم گرفتن شما در این تحقیق به استثناء گرفتن وقت با ارزش شما وجود ندارد. همچنین نفع مستقیمی نیز عاید شما نخواهد شد. با این همه، نتایج این تحقیق ممکن به ما کمک نماید تا سیاست ها و راهبردهای موثری را شناسایی و اتخاذ نمائیم تا میزان استفاده از روش های تنظیم خانواده افزایش یافته و در نتیجه صحت مادران و اطفال افغانستان به شمول صحت شما و اطفالتان بهبود یابد.



شريكساختننتيجهتحقيق:

معلوماتير اكهمادر جرياناينتحقيقيه دستميآور يمهمر اهشمادر ميانكذاشتهخو اهدشد

آكر شمامو افقباشيدماآدر ستماسشمار ايادداشتميكنيمتايكنقلاز نتيجهتحقيقر ابر ايشماار سالنمائيم.

حقممانعتاز اشتر اكوانصر اف:

شمامختار هستيدتادر تحقيقشر كتنمائيد. شماميتو انيداز پاسخگو بيبهبعضيياتمامسو الاتيكهبر ايشماخو شايندنيستامتناعنمائيد.

محرميت:

معلوماتیر اکهشماار انهمیکنیدبهطور محر مانهحفظخوا هدشد. هیچشخصیبهاستثناءشخصمحققامکاندستر سیبهآنر انخواهدداشت. نامو هو پتشمانیز در هیچز مانیافشانخو اهدشد.

منابع اخذ معلومات:

اگر شماسو الیداشتهباشیدمیتو انیدباشخصمحقق،داکتر محمدطالبنو ری،دانشجویفو قلیسانسصحتعامهدر دانشگاه مو لاناآز ادهندو ستاراز طر قذیلبهتماس شوید:

شمار ههايتماس: 741 294 700 (0)93+

آدر سپستالکترونیکی: noori2016@gmail.com

اعطاء اجازه:

من متن رضایت نامه را فهمیدم و به اختیار خود در تحقیق شرکت می نمایم. من به اختیار خود تصمیم به اشتر اک در این تحقیق را گرفتم و می دانم که رضایت من هیچ حق قانونی را در صورت بروز هر نوع غفلت و تخلف قانونی از سوی کسانی که در این تحقیق دخیل هستند، از من سلب نمی کند. من همچنین دانستم که هیچ چیزی در این رضایت نامه جایگزین هر گونه قوانین محلی و ملی نخواهد شد.



Annex 08: Approval Letter from Institutional Review Board, Ministry of Public Health, Afghanistan

د افغانستان ال Islamic Republic of Afghanistan د علمي روغتيا وزارت **Ministry of Public Health** د الأنقصقان دعامي روغها ولي الصقيقوت Abhantaism Beilenel Puidle Health healthris Institutional Review Board 11 No. 1 Date: Jan. 30, 2018 To: Mohammad Taleb Noori, MD Senior Monitoring and Evaluation officer National Emergency Operation Center (NEOC), MoPH Subject: Approval for proposal entitled, "Factors influencing contraception use by women of reproductive age in Afghanistan". Dear Noori, Institutional Review Board, Ministry of Public Death has examined and reviewed your proposal entitled, "Factors influencing contraception use by women of reproductive age in Afghanistan". We are pleased to declare that your study is approved. However, we reserve to the rights to monitor and audit your study and any violation of ethical norms during the course of study shall lead to withdrawal of given approval. The duration of approval for a study to begin the research project is valid for six months and the implementation plan and monitoring plan should be shated to IRB secretary (irb.afg@gmail.com). You are bound to share the result of your study with MoPH prior any dissemination plan. Sincerely, Bashir Noormal MD, MPH Director General Afghanistan National Public Health Institute (AMPAN) & Chairman, Institutional Review Board (1984) Ministry of Public Health 493 (0) 780 28 11 34 -93 (0) 206 28 11 34 mil Address deaphicmed(Stemail.com desphimuphärgmail.com severangel.nephgas.ut 5° A 6° four- of the Central Blood Bark Building Dehied Central Phyclinic, Cinema Pamir Area, Kabul-Alghaniscou <u>maw.apphi.apph</u>ay.of مازار بنجر با ششم تعور بالک خون مرکز و، 14.15 وتعاشك مرغزي مراهة



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