

**ASSESSMENT OF KNOWLEDGE, ATTITUDE, AND PRACTICE OF
PRECONCEPTION CARE TOWARD AMONG PREGNANT MOTHERS
IN AREKIT TOWN, GURAGE ZONE, SNNPR, ETHIOPIA, 2020**

Investigators:

1. Gemechu Hamiyo
2. Degu Agumas
3. Abubeker Nassir

**A RESEARCH PAPER SUBMITTED TO WOLKITE UNIVERSITY
COLLEGE OF MEDICINE AND HEALTH SCIENCE DEPARTMENT OF
MIDWIFERY IN PARTIAL FULFILLMENT OF REQUIREMENTS FOR
THE DEGREE OF BACHELOR OF SCIENCE IN MIDWIFE**

WOLKITE, ETHIOPIA

**WOLKITE UNIVERSITY COLLEGE OF MEDICINE AND HEALTH
SCIENCE DEPARTMENT OF MIDWIFERY**

**ASSESSMENT OF KNOWLEDGE, ATTITUDE, AND PRACTICE OF
PRECONCEPTION CARE TOWARD AMONG PREGNANT MOTHERS
IN AREKIT TOWN AT GURAGE ZONE, SNNPR, ETHIOPIA ,2020G.C.**

Investigators:

1. Gemechu Hamiyo
2. Degu Agumas
3. Abubeker Nassir

Advisors:

1. Fantaye chemir (Assis prof)
2. Alex Yeshaneh (BSc, MSc)

ABSTRACT

Background

Preconception is a set of interventions that aim to identify and modify biomedical, behavioral and social risks to a women's health or pregnant outcome through prevention and management by emphasizing those factor that must be acted on before conception to have maximal impact or that are carried out to improve the reproductive period of life of child bring age group. It is one of the most effective maternal and chilled cares that targets to improve maternal and chilled health before the occurrence of complication. .

Objective:- To assess knowledge, attitude and practice of preconception care toward pregnant women in Areket town southern Ethiopia, in 2020

Methodology: - The study was conducted in Areket town, capital of Gumer woreda, Gurage zone, SNNPR, Ethiopia. The study was conducted from December to January 2020 G.C Community based cross- sectional study design was employed to assess of knowledge, attitude and practice of preconception care toward pregnant mother in Areket town southern Ethiopia. Each study subject was selected by using simple random sampling methods through proportional allocation numbers of women's in their villages

Result: -Majority of study subject 98(81%) are Gurage in ethnicity followed by 13(10.7%) are SILTE, 5(4.1%) are kembata and 4(3.3%) are hadiya and 1(8) are wolaita ethnic groups. From the total study subjects 75(62.0%) are Muslim, 31(25.6%) are orthodox 15(12, 4%) are protestant religion.

Conclusion: - The finding of the study showed that level of KAP toward preconception care was low when compared to different literatures. Women's education, occupation, history of spontaneous abortion and partner's education were the identified factors that significantly influence KAP on preconception care. The finding of the study concluded that having high level of education, having history of spontaneous abortion and husbands educational status which is collage and above leads to being knowledgeable on preconception care.

Recommendation:-In this study low KAP was seen on pregnant mother toward preconception care in Areket town, therefore to improve maternal and child health by good knowledge and utilization of preconception care the following recommendation was forwarded to different concerned body.

ACKNOWLEDGEMENT

First of all, we would like to thank our God. We also thank Wolkite University, college of medicine and health science, department of midwifery for giving this chance to conduct the research. Also we would like to thanks our advisors, Mr. Fantaye chemir and Mr. Alex yeshanew for their unprecedented and unreserved support comments and follow up throughout the development of our research paper. We would like to forward our appreciation to Wolkite University, College of medicine and Health Science, and Department of Midwifery for giving this chance to conduct the study in our carrier. Finally, we would like to forward our acknowledgment to Arekit community for giving relevant information during data collection.

Table of Contents

ABSTRACT	iii
ACKNOWLEDGEMENT.....	iv
LIST TABLE.....	viii
LIST FIGURE	viii
ACRONYME	ix
CHAPTER ONE.....	1
1. INTRODUCTION	
1.1 Background.....	1
1.2. Statement of the problem	2
1.3 Significant of the study.....	4
CHAPTER TWO	5
LITERATURE REVIEW	5
2.1. Concept of preconception care	5
2.2. Knowledge on preconception care.....	5
2.3 Factor associated with knowledge, Attitude and practice preconception care.....	7
\.....	8
CHAPTER THREE	9
3. OBJECTIVE	9
3.1. General objective.....	9
3.2. Specific objective	9
CHAPTER FOUR	10
METHODOLOGY	10
4.1. Study area.	10
4.2 Study period	10
4.3. Study design	10
4.3.1. Source population	10
4.3.2. Study population	10
4.4. Inclusion criteria and exclusion criteria	10
4.4.1. Inclusion criteria	10
4.4.2. Exclusion criteria.....	10
4.5. Sample size determination	11
4.6. Sampling technique.....	11

4.7. Variables.....	13
4.7.1. Dependent variables	13
4.7.2. Independent variables	13
4.8. Operational definition	14
4.9. Data collection procedure	14
4.10. Data quality assurance	14
4.11. Data processing and analysis	15
4.12. Ethical considerations	15
4.13. Dissemination of the study finding.....	15
CHAPTER 5 RESULT.....	15
5.1 SOCIO DEMOGRAPHIC DATA CHARACTERISTICS OF RESPONDENTS	15
5.2 KNOWLEDGE ON PRECONCEPTION CARE.....	19
5.3 ATTITUDE ABOUT PRECONCEPTION CARE.....	23
5.4 PRACTICE OF PRECONCEPTION CARE	24
CHAPTER 6	26
DISCUSSION	26
CHAPTER 7 CONCLUSION AND RECOMMENDATION	27
7.1. CONCLUSION	27
RECOMMENDATIONS	27
Reference.....	27
ANNEX-2 .Questionnaires.....	32

LIST TABLE

Table-1 Socio-demographic characteristics of respondents in Arekit town gurage zone SNNPR, 2020 GC.....	16
Table-2 obstetrics' history of pregnant mother in Arekit town gurage zone SNNPR, 2020GC.....	18
Table 3:- knowledge of pregnant mother on preconception care in Arekit town gurage zone SNNPR, 2020GC.....	21
Table- 4 attitude of preconception care towards pregnant mothers in Arekit town gurage zone SNNPR, 2020GC.....	24
Table-5 practice of preconception care towards pregnant mothers in Arekit town gurage zone SNNPR, 2020GC.....	25

LIST FIGURE

Figure1Sample selection diagram of Arekit town pregnant women's.....	12
Figure2- obstetrics history of pregnancy Arekit town.....	19
figure 3-knowledge of pregnancy mother on preconception care in Arekit town.....	20
figure4-knowlege of pregnant mother on of preconception care in Arekit town.....	21
figure5-knowlege of pregnant mother on benefit of preconception care in Arekit town.....	22

ACRONYME

ACOG	American College of Obstetrics and Gynecologist
APO	Adverse Pregnancy Outcome
EDHS	Ethiopia Demographic Health Survey
MMR	Maternal Mortality Rate
MM	Maternal Mortality
PNC	Postnatal Care
PCC	Preconception Care
SPSS	Statistical Package for Social Science
STI	Sexual Transmitted infections
WHO	World Health Organization

CHAPTER ONE

1. INTRODUCTION

1.1 Background

Pregnancy preconception care is a natural state of expecting an offspring among couples or it was described by scholars as a window of opportunity for promoting positive health behaviors because it is a time when women are more inclined to give up unhealthy habit (1).

Worldwide about 830 women die from pregnant preconception care or child birth related complication around the world every day. It was estimated that in 2015 roughly 30,300 women died during pregnancy preconception care and child birth Almost all of this death occurs in low resource setting and most could have been prevented (2).

Almost all maternal mortality (MM) [99%] occurs in developing countries. More than half of this death occurs in sub-Saharan Africa including Ethiopia and almost one third occurs in south Asia (3). EDHS 2020 reported MMR 412/100 preconception care- related death of 21women. It also reported child mortality rate of 67/100 live birth.NMR of 29/100 live birth and infant mortality rate of 48/100 live birth (4).

Maternal under nutrition and iron deficiency anemia increase the risk of maternal death accounting at least 205 maternal mortalities worldwide (6). In 2010 58,000 new born babies died from neonatal tetanus (7). Up to 35% of pregnancy preconception carries women who have untreated gonococci infection results low birth weight infants and premature deliveries and up to10% results in prenatal death (7).

One target under sustainable goal is to reduce the global MMR to less than 70/100,000 births with no country having MMR of more than twice the global average. One of its strategy is to prevent MM is preconception care (3). PCC is therefore the intervention that aims to identify and modify biomedical, behavioral and social risks to a women's health or pregnancy preconception care outcome through prevention and management by emphasizing those factor that must be acted on before conception to have maximal impact (8).

The American college of obstetrician and gynecologist (ACOG) recommend that all encounters during women's reproductive years particularly those that are part of PCCs should include

counseling an appropriate health behavior to optimize pregnancy outcome and prevent maternal and child mortality (9).

In other word PCC is any intervention that is provided to women and couples of child bearing age regardless of pregnancy status or desire before pregnancy to improve health outcome for women (10). PCC addresses both unmarried and married people and should begin early before any pregnancy for a better or best outcome (9).

Adequate implementation of information on case before, during and after pregnancy can improve the outcome of delivery and health of the man and women. PCC covers the provision of preventive, primitive or curative health and social intervention before conception occurs and the provision of intervention between two pregnancies (9). PCC capture health care of both male and females in all reproductive age. It makes the most significant strategy to reduce maternal and neonatal or child mortality (9).

The core preconception care services includes: screening for undiagnosed ,untreated or poorly controlled medical conditions including STI , checking the immunization history to insure it's up to date, assessment of the nutritional status of the mother, assessment of family history and genetic risk factors , assessment of tobacco and substance use and other high risk behaviors ,supplementation of vitamin and supplementation of folic acid 0.4mcg per day among other components to allow early detection and intervention before the women conceives(10).

1.2. Statement of the problem

Preconception care is the provision of biomedical and social health intervention to women and couples before conception occurs. It aims at improving their health status and reducing behaviors of individuals and environmental factors that contribute to poor maternal and child health outcome. Its ultimate goal is to improve maternal and child health in both the short- and long - term meeting to develop global consensus on PCC, to reduce maternal and child mortality and morbidity (11).

PCC is the unique and innovative approach that identifies couples contemplating pregnancy before conception to modify biomedical, social, behavioral and environmental risk factors leading to adverse pregnancy outcome it is the only recommended evidence-based practice targeting the critical period of the preconception (6).

The benefits of PCC are well documented for improving maternal and infant health outcomes. Having good utilization of PCC decrease maternal and child mortality around by 57% and maternal and child morbidity by 73 % (12-14). Despite improving in access to antenatal care, the incidence of congenital anomalies, preterm birth, and MM have not decreased in many countries, this indicates that preconception care alone is not enough to improve pregnancy outcomes (15). Worldwide women's knowledge regarding to preconception care was affected by women's age, ethnicity, occupation, educational status, preconception care intention previous history of abortion, monthly income, previous history of still birth, parity and use of family planning (16- 20)

Worldwide the utilization of PCC is very high especially in developing country including Ethiopia. Utilization of PCC in developed country like China, Iran, Nepal, and Canada is 40%, 47%, 51% and 54% respectively (16-19). In developing countries like Brazil, Sudan, Sri Lanka and Ethiopia is 7.9%, 9%, 27.7% and 9.6% respectively (20-23).

The prevalence of preconception folic acid utilization in China is 68% but only 16.1% of women take folic acid regularly from 4 weeks before conception throughout 4 weeks after conception (24). The prevalence of preconception folic acid utilization in developed countries estimates were 32-51% in North America, 9-78% in Europe, 21-46% in Asia, 4-34% in the Middle East, 32-39% in Australia (20). There is evidence that less than 50% of women supplement their diet with foliate during preconception even though there are strong evidences that foliate supplementation reduce the risk of neural tube defect (NTD) (25). In western societies PCC is widely recognized as a way to optimize women's health prior to conception with the aim of improving pregnancy outcome.

In developed countries there are strategies to improve utilization of PCC (i.e. China, USA, and Iran) in order to reduce maternal and child mortality. Whereas PCC in developing countries is the most neglected maternal health care service that needs especial attention (26, 27). To improve utilization of PCC intervention taken in USA is increasing health providers and awareness concerning the importance of preconception care of PCC among women of reproductive age including men.

In order to fully adopt the preconception care concept, the current preventive care system will need to be strengthened. This is due to the fact that provision of all needed care prior to pregnancy will guarantee a healthy mother and new born baby during prenatal and postnatal period (28). PCC highly associated with increase in preconception care, delivery care and PNC service utilization which are the corner stone to improve maternal and child health (6).

The magnitude of adverse pregnancy outcome (APO) like APH, PPH, premature rupture of membrane, pregnancy induced hypertension, anemia, low birth weight, still birth, preterm delivery, and congenital malformation that can be minimized by effective PCC are very high in our country Ethiopia (29-31). Despite the higher magnitude of APO in Ethiopia the existing APO preventive strategies in the countries are highly reliant on delivery of pregnancy, PNC, and child health services (32). Despite the important of PCC, there is a limited research done in Ethiopia regarding preconception.

By considering this gaps this study aims to assess knowledge on PCC and its associated factors among pregnant mother in Arekit town. Which is very important for policymakers to introduce intervention and developed evidence based guidelines for improvement of PCC.

1.3 Significant of the study

Identification of level of knowledge, attitude and practice of preconception care related to different determinants of pregnant mothers allows ministry of health sectors and other stockholders to design appropriate policy and programs with varieties of supportive packages to address the needs of women before pregnancy.

The main significant of the study is to influence policy makers (MOH and ministry of education) to incorporate PCC as one of the major component of maternal and child health care (MCH) services, to decrease maternal and child mortality in the country and to incorporate PCC in the education curriculum of health and all health science students should learn about PCC to implement Preconception health service in all part of the country.

We hope that the study was provided insight for the ministry of health, health sector administrators and co-sectors to formulate mechanisms to address preconception care services and development of policies on health protection and promotion Therefore, this study was added

some effort for the country especially health institutions and aimed at identification of nature of problems that could hamper in preconception care, enabling health care strategies to underline preconception care as part of their strategy.

CHAPTER TWO

LITERATURE REVIEW

2.1. Concept of preconception care

For women of reproductive age preconception care is a crucial component. The main goals of PCC are to provide screening, detection and management of medical, behavioral and environmental conditions that might affect pregnancy outcome. It is not only a single visit to a health care provider but it was included full facilities of preventive and primary care services for women before pregnancy or between pregnancies (33).

Preconception care is an integral part of antenatal care because this care program has potential to assist women by reducing risk, promoting healthy life style and improving readiness for pregnant (34).

2.2. Knowledge on preconception care

With the exception of avoiding smoking, alcohol and illicit drugs, women's awareness of preconception health was modest or poor, beyond this there was a little evidence of any received wisdom or prevailing culture of preparing for pregnpreconception carey (35).

A descriptive-cross- sectional study conducted in Nepal on pregnant mother attending antenatal clinic (n=100) reported that 51% of the mother had poor knowledge, 42% had moderate knowledge and only 7% of mothers attending preconception care had adequate knowledge about preconception care and its important on pregnpreconception carey outcomes (34). Another study conducted on Iran showed that, over two third (68.8%) of women had adequate knowledge about PCC (36).

A large descriptive cross sectional study conducted in Korea on pregnant mother admitted in pregnancy waiting room(n=500) showed that 65.6% had knowledge about pregnancy care of preconception folic acid taking, but only 26.4% had take's folic acid in the preconception period (37).

Study conducted in Iraq on reproductive age women showed that (n=150)76.7% of women had fair knowledge, 20% of women's had poor knowledge and only 3.3% of women's had good knowledge about PCC (38).

A cross sectional study done in Dubai on reproductive age women (N=227) reported that majority of the respondents (84.5%) had inadequate knowledge and only 35(15.42%) had a good knowledge regarding PCC. The study results showed that the highest knowledge was in the area of identification of reproductive health risk (39).

Result from large survey in Arab on Arabian Qatari women (n=1480) reported that only half (50%) of the women knew about the important of preconception foliate supplementation on pregnpreconception care outcome. From those who knows about preconception foliate supplementation only 14% of women correctly knows that taking of foliate before pregnancy prevent birth defect (41).

A cross sectional study conducted in Kelantan on reproductive age women (n=492) reported that 51.9% of women had a good knowledge on PCC (42).

A cross sectional survey in low income Mexican American population on reproductive age women (n=305) reported that 76% of women had adequate knowledge on preconception care. The result reveals areas of higher knowledge are concentrated on the effect of preconception folic acid taking in pregnancy outcome (43).

A result from study conducted in Nigeria on life central local government (n=238) 34.1% had good knowledge about preconception care (44).

A study conducted in Kenya on reproductive age women showed that (n=384) more than half of the participant had inadequate knowledge, only 38.3% had adequate knowledge about PCC. The highest knowledge is found in screening for STI (28.4%) and lowest knowledge is found in screening for genetic disease (7.6%) (10).

Study conducted in North West Ethiopia West Gojjam on reproductive age women (n=422) revealed that the overall knowledge of PCC was 27.5 %(46). Another survey conducted in X comprehensive community on pregnant mother with preexisting diabetic mellitus (n=150) reported that 42.7% pregnant mother had good knowledge about PCC (47).

A result from large study conducted in Hawassa health institution on postnatal mother (n=580) 20% of postnatal women had adequate knowledge on preconception care (23). Another large study conducted in west Shoa, Oromia region on pregnant mother attending preconception care (n=634) reported that 232 (36.6%) had poor knowledge and 402 (63.4 %) had a good knowledge about preconception care (48).

2.3 Factor associated with knowledge, Attitude and practice preconception care

Study on Iran revealed that education and age were significantly associated with knowledge and attitude on PCC. The study revealed that women with age group of 30-39 and 40-49 years was significantly higher knowledge on PCC than those who are in the age group of 20-29 year and those women who attends collages and university education had higher knowledge than those who attends primary and high school education. Based on this study employed women had significantly greater knowledge than homemakers (36).

Study conducted in Saudi also reported that knowledge of preconception folic acid supplementation is significantly associated with educational status of the mother. Highly educated women had 41.3% knowledge about folic acid and used it more often in the preconception period than illiterate women`s (40).

Different literature reported that women`s knowledge on preconception care had significantly associated with educational status, family income, occupation, residence and age of the mother. Those women who have good family income and those who come from urban area had relatively good knowledge about PCC than the counterpart (37-44). A study in Kenya reported that employed women had relatively good knowledge (33.1%) than unemployed women (5.2%) and those women who are married had relatively good knowledge (28.6%) than unmarried women`s (9.6%). This study also revealed that those women whose religion is Christians had relatively good knowledge (36.5%) than Muslim followers (1.8%) (45).

Another cross sectional study in Zambia showed that there is significant association between the level of education and knowledge on PCC. In this study, women with up to primary level of education were 4.54 times more likely to have poor knowledge on PCC than those with tertiary education (45).

A survey conducted in Hawassa health institution reported that women who have at least one preconception care contact, urban residence, having secondary education and women who have educated husband had good level of knowledge on PCC (23).

Obstetrics factors

Many literatures report that gravidity and parity are highly associated with knowledge of preconception care. Women`s with high gravidity (multipara) and high parity (multi parity) had relatively good level of knowledge on PCC than prime women`s (35-40).

A study done in Iranian women revealed that there is a strong association between knowledge on PCC and bad obstetrics history like abortion, repeated bad obstetric history are 2 times knowledgeable than those who faced only one bad obstetric history (36).

A survey in west Gojjam, adet report that women who had no history of family planning use were 85% less knowledgeable than those who had a history of family planning (46). Survey in Hawassa health institutions reported that those women attended at least one preconceptioncare visit had relatively good knowledge (19.39%) than those who don't attend preconception care (0.5%). Another study in west Gojjam, Adet shows that women having pregnancy intention (planned pregnancy) had 3.3 times likely knowledgeable than those women who had unplanned pregnancy (23).

Preterm labor and intrauterine fetal death. Based on result from this study those women who faced the above bad obstetric history are 4-13 times knowledgeable than those who had not faced. Even those women with

CHAPTER THREE

3. OBJECTIVE

3.1. General objective

- ❖ To assess knowledge, attitude and practice of preconception care toward pregnant women in Areket town southern Ethiopia, in 2020

3.2. Specific objective

- ❖ To assess knowledge of pregnant women toward preconception care in Arekit town southern, Ethiopia ,in 2020
- ❖ To determine the attitude pregnant mother toward preconception care in Areket town
- ❖ To assess practice pregnant mother toward preconception care in Areket town

CHAPTER FOUR

METHODOLOGY

4.1. Study area.

The study was conducted in Areket town, capital of Gumer woreda, Gurage zone, SNNPR, Ethiopia. The town is located 224 km south west of Addis Ababa which is the capital of Ethiopia, and 306 kms from Hawassa; the capital of SNNPR and 68kms from Wolkite. It is located at latitude of $8^{\circ} 17' \text{ N}$ $37^{\circ} 47' \text{ E}$ and longitude of 8.283° N 37.783° E with an elevation of 1910 and 1935 meters above sea level. The structural plan of Arekit from 7 urban and 5 rural villages.

According to Areket town statistical agency report, Areket town has a total population of 4001 peoples of these 1960 are males and 2041 females. (Gumer woreda administrative office)

4.2 Study period

The study was conducted from December to January 2020 G.C

4.3. Study design

Community based cross- sectional study design was employed to assess of knowledge, attitude and practice of preconception care toward pregnant mother in Areket town southern Ethiopia.

4.3.1. Source population

All pregnant women living in Areket town

4.3.2. Study population

The study population was eligible pregnant mothers in Areket from December to January

4.4. Inclusion criteria and exclusion criteria

4.4.1. Inclusion criteria

Pregnant mothers who living in Areket town and volunteer for interview

4.4.2. Exclusion criteria

Women who were sick and unable to communicate

4.5. Sample size determination

Preconception care 20 Sample size was determined by single population formula by considering the proportion of the knowledge of % [which was derived from study conducted Hawassa] 95%CI and marginal error of 5%

$$n = \frac{z^2 \cdot p (1 - p)}{d^2}$$

Where: - n=sample size

z=the standard normal deviation at 95% confidence interval [CI], =1.96

P=the proportion of knowledge on PCC assumed to be 20%which was

Derived from study conducted in Hawassa

d=margin of error

$$n=(1.96)^2 \times 0.2(1-0.2)/(0.05)^2=245.86 \approx 246$$

The total number of pregnant women in study area is 200 since the total number pregnant women is less than 10,000 we use the correction formula $n = \text{no} / (1 + \text{no}/N)$ sample size= $246 / (1 + (246/200)) = 110.31 \approx 111$ Taking consideration the non response rate 10%(11) of sample size was added and the final total sample size of the study was 121

4.6. Sampling technique

Multistage sampling method was used to select study participants. There are twelve villages in Areket towns. Out of these villages three villages was selected by using the lottery methods of non probability sampling techniques. Each study subject was selected by using simple random sampling methods through proportional allocation numbers of women's in their villages.

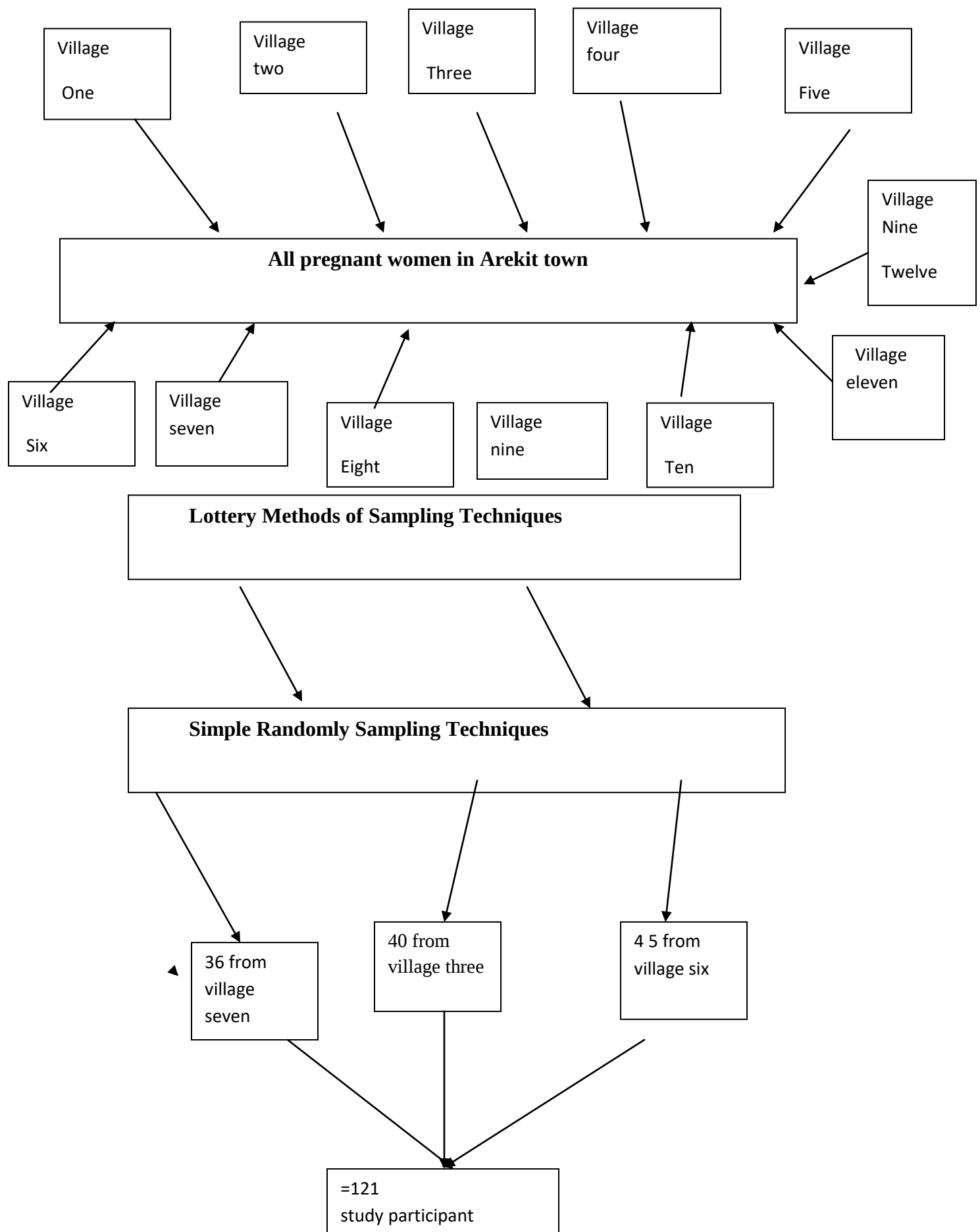


Figure 1. Sample selection diagram of Arekit town pregnant women's.

Systematic sampling was techniques of the study. Hence to determine the sampling interval the following method was used

$K=N$ where k = sampling interval between houses

nN =total number of houses=420

n final sample size=121

$k=420/121 =3.4\approx 3$ Therefore, sampling interval was every 3 house. The first was selected by random lottery method.

4.7. Variables

4.7.1. Dependent variables

- ❖ Knowledge on preconception care
- ❖ attitude of preconception care
- ❖ practice of preconception care

4.7.2. Independent variables

- socio demographic characteristics
 - age
 - educational status
 - occupation
 - ethnicity
 - religion
- obstetric factors
 - Parity
 - Gravidity
 - bad obstetrics history
 - ✓ abortion
 - ✓ still birth

- ✓ congenital anomaly
- ✓ neonatal death
- ✓ preterm birth

- Family planning use
- Planed pregnancy

4.8. Operational definition

PRECONCEPTION CARE: an intervention either advice or treatment and lifestyle's modification before being pregnant (24). Preconception component in this study is HIV testing and Counseling Screening and treatment infertility, nutrition ferrous supplementation immunization advice cessation of cigarette smoking

GOOD KNOWLEGE: pregnant mother who respond to correct answer of knowledge- based question more than 75%

POOR KNOWLEGE: pregnant mother who respond to correct answer of knowledge- based question less than 75%

POSITIVE ATTITUDE; Pregnant mother who score is more than or equal 75 of Attitude related question

NEGATIVE ATTITUDE; pregnant mother who score is less than 75 of attitude related question

GOOD PRACTICE; pregnant mother who have used preconception care currently

BAD PRACTICE; pregnant mother who have not used any preconception care

4.9. Data collection procedure

Data was collected in Areket town by our group fourth year midwifery students of wolkite University College of medicine and health science

4.10. Data quality assurance

The questionnaire was prepared in English language, then translated in to a common spoken language Amharic and then transcribed back to English properly to keep its consistency. To check instrument simplicity, consistency and order of the question. To improve the validity

and reliability of the instrument, a questionnaire modification was made after the pretest accordingly. Regular check-up for completeness and consistency of data on daily base was done by group members.

4.11. Data processing and analysis

The data was checked, coded and entered in to Epi- data version 3.1 and then analyzed with the statistical package for social sciences (SPSS) version 21. Descriptive statistics tables chart and frequency will be used to present the information.

4.12. Ethical considerations

Study was carried out after obtaining written consent from Midwifery department of WKU and Arekit town administrative office. The purpose of the study was explained to the study participants and written informed consent was secured before data collection was started participation was on voluntary basis after written consent, and response was kept confidential. The consent procedure was approved by ethical committee for all.

4.13. Dissemination of the study finding

Result of this study was submitted to Wolkite University, college of medicine and health science department of midwifery, and Areket to be used as a reference for the future researchers.

CHAPTER 5 RESULT

5.1 SOCIO DEMOGRAPHIC DATA CHARACTERISTICS OF RESPONDENTS

Majority of study subject 98(81%) are Gurage in ethnicity followed by 13(10.7%) are SILTE, 5(4.1%) are kembata and 4(3.3%) are hadiya and 1(8) are wolaita ethnic groups. From the total study subjects 75(62.0%) are Muslim, 31(25.6%) are orthodox 15(12, 4%) are protestant religion.

About 16(13.1%) of study subjects have monthly income of 500-1000 Ethiopian birr, 40(33.1%) and 65(53.7) have monthly income of less than 500 birr and greater than 1000 birr respectively. A gravidity women who have children greater than eight account for about 3(2.2%) and those who have children less than tree accounts for about 63(5.21%) a Para women women who have children greater than eight account for about 3(2.2%) and those who have children less than three account for 66(54.5%).

About 24(19.8%) study subjects are 0-8 grade, 14(11,16%) are illiterate, 32(26, 4%) are educated 9-12 , 20(16.5%) are degree and 31(25,6) were diploma .About 64(52.9%) of study participant are house wife, 40(33.1%) are government employer, 2(1.7%)are farmer 11(9.1%) 4(3.3)are merchant and private business respectively subjects 30(24.8%) women's are lives within less than 2km distance from health institution, 49(40.5%) are between 2 and 4km and 42(34.7%) are live at greater than 4km ..

Table-1 Socio-demographic characteristics of respondents in Areket town gurage zone SNNPR, 2020
G.C

VARIABLE	CATEGORY	FREQUENCY (%)
AGE	15-20	1(8%)
	21-25	14(11.6)
	26-30	51(42.1)
	31-35	23(19.0)
	>35	32(26.4)
MARITAL STATUS	MARRIED	114(94.2)
	SINGLE	1(8)
	WIDOWED	4(3.3)
	DIVORCED	2(1.7)
EDUCATIONAL STATUS	0-8	24(19.8)
	9-12	32(26.4)
	DIPLOMA	31(25.6)
	DEGREE	20(16.5)

	ILLITRATE	14(11.6)
RELIGION	OTTHODOX	31(25.6)
	MUSILIM	75(62.0)
	PROTESTANT	15(12.4)
	CATHOLIC	0
ETHNICITY	GURAGE	98(81)
	SILTE	13(10.7)
	HADIYA	4(3.3)
	KEMBETA	5(4.1)
	WOLAITA	1(8)
OCCUPATION	HOUSEWIFE	64(52.9)
	MERCHANT	11(9.1)
	FARMER	2(1.7)
	GOV'T EMPLOYE	40(33.1)
	PRIVATE BUSINESS	4(3.3)
MONTHLY INCOME	<500	40(33.1)
	500-100	16(13.2)
	>1000	6.5(53.7)
HUSBAND EDUCATIONAL STATUS	0-8	21(17.4)
	9-12	16(13.2)
	DIPLOMA	31(25.6)
	DEGREE	35(28.9)
	ILLITRATE	18(14.9)
	<2km	

HOW FAR YOURROOM FROM HEALTH		30(24.8)
	2-4km	49(40.5)
	>km	42(34.7)

Table2- Obstetrics History of pregnant mothers towards preconception care in Areket town

Variable	Category	Frequency (%)
Gravidity	<3	63(52.1)
	3-5	43(35.5)
	6-8	12(9.9)
	>8	3(2.5)
Parity	<3	66(54.5)
	3-5	40(32.1)
	6-8	12(9.9)
	>8	3(2.5)
Planned pregnancy	Yes	103(85.1)
	No	18(14.9)

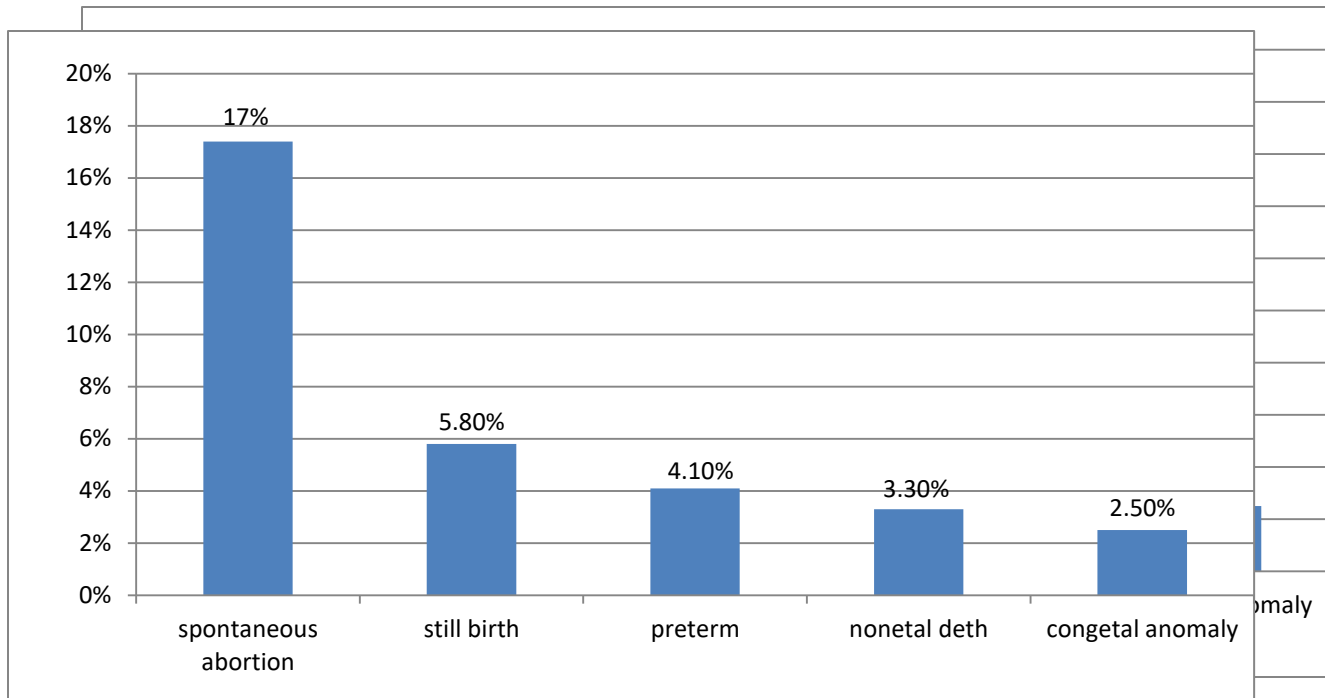


Figure-2 obstetrics' history of pregnant mother in Arekit town

5.2 KNOWLEDGE ON PRECONCEPTION CARE

Among 121 participants, 42(34.7%) of pregnant women had heard about preconception care before. The rest 79(65.3%) not heard about preconception care. From those who have knowledge about preconception care 30(71.4%) get the information from health professional 5(11.9%) from health science student 4(9.5%) from the family and 3(7.1%) the rest from other women from community.

About 110(90.9%) HIV testing and counseling is used for prevention of maternal and child mortality, 11(9.1%) no HIV testing 97(80.2) know that nutrition assessment and advice during preconception care 24(19.8%) not know.

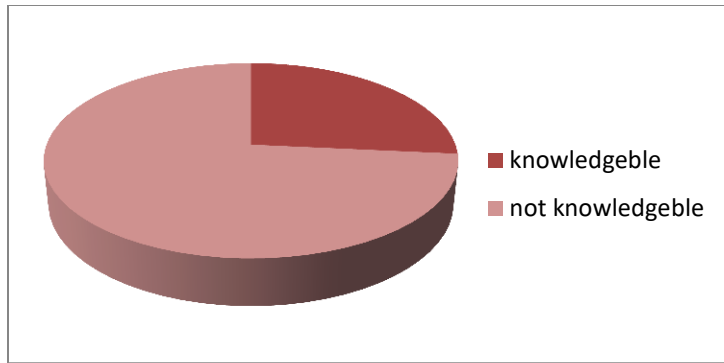


Figure 3:- knowledge of pregnant mother on preconception care in Arekit town, 2020 EC.

Source of information

For those who had heard about PCC; the major source of information was health professionals 30(71.4%) and minority 5(11.9%) of them had heard from the family and from health science student.4 (9.5%) was heard from other women from community respectively.

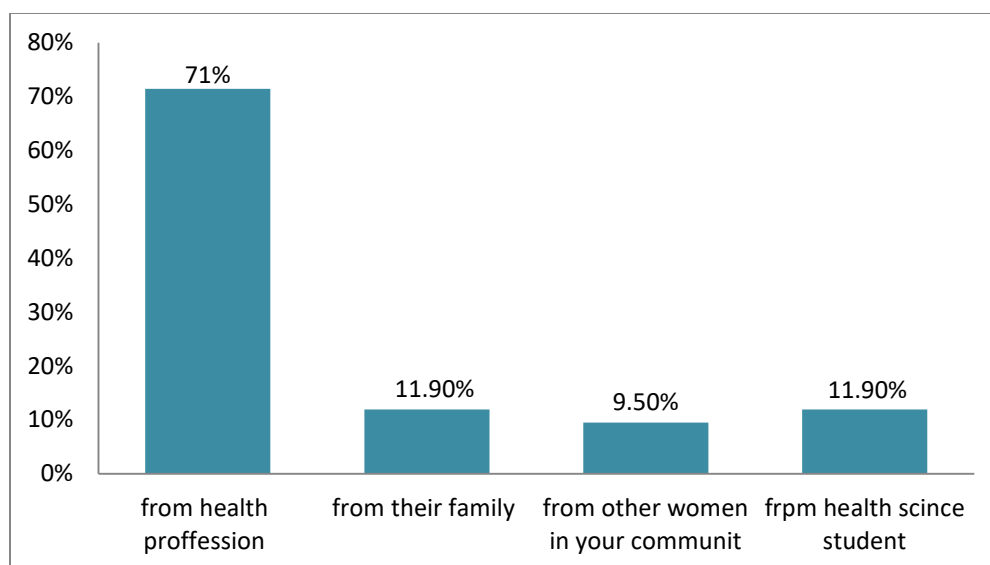


Figure 4:- knowledge of pregnant mother on of preconception care in Arekit town

	Category	Frequency (%)
Hiv testing and counseling	Yes	110(90.9)
	No	11(9.1)
Nutrition assessment and advice	Yes	97(80.2)
	No	24(19.8)
Iron foliate and other vitamin	Yes	95(78.5)
	No	26(21.5)
Immunization	Yes	101(83.5)
	No	20(16.5)

Screening and treating STI	Yes	60(49.6)
	No	61(50.4)
Genetic screening and counseling	Yes	74(61.2)
	No	47(38.8)

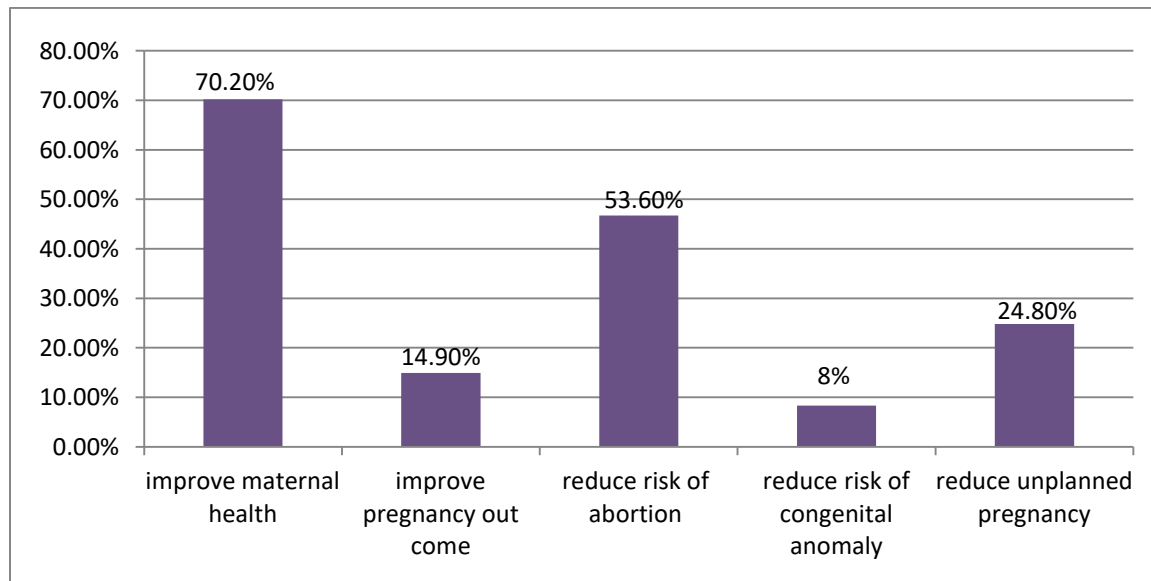


Figure 5:- benefit of preconception care for pregnant mother in Arekit town 2020 E C

Table 5: knowledge of pregnant women on pre conception care

Preconception care and counseling are needed	For all women	89(73.6)
	Only women with chronic illness and bad obstetrics'	6(5.0)
	Don't know	26(21.5)
Duration to star preconception care	Three month	40(33.1)
	Two month	21(17.4)
	One month	28(23.1)
	Don't know	32(26.4)
Time to start folic acid	Before pregnancy preconception care	23(19.0)
	After pregnancy preconception confirmed	55(45.5)
	After birth of the baby	8(6.6)
	Don't know	35(28.9)

5.3 ATTITUDE ABOUT PRECONCEPTION CARE

From those who have no knowledge about Preconception 42(95.45%) wants to know about the service and the rest 2(4.55%) do not want know about the service. The reason is due to their plan to stop giving birth and unknown reason.

Almost all 191(88.43%) of respondents support other women who use the service. The majority of them have their own reason to support others like; to reduce maternal and child mortality, to

reduce complication of labor and pregnancy and others. But, some of them support without any reason.

From the total study subjects 153(70.83%) of respondents discuss with their friends and husbands about preconception care and the rest 61(28.24%) didn't discuss about preconception care. It might be due to their husband is too busy and some of the respondent's husband live far away from them and others with unknown reason

Table- 6 attitude of preconception care towards pregnant mothers in Areket town

Variable	Category	Frequency (%)
Have you heard about preconception care	Yes	54(44.6)
	No	67(55.4)
Do you want to know about preconception	Yes	50(72.5)
	No	7(10.1)
	No response	12(17.4)
Do you all pregnant used preconception care	Yes	82(68.6)
	No	21(16.9)
	No response	17(14.4)
Do you oppose those women used preconception	Yes	26(21.5)
	No	93(76.9)
	No response	2(1.7)

5.4 PRACTICE OF PRECONCEPTION CARE

From the total study subjects 42(34.7%) are receive preconception before the current pregnant preconception care and the rest 79(65.3) of them didn't receive preconception before. The reason 47(59.5%) lack of knowledge, 16(20.3%) is lack of access and 16(13.2%) is the other. From

those who did not use the service 105(86.8) have a plan to use the service in future but, the rest 4(3.3%) have not plan to use the service due to they have not plan to give birth & 12(9.9%) for unknown reason

Table-6 practice of preconception care towards pregnant mothers in Arekit town

Variable	Category	Frequency (%)
Are you practice it now?	Yes	79(65.3)
	No	42(34.7)
If yes when do you start	Before pregnant	36(45.6)
	After pregnant	43(54.4)
	Other	42
If no what is your reason	Lack of knowledge	16(38.1)
	Lack of access	3(7.1)
	Other	23(54.8)
Do you have any plane to use preconception service in the future?	Yes	105(86.8)
	No	4(3.3)
	No response	12(9.9)

CHAPTER 6

DISCUSSION

In this study pregnant mothers who have ever heard about preconception is 42(34.7%) which is less than that of the study conducted in MizanTepi which is around 225(88.20%) from the total of 255 respondents (24). This difference may be that Mizan town is more facilitated compared to that of Areket town

Research conducted in metekel zone, North West Ethiopia indicated that 34.4% of the mothers have no knowledge about preconception (8). This is very low when compared to our study which are 65.3%, this might be due to currently more information dissemination is present.

According to this study, it was found out that preconception service utilization from skilled providers is 54.5%. This is larger as compared to preconception utilization in urban area of Ethiopia which is 76% and it is low as compared to preconception utilization in Addis Ababa which is 93.6% (4). The possible reason for this difference might be due to the fact that Addis Ababa city has good access to health service facilities nearby as compared to Arekit town.

A research conducted in yem special woreda, south eastern Ethiopia shows that, 28.5% were reported to have received preconception which is very low as compared to this study research.

From study participants majority of them have knowledge on preconception. 54.5% of them get information from health professional.

There is statically significant association between Socio demographic variables (like; age, educational status, distance from health institution and monthly income) and knowledge on preconception with preconception utilization. As age increases preconception practice decrease. The number of children increases preconception practice decrease. Distance from health institution increase preconception practice decrease. As mother educate more their preconception utilization increase. It might be due to increase their knowledge about preconception. Because of giving free preconception service currently utilization by pregnant mother increase.

CHAPTER 7 CONCLUSION AND RECOMMENDATION

7.1. CONCLUSION

The finding of the study showed that level of KAP toward preconception care was low when compared to different literatures. Women's education, occupation, history of spontaneous abortion and partner's education were the identified factors that significantly influence KAP on preconception care. The finding of the study concluded that having high level of education, having history of spontaneous abortion and husbands educational status which is collage and above leads to being knowledgeable on preconception care. And also history of family planning using was create a great opportunity having good KAP about preconception care. As preconception care has many advantage on improving on maternal and child health; women's KAP on PCC is very low. Special attention should be given by policy makers.

RECOMMENDATIONS

In this study low KAP was seen on pregnant mother toward preconception care in Areket town, therefore to improve maternal and child health by good knowledge and utilization of preconception care the following recommendation was forwarded to different concerned body.

ANNEX-1

Reference

1. Bhutta ZA CM, Axel son H.,Berman P, Borema y,Bryce G, Bustreo F,C avagnero E `et al. taking stoke of maternal, newborn and child survival. Countdown to decade report (2000-2010]: lancet 2012.2015; 375(9730):2032-44.
2. Global, regional and national levels and trends in maternal mortality with a scenario based projection to 2030: systematical analysis by UN maternal mortality

Estimation inter agency group. 1990 to 2015.

3. World health organization. The millennium development goals report 2017. Geneva Switzerland .2017

4. Central statistical agency Arekit, Ethiopia. demographic and health survey 2016.

5. Blencowe HcousensS, Jassir FB, Say L, ChouD, Mothers C ` et al. national, regional, and worldwide estimates of still birth rate in 2015, with trends from 2000: a systematic analysis. Lancet global health .2016; 4 [2].

6. World health organization. A meeting to develop a global conscience on PCCto reduce maternal and child mortality and morbidity. Geneva Switzerland. 2013a.

7. global, regional and national cause of child mortality: on up to date systematic analysis for 2010 with time trends since 2000.the lancet 2012, 379: 2151 -61.

8. Born too soon. the global report on preterm birth. Geneva, WHO 2012.newyork: UN .2015.

9. Adewole Abimbola D and Odutayo Patience O.PCC strategy to reduce child and maternal mortality. International research journal .2017; 8 [42):141- 5161.

10. Poles M.Koster MPH, Boeige, HR, Franx, A, Stel HF.Why do women not use preconception care; obstetrical and gynecological survey Netherland .2016.

11. Margaret Keraka and DR Joan Njagi. Assessment of knowledge on PCC among women of reproductive age in Kenya.GJHIS .2018; 3(1):81-100.

12. Central for disease prevention and control (CDC). Maternal health advancing g the health of the mother in the 21th century.2016.

13. World health organization. Reduction of maternal and chilled mortality and morbidity; the role of preconception care in the life coarse approach 3rd congress on preconception health. Uppsala ,Sweden.2016.

14. SutanR,Mohamed N, Tamil AM, Yusef A.maternal health seeking behavior at pre pregnancy stage among mother`s with low birth weight bobies. Womens health gynecol. 2016;2(046).

15 .Robab LAtefejad Roudsari, Roghih Bayrami, Mjgan Jvadnoori, Hamid Allahverdipour. Pattern and determinant of preconception health behavior in Iranian women`s. Iranian Red Crescent Medical Journal. 2016; 18(12):e59044.

16. Nepali G, Sapkota SD. knowledge and practice and practice regarding preconception
17. Best start resource. Preconception health care awareness behaviors in Ontario. center for preconception health, Ontario ,Canada.2009.
18. Nascimento NC, Borges ALV, Fujimori E, Tsunehiro MA, Chofakian CBN. Knowledge and practice among adolescent`s. J Nurs UFPE. 2015;9(7895-7901).
- 19 .Ahmed KYM, Elbashir IMH, Mohamed SMI, Saeed AKM, Alawad AAM. Knowledge, attitude, and practice of preconception care among Sudanese reproductive age women.2015;4(199-203).
20. Patabendige M, Goonewardene IM. preconception care received by women attending antenatal clinic at teaching hospital in southern Sri Lanka. Sri Lanka J obstet gynecol. 2013;4.
21. Borges ALV, Santos OA, Nascimanto NC, Chofakian CBN, Sponholz FA.preconception health behaviors associated with pregnancy planning status among Brazilian women`s .Rev Esc Enferm USP. 2016;50(208-215).
22. Dean Sv,Lassi ZS,I mam AM ,Bhutta ZA.Preconception care closing the gap in the continuum health .2014;11
23. Yitayal Ayalew Gashu, Tewachew Muche Liyeh and Amare Simegn Ayele. Preconceptional cre utilization and its associated factors among pregnant women in Adet, West Gojjam north – Western Ethiopia. J Women`s Health Care.2018; 7(5).
24. Xing XY. Preconception folic acid supplementation among women attending antenatal clinic in Anhui, China.2012.
25. Kirsti Toivonen, Emilie Lacroix, Michelle Flynn,P.E. Ronksley. Folic acid supplementation during the preconception period: A systematic review and meta-analysis. J Preventive Medicine. 2018; 48(114).
26. Anna Berglund and Gunilla Lindmark. Preconception health care strategy for improved maternal and chilled health. Ups J Med Sci,2016 ;121(4):216-222..

27. Nobles-Botk J, Lincoln A, Cline J. preconception care resources where to start. *J Midwifery Women`s Health*.2016;61(365-369).
28. Johnson KPS, Biermann J, Cordero JF, Atrash HK, Paker CS, Boulet S, Curtis MG. recommendations to improve preconception care united stat. 2006;55(6):1-23.
29. Cherie N, Mebratu A. adverse birth outcomes and associated factors among delivered mothers in Dessie Referral hospital, North East Ethiopia. *J Women`s Health Reprod Med*. 2017; 1:4.
30. Adane AA. Adverse birth outcomes among deliveries at Gondor university Hospital, North West Ethiopia. 2014; 14:90.
31. Berhe H. factor associated with patterns of birth outcome at public hospital in Mekelle town ,Tigri Region, Ethiopia. 2013; 67-81.
32. Federal democratic republic of Ethiopia and ministry of health [MOH],health sector development program IV 2010/11-2014/15.
33. World health organizations. Preconception health: maximizing the gains of maternal and chilled health. WHO 2013.
34. Gayatri Napali and Shubha Sapkota. Knowledge and practice regarding preconception care among antenatal mother. *Int J of preconception in public health*.2017;1(4): 224-227.
35. Beyeza Kashesya J EA, Kaharuza F, Mirembe F, Neema S, Kulane A. My partner wants a child: a cross-sectional study of the determinants of the desire for children among mutually disclosed sero-discordant couples receiving care in Uganda. *Biomed Central Public Health*.
36. Fatemh Jafar.;S amen ch Reshid. Iranian women`s knowledge and attitude regarding PCC. *journal of nursing and midwifery science* .2017;4(3).
37. Jihun Kim, Miyong Yan, Cho-il Kim, Yoonna Lee, Gui-im Moon. Preconception use of folic acid and knowledge about folic acid among low-income pregnant women in Korea. *Nutrition research and practice*. 2017;(1976-1457).

- 38.308 Ahmed, M.H, Jmil Piro .T. Knowledge ,practice and attitude of married women about PCC .journal of client centered nursing care. 2017;3[1]:.37-44.
39. Prashansa Gaeutam ,Rojana Dhakal. Knowledge on PCC among reproductive age women .Saudi J.Med.Sci.2016; 10(247): 1-6.
40. Madanat A. preconception care in Saudi women with diabetes mellitus. J Fam Community Med.2016 ;23: 109-14.
41. Bener A. maternal knowledge, attitude and practice on folic acid intake among Arabian Qatari women. 2006.
42. Naniy Dramen, Azidah Abdulkader ,Rosediani Muhamed. knowledge,attitude and practice of PCC among women attending appointment at a rural clinic in Kelantan .education in medicine journal . 2016;8(4): 57-68.
43. Dean V Coonrod, Natali C Bruce, Theresa D Malcolm, David Drachman. Knowledge and attitude regarding preconception care in predominantly low-income Mexican American population. American journal of obstetrics and gynecology. 2009;200(6):1-7.
44. AE Olowokere, A Komolafe, C Owofadeju. Awareness, knowledge and uptake of preconception care among women in life central local government area of Osun state. Journal Home. 2015;27(2).
45. Patrica Mutale , Mwenya Kwangu, Chishal Mirrian, Kapambwe Muchemwa ,Moonosilitongo, Mutale Chileshe et al. knowledge and PCC seeking practice among reproductive age diabetic women in Zambia .international journal of translational medical research and public health . 2017;1(2): 36-46.
46. Yitayal Ayalew,Amlaku mulat , mulugeta Dile ,Amare simegne. Women`s knowledge and associated factors in PCC in adet, west Gjjam, north west Ethiopia.2017.
47. AycheW Kassa. Knowledge and experience of preconception care and its associated factors among pregnant mother with preexisting diabetics` disease attending diabetic follow up at selecttableaaed governmental hospital in Addis Ababa, Ethiopia. 2018.

48. Andualem Mekonen. knowledge and experience of PCC among pregnant mother in west Shoa, Oromia region Ethiopia 2016

ANNEX-2 .Questionnaires

Hello, how are you, our name is Gemechu Hamiyo Degu Agumas Abubekar Nassir We are graduating student in Wolkite University College of medicine and health science department of midwifery. Our colleagues and we are conducting a research on assessment of knowledge attitude and practice of preconception care and. **Benefit:** for your participation no payment was granted or has no any special privilege to you. But your response to the following question are beneficial to you and other pregnant mothers as input in improvement towards preconception care services so recommendations was made to responsible organizations to fill those gaps. **Risks:** the study was conducted through interviews if you volunteer to participate and you are asked for a maximum of 20 minute. There is no possible risk associated with participating in being this study except the time spent for responding to the questionnaire. The information that you give to me well never be used in connection with you. Your answer is completely confidential and you can interrupt the interview at any time.

Are you voluntary to participant in this study?

1 Yes (continue to the next page)

2 No

Assessment of knowledge, attitude, and practice preconception care and its associated factor among pregnant women in Arekit town.

PART ONE

1.SOCIO DEMOGRAPHIC CHARACTERCTICS

1. What is your age in completed year? ____Year

A.15-20 B. 21-25 C26-30 D31-35 E.>35

1.1. What is your marital status?

A. Married

C. windowed

B. Single D. Divorced

1.2. What is your educational status?

A .0-8 C. diploma

B.9-12 D. degree

E Illiterate

1.3. What is your religion?

A.Orthodox C. protestant

B.Muslim D. catholic

1.4 What is your ethnicity?

A. Gurage C. hadiya E. wolaita

B.silte D. kembata

1.5. What is your occupation?

A. House wife C. farmer E. Private business

B.merchant D. Gov`t employee

1. 6. Family monthly income in Ethiopia birr..... ?

A. <500 B 500-1000 C>100

1.7. What is your husband education status?

A. (0-8) B. (9-12) C Diploma D.Degree E Illiterate

1.8 How far your house room from health institution?

A. <2km B. 2-4km C.>4km

2. OBSTETRICAL HISTORY

1. What is your total number of pregnancy (gravidity).....?

A. <3 B.3--5 C 6-8 D>8

2. What is your total number of birth after 7month of gestation (parity)?

A. <3 B.3-5 C6-8 D>8

3. Were all pregnancy planned including current pregnancy?

A. Yes

B. No

4. Have you ever had any one of the following? (More than one answer is possible)

A. Spontaneous abortion D. Neonatal death

B .Still birth

C.Preterm birth E. Baby with congenital anomaly

5. Have you ever had Spontaneous abortion?

A yes B no

6 if yesQn5 how many times occurs?

A 1 B 3 C 2 D>3

7 Have you ever had still birth?

Ayes B no

8 if yesQn7 how many times occurs?

A1 B3 C2 D>3

9 Have you ever had preterm baby?

10. if yesQn9 how many times occurs?

A1 B3 C2 D>3

11. Have you ever had Neonatal deaths?

12 if yes Qn 11 how many times occurs

A1 B3 C2 D>3

13. Have you ever had Baby with congenital anomaly?

14. If yes Qn 13 how many times occurs?

A1 B3 C2 D>3

15. Did you use contraceptive before current pregnancy?

A. Yes

B. No

PART TWO

2. KNOWLEDGE ON PRECONCEPTION CARE

2.1. Have you heard about preconception care before pregnancy?

A. yes B. no

2.2. If yes for question 1, where did you get the information?

A. from health professional

B. from health science student

C. from the family

D. from other women in your community

2.3. Do you know that HIV testing and counseling were given during preconception care services? A. yes B. no

2.4. Do you know that nutrition assessment and advice were given during preconception care service?

A. yes B. no

2.5. Do you know that iron foliate and other vitamin supplementation were given during preconception care service?

A. yes B. no

2.6. Do you know that immunizations for vaccine preventable disease were given during preconception care service?

A. yes B. no

2.7. Do you know that screening and treating of STI, chronic disease and environmental risk were given during preconception care service?

A. yes B. no

2.8. Do you know that genetic screening and counseling were given during preconception care service?

A. yes B. no

2.9. Do you know the benefit of preconception care services? (More one answer is possible)

A. Yes

B .No

2.10. If yes for Qn2.9, what do you think some of the benefits? (More than one answer is possible)

A. Improved maternal health

D. reduces risk congenital anomaly

B. reduces risk of abortion

E. reduce unplanned pregnancy

C. improve pregnancy outcome

2.11 Improved maternal health?

A. yes B. no

2.12 reduce risk of abortion?

Ayes B no

2.13. Improve pregnancy outcome?

A yes B no

2.14 reduce risk congenital anomaly?

A yes B.no

2.15. Reduce unplanned pregnancy?

A.yes Bno

2. 16. For whom preconception care and counseling are needed?

A.For all women

B.Only women with chronic illness and bad obstetric history

C.I don't know

2.17. What is the minimum recommended duration to start preconception care? \

A. Three month

C. One month

B.Two month

D. Don't know

2.18. What is the recommended time to start folic acid supplementation?

- A. Before pregnancy
- B. After pregnancy confirmed
- C. After the birth of the baby
- D. don't know

PART THREE

3. ATTITUDE OF PRECONCEPTION CARE

3.1. Have you heard about preconception care before pregnant?

- A. yes B. NO

3.2. If your answer is no do you want to know about preconception care

- A. Yes B. No C. no response

3.3. Do you think all pregnant women used preconception care?

- A. Yes B. No c .no response

3.4. Do you oppose those women used preconception service?

- A. Yes B. No

PART FOUR

4 PRACTICE OF PRECONCEPTION CARE

4.1. Are you practice it now?

- A Yes B .No

4.2. If yes when do you start?

- A before pregnant B after pregnant C other

4.3. If “NO” for question no4.1 what your reason?

- A lack of knowledge B lack of access C.Other

4.1 do you have any plane to use preconception care service in the future?

- A. Yes B. No