ADDIS ABABA UNIVERSITY

COLLEGE OF HEALTH SCIENCES

SCHOOL OF ALLIED HEALTH SCIENCES

DEPARTMENT OF NURSING AND MIDWIFERY

ASSESSMENT KNOWLEDGE AND EXPERIENCE OF PRECONCEPTION CARE AMONG PREGNANT MOTHERS ATTENDING ANTENATAL CARE IN WEST SHOA ZONE PUBLIC HEALTH CENTERS, 2016

BY ANDUALEM GEZAHEGN (BSc)

A THESIS SUBMITTED TO THE SCHOOL OF GRADUATE STUDIES OF ADDIS ABABA UNIVERSITY, COLLEGE OF HEALTH SCIENCE, SCHOOL OF ALLIED HEALTH SCIENCES IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE IN MATERNITY AND REPRODUCTIVE HEALTH IN NURSING.

MAY, 2016

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Acknowledgement

I would like to forward a grateful thank to Addis Ababa University, College of health science school of allied health sciences department of nursing and midwifery for financially supporting this thesis and writing letters that enabled me to communicate with all relevant offices.

My most gratitude goes to Dr. Hussen Mekonnen (Bsc,MPH,PhD) for continuous contribution as scientific advisors and constructive comments he provided me even during his private hours throughout the thesis work. my great thank goes to Dr. Amsale Cherie for constructive comments and support she provided.

The West shoa Zone Health office, dendi woreda health office, Ambo woreda health office, Ambo higher, Ghinchi, wolenkomi, Asgori, Boda and Meti health centers for welcoming the conduct of this thesis with great appreciation and facilitated cooperation in activities of data collection.

I would like to express my heartfelt gratefulness to the respondents of this study for devoting much of their invaluable time during the interview.

All data collectors and respondents are very much appreciated for their patience and strength to reach all selected health centers.

I'm thankful to my dearly loved Berhan kasiye for her support throughout my work. At last but not least I also thank those whom I might have overlooked to cite, but contributed to the thesis work in one way or the other.

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Acronyms:

ANC- Antenatal cares

AOR- Adjusted Odds Ratio

BSC- Bachelor of Science

COR-Crude Odds Ratio

CI - Confidence Interval

HIV- Human Immuno deficiency Virus

LMIC - Low and Middle Income Countries

MNCH- Maternal Newborn and Child Health

NTD -Neural Tube Defect

PCC - Preconception Care

PLWHIV- Peoples Living With HIV

SCC-Safer Conception Counseling

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Abstract:

Introduction: Preconception care is <<an approach to health promotion and preventive medicine which focuses on interventions that identify and modify biomedical, behavioral and social risks to a woman's health or pregnancy outcome through prevention and management>> or it could be described as the entire range of measures designed to promote the health of the expectant mother and her child prior to pregnancy.

Methods: A cross-sectional study was conducted from march 1st to 31st 2016 in selected health facilities of West Shoa Zone, Oromia. Six hundred thirty four study participants were included in the study. The sample size was assigned to each health facility proportionally. Study subjects were selected by systematic random sampling technique. An interviewed structured questionnaire was used to collect information. Bivariate and Multivariate Logistic regression was used to identify factors associated with knowledge and experience pregnant mothers towards preconception care. P-value<0.05.

Result: Six hundred thirty four participants with 100% response rate were involved in the study. Of these,232(36.6%) had poor knowledge and only 242(38.2%) had experience towards preconception care. having information on preconception care was associated with knowledge on prenatal screening (AOR=0.27 CI of 95% (0.17,0.42)). consideration of benefits of preconception care to couples was significantly associated with experience of preconception care AOR=2.308 CI of 95% (1.082, 4.923).

Conclusion: More than one third of the study participants were not knowledgeable and more than half of them had low experience on preconception care utilization. The information to be provided to the pregnant mothers was a foundational step for improving delivery and uptake of PCC. Further study is recommended.

Key words: Barrier**,** preconception care, under utilization, west shoa zone

CHAPTER ONE: Introduction

1.1. Background

Pregnancy 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 habits’’(1). Worldwide in 2010, 287,000 women died, with many more suffering long-term disability, from causes related to pregnancy and childbirth(2). In the same year, 3.1 million newborn babies, globally died in their first month of life, while 14.9 million were born prematurely and 2.7 million were stillborn(1). Of the total number of pregnancies occurring worldwide each year, over 40% are unintended(3). By its nature, preconception care relates to care before pregnancy, whether it be a first pregnancy or between consecutive pregnancies, and the importance of this component of contemporary health care has been acknowledged by a range of international bodies and organizations representing health professionals and policy makers (4). Near to 2015 deadline for the Millennium Development Goals, there is a discriminating awareness of this persistent burden, especially since a significant proportion of maternal, newborn and child mortality and morbidity is preventable with existing interventions(5).

Preconception care completes this continuum of care, ensuring ongoing health surveillance and early intervention, so that women begin pregnancy in the best health. This care recognizes that many adolescent girls and young women will be thrust into motherhood without the knowledge, skills or support they need; and that by promoting health and providing preventive care, for better outcomes for them and their children. Interventions that optimize women’s health before pregnancy with the intent to improve maternal and newborn health outcomes are collectively termed preconception care.

The first review of the evidence in this subject area put forward this definition of preconception care: "a set of interventions that aim to identify and modify biomedical, behavioral, and social risks to a woman's health or pregnancy outcome through prevention and management"(6).

Another review suggested, "Preconception care is the entire range of measures designed to promote the health of the expectant mother and her child" (7). Risk prevention and health promotion before pregnancy were two essential criteria that must met to define preconception; with the aim to improve pregnancy and health outcomes for mothers and child.

To date, the evidence has typically focused on the provision of preconception care in the healthcare setting (8), even though there are many potential barriers to disseminating PCC into the clinical setting. Like health literacy(9), to women or couples of reproductive age who are contemplating pregnancy or have had a previous adverse pregnancy outcome(10). However, this excludes broader strategies for promoting health for all adolescents, women and men of reproductive age that could further improve outcomes for mothers and babies.

In addition, the highest burden of maternal and childhood mortality and morbidity is seen in the low and middle-income countries (LMIC) of Southeast Asia and Sub-Saharan Africa including Ethiopia, where access to healthcare is limited, and therefore community approaches need to be developed. National and international guidelines outlining evidence based recommendations for the delivery and uptake of PCC have been published(7, 10). These recommendations focus on medical risk factors such as infection, immunization status, previous adverse pregnancy outcomes, and patient lifestyle. Preconception care that begins early on and continues between pregnancies will help to ensure that women have a reproductive life plan and are able to decide when to have children, how many children they desire and methods used to prevent unintended pregnancy.

So, this study will spot knowledge and experience of pregnant mothers towards preconception care to bridge the gap between evidence and implementation. With an objective to gather the data though

knowledge and experience care preconception care and see their impact; identify research gaps; and recommend strategies for implementation.

1.2. Statement of the problem

Preconception care is an approach to health promotion and preventive medicine which focuses on interventions that identify and modify biomedical, behavioral and social risks to a woman's health or pregnancy outcome (11). Its ultimate aim is improved maternal and child health outcomes (9). More than 90% or more of maternal and child mortality remains concentrated in South Asia and Sub-Saharan Africa, countries that simply lack the resources to deliver existing, effective interventions that could prevent many of these deaths (7). Thus moving towards preconception care offers the potential for earlier risk assessment and intervention that can benefit the woman or couple even before pregnancy and ensure the healthiest possible start for the newborn child.

Many studies have shown that women of reproductive age demonstrate low levels of knowledge and behavior related to preconception care (PCC) (11-15). In one study, it was reported that less than 50% of women supplement their diet with folate during the periconception period (11), even though, there is strong evidence that folate supplementation reduces the risk of neural tube defects (NTDs) (14). Only 53% of women who had heard of folate reported doing so from care providers (12). Each year in the United States, approximately 6 million pregnancies result in over 4 million live births. Almost half of all pregnancies are unintended, despite the fact that 62% of the 62 million women of reproductive age use a contraceptive method(16).

However, there are many barriers to the provision of preconception care, including the fact that the best way to provide preconception care has not been determined (17-22). The delivery of PCC is generally achieved in a primary health care setting, but many women find that health care providers rarely discuss the availability of and need for PCC (23).

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 newborn baby during perinatal and post natal periods.

Even though, literatures on related area of study did not found in developing countries including Ethiopia, some international studies show as there was a gap in service delivery system and utilization of preconception care. Therefore, identification of knowledge and experience of preconception care was a foot point to assure a subsequent life of the mother and newborn.

Thus this study was aimed to assess knowledge and experience of preconception care among pregnant mother's on ANC in west shoa zone, oromia. This will hopefully point their level of awareness and practices towards PCC .

1.3. Rationale of the study

The very objective of the study was to identify knowledge and experience of preconception care related to socio demographic and related factors of pregnant mothers following antenatal care in public health centers of west shoa zone. The study is significant in a sense that it will find out ways and means in which those pregnant mothers could be strengthened, if obstacle already existed, or offer recommendations on how they could be initiated and implemented.

Beside this, the following are among the main contributions of the study. Identification of level of awareness and experience related to preconception care related to different determinants of pregnant mothers provides the whole picture of the situation. This in turn allows ministry of health, health sectors and other steckholders design appropriate policy and program with varieties of support packages to address the needs pregnant mothers before pregnancy.

It is hoped that the study will provide insight for the Ministry of Health, health sector administrators, and co-sectors in general to formulate mechanisms to address preconception care for mothers before conception.

The absence or lack of information, and shortages in service delivery system on preconception care is a factor that contributes to poor or inexistent preconception care, both in terms of the offer of services and development of policies on health protection and promotion.

Therefore this study will add some effort for the country, especially health institutions; and aimed at identification of nature of problems those could hamper in pre conception care, enabling health care strategies to underline preconception care as parts of their strategy.

CHAPTER TWO: Literature review

Limited use of preconception care is a global issue, even though the problem also existed in developed countries, developing countries are more affected by a misuse or lack in practicing preconception care due to different enablers. The preconception window has been recognized as one of the earliest sensitive windows of human development, and taken together with the developmental origins of health and disease paradigm(24); it also highlights the importance of the preconception period for optimizing health. The preconception periods not only have the potential to affect immediate maternal and child health, but exposures during this sensitive time can have effects on reproductive and developmental endpoints. It has been shown that women who obtain preconception care and counseling are likely to develop better health behaviors, such as daily pre-pregnancy multivitamin consumption, early entry into prenatal care.

One community based study showed that in developing countries, education on pregnancy and childbirth for women in pre pregnancy establish guarantee as a means to improve maternal and child health; preconception health care can increase antenatal care seeking by 39% (RR 0.98), reduce neonatal mortality by 17% (RR= 0.76), increase the use of safe delivery kits at home births in developing countries by 1.82 times, and an encouraging finding was that women were 20% more likely to breastfeed(increase the likelihood of breastfeeding by 71%) (25).

A research conducted at Monash University, Australia found that the barriers and enablers to the delivery and uptake of preconception care were primarily related to four theoretical domains: beliefs about capabilities; motivations and goals; environmental context and resources; and memory, attention, and decision making (26).

Although vaccination has been a highly successful public health campaign, gaps remain in coverage. Immunization during the preconception period can prevent many diseases which may have serious

consequences or even prove fatal to the mother or newborn. For example, rubella exposure during early pregnancy can result in pregnancy loss, stillbirths or congenital rubella syndrome. Further, live-virus vaccines are recommended in the preconception period because they cannot be safely administered during pregnancy; others have maternal benefits because they avoid treatment that might have adverse consequences for the pregnancy. An intervention trials were found that assessed the effectiveness of tetanus toxoid vaccination in women of child-bearing age (27-28).

2.1. Knowledge about 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 little evidence of any received wisdom or prevailing culture of 'preparing for pregnancy'. Many thought a range of risks were relevant during rather than before pregnancy. For example, they did not see the need to check immunization status, medication or family history, rule out infectious disease or take folic acid prior to conception. Younger women were perceived to be less aware of these issues (29).

2.2. Women's experiences of preconception care

Within the studies exploring women's experience of preconception care, a trend towards fear and resistance to the present approach to preconception counseling including a perceived medicalisation of the condition (30-32) and a preference for more holism in the approach to preconception care is evident (32). women's ability to engage with, or maintain, preconception practices not only include the emotional concerns, but also employment type, particularly as they relate to the ability to implement and maintain diet and lifestyle change (33). Many women have abortions because they do not have recourse to family planning services, and thus are unable to plan when or how many children they have; a large unmet need for family planning still exists with 222 million women who

want the ability to plan their pregnancies not currently using contraception. Effects of prenatal cocaine exposure on development and behavior in the children have been extensively studied.

Prevalence of engagement with preconception care services and practices of women who undertook to use preconception care were examined in different studies (35-37). One large US population study (n = 6385) examined folic acid supplementation for women who had diagnosed diabetes or were classified as overweight or obese and found 35% of total respondents self-administered folic acid (38).

A Canadian study of women attending a health clinic (n = 464) found a notable difference in preconception care service use between women with type 1 (43.1%) and type 2 (18.4%) diabetes(35).

A study conducted trend in United kingdom was also reported (n = 588) (38); Within the subgroup of women with type 1 diabetes, those who are younger have lower weight have longer duration of diabetes and only use insulin for treatment, are more likely to report preconception care practices such as focusing on glucose control or family planning counseling (39). A major structural barrier that came up in varied ways for different care providers were challenges associated with the lack of integration of reproductive health, including SCC. Women highlighted their common experience of pregnancies being unplanned and that thinking about their health and lifestyle only arose after conception (40). They perceived 'preconception health' would experience similarly intangible to others, and not emerge relevant in women's day-to-day lives. No respondents had experienced broader preconception assessment or care from any health professional.

Only a few mothers had actively sought preconception information or advice from their care providers, prompted by fertility concerns or in order to receive a prescription for folic acid. Women of South Asian background reflected that stigma associated with infertility was a further reason for

keeping pregnancy plans secret. Faith, or fatalism, was sometimes mentioned as an important reason for not approaching healthcare professionals(29).

One study done in England on preconception services reflects as high number of unplanned pregnancies (50% of pregnancies in the UK) and lack of knowledge about the aim of preconception counseling are identified barriers for delivery of preconception care (41-42). The optimal body weight of pregnant women has been an issue of much debate over the years. It has long been recognized that underweight women tend to deliver small infants and a low birth weight is well known to be associated with increased mortality and morbidity in children(43).

A study conducted in Washington shows that, offering preconception services, such as counseling on diet and physical activity as well as access to contraception, to all overweight or obese women to help them reach a healthy weight before conceiving 'All women should start pregnancy with a healthy body weight'(44). About 90% or more of maternal and child mortality remains concentrated in South Asia and Sub-Saharan Africa, countries that simply lack the resources to deliver existing, effective preconception interventions that could prevent many of these deaths (45).

Considering the current, global maternal and child health picture and potential impact of preconception care was to further accelerate improvements in outcomes, it was felt that preconception care has a broader scope and should be extended.

The knowledge and experience to the delivery and uptake of preconception care could be seen with the following *Andersen's Behavioral Model* of Utilization of Care to predict women's access to PCC conceptual framework sphere.

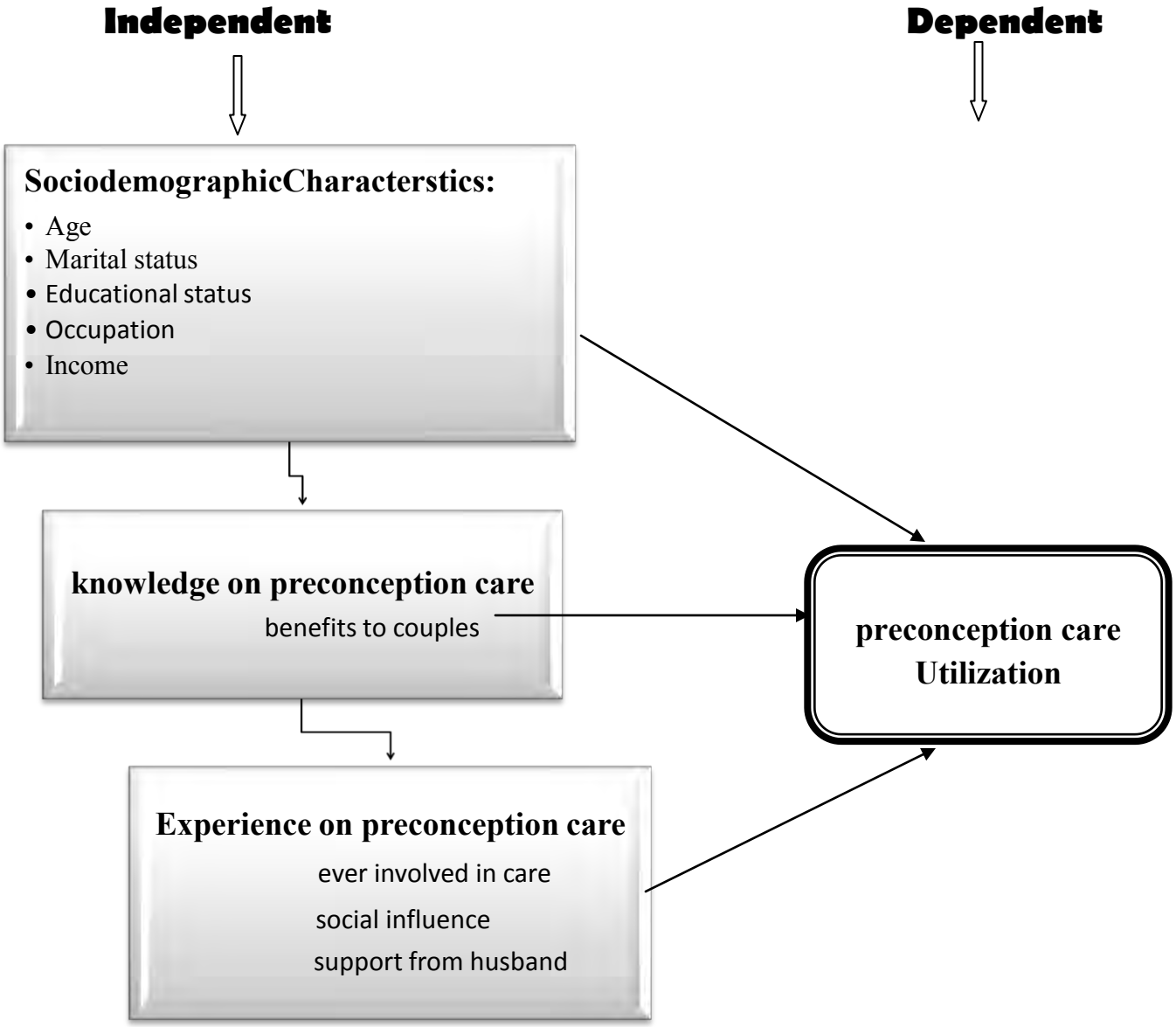

Figure1. Conceptual frame work

Source: Andersen's Behavioral Model

CHAPTER THREE: Objectives

3.1. General objective

- To assess knowledge and experience of preconception care among pregnant women Attending Antenatal Care at public health centers, west Shoa Ethiopia, 2016

3.2. Specific objectives

- To assess knowledge about preconception care among pregnant women attending Antenatal care at public health centers, west Shoa Ethiopia.
- To determine experience of preconception care among pregnant women attending Antenatal care at public health centers, west Shoa Ethiopia.

CHAPTER FOUR: Methodology

4.1. Study area and Period

The study was conducted in west Shoa Zone, Oromia regional state Six health centers from March 1st to March 31st; 2016; West Shoa Zone has a total of 18 woredas and One administrative City. Currently there are 5 hospitals, 89 health centers, 528 health posts in west shoa zone. The area was located in 14,921.19 km^2 and having 2,517,109 total populations; Male 1,257,964 whereas, Females are 1,259,145. Among the total population in the zone about 87.7% were in the rural catchment and 12.3% in the urban, according to the information collected from regional health office.

4.2. Study Design:

An Institution based cross sectional study design was carried out to conduct the study.

4.3. Population

4.3.1. Source population

All pregnant women attending Antenatal care during study period.

4.3.2. Study population

Pregnant mothers on ANC in public health centers west Shoa Zone.

4.4. Inclusion and exclusion criteria

4.4.1. Inclusion criteria

All pregnant mothers attending ANC in public health centers, west Shoa Zone, Oromia.

4.4.2. Exclusion criteria

Pregnant mothers who are not willing to participate in the study.

4.5. Sample size determination

Sample size was determined by single proportion formula by considering proportion of preconception care utilization to be 0.5% , 95%CI and 5% of marginal error.

$$n = \frac{(Z\ \alpha/_2)^2 \times P \times (1-P)}{d^2}$$

Where; n= Sample size

Z= the standard normal deviation at 95% confidence interval; =1.96

P= expected proportion of preconception care utilization among ANC attendants. Hence, there is no reasonable estimate, and then 50% (0.5) will be used

d= margin of error that can be tolerated, 5% (0.05)

Therefore, based on the above single proportion formula the sample size could be calculated as:

$$n = \frac{(Z\ \alpha/_2)^2 \times P \times (1-P)}{d^2}$$

$$n = \frac{(1.96)^2 0.5(1-0.5)}{(0.05)^2}$$

n= 384.16

So, minimum sample size, n=384.16 ~ **384**; when p=50 %(0.5)

Accordingly, the calculated sample size becomes 384; and a design effect was assumed by 1.5. So, the sample size calculated as; 384*1.5= 576.24 ~ 576 by considering 10% of non-response rate, the **final sample size** will be: 576*10%=633.6 ~ **634**

Therefore, **634** pregnant mothers on antenatal visit will be subjects of the study.

4.6. Sampling procedure

Among all public health centers in West Shoa Zone, The total population in each institution was assigned using population proportion to size. Each study subject was selected by using systematic random sampling using list of Woman's card number as sampling frame**.**

4.7. Data Collection

Data was collected by interviewed structured questionnaire. The study questionnaire consists of three parts for data collection up on the tool adopted from previous literature's. Part one includes questions about the demographic information, part two consists of knowledge based information and the third part contains questions on experience of preconception. Six data collectors and one coordinator were trained on data collection, access records and how to approach each item in the instrument, wisely using of time, data handling, and submission of the collected data.

4.8. Variables

4.8.1. Dependent variables

- ❖ Preconception care utilization

4.8.2. Independent variables

- Socio-demographic characteristics
- Knowledge gap on preconception
    - benefits to couples
- Experience of preconception care
    - ever involved in PCC
    - Social influences
    - support from husband

4.9. Operational definition

Experienced: pregnant mothers who respond to experience based questions more than 75%.

Non experienced: pregnant mothers who respond to experience based questions in less than mean of correct answer.

Knowledgeable: pregnant mothers who respond to knowledge based questions more than 75%.

Not knowledgeable: pregnant mothers who respond to knowledge based questions in less than mean of correct answer

Preconception care: An intervention that a woman of childbearing age receives at least twice a year before conception regardless of previous pregnancy status.

Social influence: a prejudice or pressure that was to be forwarded to mothers having a preconception care in the society.

4.10. Data quality assurance

A pre-test was conducted using 5% of the sample among pregnant mothers on follow up of Antenatal care at Teklehaymanot health center, Addis Ababa to assess instrument simplicity, flow and consistency. To improve the validity and reliability of the instrument, questionnaire modifications was made after the pre-test accordingly. Data collectors and supervisors, who are either midwifes or nurses, were trained. Data completeness and consistency was checked, cleaned and compiled by the investigator on daily basis. Incomplete data were removed from the study.

4.11. Data processing and analysis

Data were entered and analyzed with the statistical package for social science (SPSS) for windows. Descriptive statistics tables, chart, mean and frequency was used to present the information. Binary logistic regression was used to identify factors associated with knowledge and experience of preconception care. Multiple logistic regressions was used to control confounding factors. Descriptive statistics tables, chart, mean and frequency were used to present the information.

The degree of association between independent and dependent variables was assessed using odds ratio with 95% CI.

4.12. Ethical Consideration

Ethical clearance was obtained from Addis Ababa University, College of health science school of allied health sciences department of nursing and midwifery Ethical Board Committee and from West shoa zone health office. A written statement (consent) was included on the introductory part of the questionnaires that further explains the study purpose and confidentiality of the research information. In addition, oral consent was obtained from the study subjects prior to data collection.

4.13. Dissemination of the result

Results of this study will be disseminated or communicated to Addis Ababa University, College Health sciences School of Allied health science Department of Nursing and Midwifery, West shoa Zone Health Office, Regional health bureau, Federal Ministry of Health, local institutions and other concerned bodies. Efforts will be made to present the results on scientific conferences and peer reviewed journal publications will be considered.

CHAPTER FIVE: RESULTS

5.1. Socio-demographic Characteristics

A total of 634 pregnant mothers on antenatal care visits were subjects of the study. All of the study participants responded to the study. The mean age of the study participants were 24.52 (±SD4.4). Majority of the study participants were Oromo 530(83.6%). Concerning the educational status of the study participants 154(24.3%) have no formal education, followed by 141(22.2%) being completed grades 1-4. Among the total study participants 537(84.7%) were married, 5.8% separated, 6.0% divorced and 3.5% widowed. Most of the study participants were orthodox religion followers 313(49.4%) followed by Protestant 163 (25.7%). Among the total study subjects 406(64.0%) were house wives in occupation. About 332(52.4%) of the subjects have monthly income of 1000-2000 ET.birr. [Table 1].

Table1: Socio-demographic characteristic of pregnant mothers on Antenatal care in selected health facilities of West shoa zone, Oromia Region, may,2016 (n=634)

Variable	Response	Frequency (n=634)	Percent(%)
Age	19 and below	35	5.5
	20-24	318	50.2
	25-29	213	33.6
	30-34	33	5.2
	>=35	35	5.5
Marital status	Married	537	84.7
	Separated	37	5.8
	Divorced	38	6.0
	Widowed	22	3.5
Educational status	Illiterate	154	24.3
	1-4gradecompleted	141	22.2
	5-8gradecompleted	136	21.5
	9-12completed	120	18.9
	College & above	83	13.1
Religion	Orthodox chrstian	313	49.4
	Muslim	128	20.2
	Protestant	163	25.7
	Catholic	9	1.4
Other religion	Wakefeta	19	3.1
Ethnicity	Oromo	515	81.2
	Amhara	83	13.1
	Tigre	17	2.7
	Gurage	19	3.0
Family size	1-2	292	46.1
	3-4	246	38.8
	5-6	65	10.3
	>7	31	4.9
Occupation	house wife	406	64.0
	Student	27	4.3
	Gov't employee	113	17.8
	NGO employee	14	2.2
	private business	53	8.4
Others	(Farmer)	21	3.3
Monthly income	<500**	41	6.5

	500-1000**	158	24.9
	1000-2000**	332	52.4
	>2000**	103	16.2
Source of income	Monthly salary	171	27.0
	Private business	249	39.3
	Crop production	190	30.0
	Source from animal product	13	2.1
Other	(Home servant)	11	1.7

Key: ** = birr

5.2. Knowledge of pregnant mothers on preconception care

Among the study respondents 402(63.4%) heard about preconception care. Two hundred eighty four(70.9%) of the respondents know HIV counseling and testing, 60(14.9%) immunization,29(7.1%) Ferrous supplementation and 28(7.0%) Nutritional management as a preconception care. Only 155(23.1%) of the subjects had information on preconception care from care providers in the health facility and 452(76.9%) have no information on preconception care.

From the study subjects who didn't received information on preconception care majority 256(56.6%) were due to uncertainty with the benefit, 88(19.5%) were due to the reason that they didn't need the information on PCC and 83(18.4%) have not yet informed of Preconception care because they didn't have enough time to have the service. [Table 2].

Table 2: knowledge of pregnant mothers on Antenatal care on preconception care in Selected Health Facilities of West shoa Zone, Oromia region may,2016 (n= 634)

Variable	Response	Frequency (n=634)	Percent(%)
What kinds of preconception care service do you know	HIV counseling and testing	285	70.8
	Nutrition	28	7.0
	Ferrous supplementation	29	7.1
	Immunization	60	14.9
Were you given information about PCC	Yes	155	23.1
	No	452	76.9
	Didn't remember	27	4.3
Reasons for not having information	I didn't need	88	19.5
	I'm not certain with the benefit	256	56.6
	I don't have enough time	83	18.4
	I were engaged with several duties	25	5.5

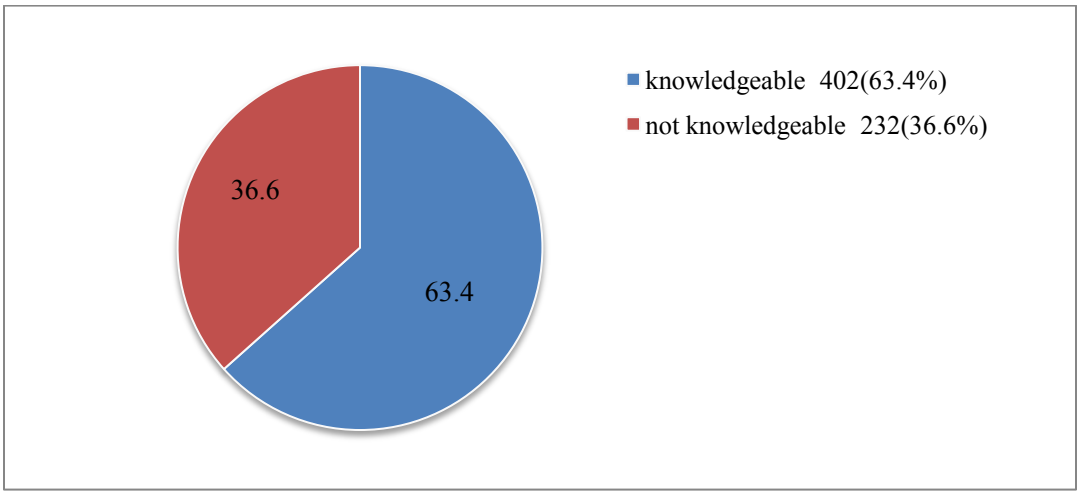

Figure 2: Knowledge of pregnant mothers towards preconception care in West Shoa Zone Oromia, may, 2016

5.3. Experience of pregnant mothers on preconception care

About 242(38.2%) of pregnant mothers have experience of preconception care and 392(61.8%) have no experience on pre-conceptional screening. Eighty six(35.2%) of the subjects having experience of preconception care faced challenges during care. among the participants who faced challenges 33(41.3%) told consumption of extended time during care provision, 28(35.0%) lack of service integration, 8(10%) negligence from health care providers, 6(7.5%) lack of privacy and five(6.3%)due to shortage of materials and supplies. 103(42.6%) of the respondents had social influence during period of care, Among those 49(47.6%) were influenced by their husband,24(23.3%) from close friends and relatives,19(18.4%) from mother and other women's and 11(10.7%) from traditional malpractice. Among the study participants only 130(53.7%) had support from their husbands for preconception screening. 112(46.3%) of the subjects have no support towards care from their husband, among those 36(30.0%) of the husbands due to the reason that they look time spent for care as wastage, 29(24.16%) of the husbands due to lack of knowledge on how preconception care benefits the couples,29(24.16%) of the husbands due to fear of wrong outlooks in the community and 26(21.70%) of them due to attitudinal problem. [Table 3].

Table 3: Experience of pregnant mothers on preconception care in Selected Health Facilities of West Shoa Zone, Oromia region may, 2016

Variables	Response	Frequency	Percentage
Ever had a prenatal screening	Yes	242	38.2
	No	392	61.8
Did you encountered challenges	Yes	87	36.0
	No	155	64.0
What are the Challenges faced during PCC	negligence from health care providers	8	9.2
	services are not integrated	30	34.5
	consumption of extended time	35	40.2
	lack of privacy assurance	9	10.3
	shortages of materials and supplies	5	5.7
Were you influenced socially during period of care	Yes	103	42.6
	No	139	57.4
Where are sources for threats	From mother and other women's	19	18.4
	From husband	49	47.6
	From close friends and relatives	24	23.3
	Traditional malpractices	11	10.7
Do you think that PCC benefits couples	Yes No	593 41	93.5 6.5
Do you have support from your husband for PCC	Yes	130	53.7
	No	112	46.3
The husband reason for his refusal towards care	due to lack of knowledge on how the service benefits couples	29	22.3
	attitudinal trouble	28	21.5
	he looks that, time spent for prenatal care as a wastage	38	29.2
	fear of wrong outlooks in the community	29	22.3

5.4. Factors Associated with Preconception care Among Pregnant mothers Attending Antenatal Care in Public Health Centers West Shoa Zone, Oromia.2016

In this study the association of different background factors of the respondents with preconception care utilization was investigated at both bivariate and multivariate levels. In bivariate analysis pregnant mothers whose monthly income was >500 ET.birr had less knowledgeable of preconception care than those having income of more than 500 with (P= 0.046) and COR= 2.36; 95% CI(1.02,5.44).

In bivariate analysis concerning educational status pregnant mothers who completed grades 5-8 and 9-12 are more knowledgeable to preconception care than those who completed grades 1-4 with (P= 0.003) and COR=0.468(0.284,0.772); and (P=0.003) and COR=,0.452(0.270-0.758) respectively; the association also shows significance with multivariate analysis with AOR=0.376(0.221,0.669) and 0.482(0.264,0.882) respectively.

Concerning information on prenatal screening, in both analysis has a significant association (p=0.000) in which pregnant mothers who had information on preconception care are better experience to preconception care utilization with AOR= 0.226(0.170,0.417).

In this study women's who considered preconception care to benefit couples, in both bivaraite and multivariate analysis shows a significant association in that pregnant mothers who considered preconception care to benefit couples, tend to have more experience towards preconception care as compared to mothers who didn't considered preconception care to benefit couples with (P=0.031) and COR= 2.308 (1.082,4.923) and AOR= 0.474(0.041,5.516)

Regarding pregnant mothers consideration in participating in prenatal screening, the result in both bivariate and multivariate analysis shows as there was significant association in that pregnant mothers who didn't considered participating in prenatal screening had less experience to preconception care with (P= 0.000) and COR= 6.310(4.418,9.011), AOR= 4.255(2.883,6.281).

Table 4: Bivariate and Multivariate analysis showing the association between preconception care and other different variables of pregnant mothers attending ANC in public health centers west shoa zone Oromia,2016(n=634)

Variable	Knowledge on PCC		Odds Ratio and 95% CI	
			Crude	Adjusted
	Yes	No		
Income				
<500	20(48.8%)	21(51.2%)	2.351(1.02,5.44)*	2.271(0.88,5.86)
501-1000	102(64.6%)	56(35.4%)	1.428(0.86,2.40)	1.183(0.63,2.22)
1001-2000	204(61.4%)	128(38.6%)	0.888(0.56,1.38)	0.794(0.46,1.36)
>2001	76(73.8%)	27(26.2%)	1	1
Educational status				
No formal school	42(27.37%)	112(72.73%)	1	1
Grades 1-4 completed	68(48.22%)	73(51.78%)	0.544(0.33-0.90)	0.758(0.431,1.13) **
Grades 5-8 completed	89(65.44%)	47(34.56%)	0.468(0.28-0.77)	0.376(0.22,0.67) **
Grades 9-12 completed	92(76.67%)	28(23.33%)	0.452(0.27-0.76)	0.482(0.26,0.88) **
College and above	51(61.44%)	32(38.56%)	0.277(0.16-0.49)	0.320(0.16,0.63)*
Information on PCC				
Yes	129(83.23%)	26(16.77%)	0.181(0.12,0.27)	0.266(0.17,0.42)*
No	36(7.96%)	416(92.04%)	1	1
Do you think that PCC benefits couples				
Yes	478(80.60%)	115(19.40%)	1	1
No	17(41.46%)	24(58.54%)	1.992(0.959,4.141)	1.388(0.609,3.164)
Did you considered participating in PCC				
Yes	188(77.7%)	54(22.3%)	1	1
No	256(65.98%)	132(34.02%)	6.238(4.37,8.90)	0.474(0.041,5.516)*

key: *=P-value ; *p-value < 0.001; **P-Value < 0.005

CHAPTER SIX: Discussion

This study showed that 402(63.4%,12.2%-27.3%) of the pregnant mothers were knowledgeable and 232(36.6%) were not knowledgeable about preconception care. About 242(38.2%) of the respondents had experience of pre-conceptional care whereas 392(61.8%) didn't ever had a prenatal care.

This study showed that the mean age of the study participants to be 24.52. This finding agrees with the mean age (25 years) of the study subjects conducted in Philadelphia, no significant difference with these characteristics was noticed (17).

This study found that participation rate in preconception care to be 38.2% . this result of study agrees with a secondary data analysis conducted in Philadelphia which found rate of participation in prenatal care to be 52%. this difference may be due to a difference in level of awareness and integrations in service delivery system.

This study found subjects who are socially influenced had less preconception care practice by about 42.6% as compared to study participants who didn't have social influence. this agrees with a result in Philadelphia which shows unsafe neighborhood perception towards prenatal care to increases the incidence of less experience towards preconception care with >50%. this difference may be due to a difference in sample size and time frame of the study period(17).

This study showed that study subjects having monthly income of <500 ET.birr were less knowledgeable to prenatal screening with AOR=2.271(0.879,5.866). This finding agrees when compared with study conducted in Philadelphia of lower income earning groups having income of <20,000$ had 1.313(0.639,5.866) times less awareness towards preconception care (17).

This study found that pregnant mothers having information on preconception care to be more experienced when compared to subjects who were not informed of preconception care (AOR=0.266,

P=0.000). This finding agrees with the study conducted in Netherlands which revealed that pregnant mothers who didn't have general information on preconception care were 3.25 times less likely to have experience of preconception care (OR=0.66, P=0.03). this difference may be due to the difference in study setting and service delivery system (7).

In this study mothers who were had support from their husband had AOR=1.388(0.609,3.164) times more experience of pre-conceptional care as compared to subjects who didn't have support of their husband. this finding agrees with the result in Netherlands which found that pregnant mothers who had support from their husband towards preconception care had increased preconceptional care (AOR=0.66, P=0.03). this difference may be due to level of awareness and difference in the quality of care (7).

About twenty six percent of the participants had an attitudinal trouble which decreased the degree of preconceptional care practice. this finding agrees with result of comparative survey conducted in Netherlands which shows a deprived neighborhood to increase the incidence with 53% (P=0.04). this discrepancy may be due to a difference in sample size and degree client flow (7).

CHAPTER SEVEN: Strength and limitations

7.1. Strength

- This study explored knowledge and experience of health care providers on preconception care perspective by covering rural and urban setting at zonal level.
- Sample size was applied according to single population proportion formula.

7.2. Limitations

- Lack of qualitative methods.
- Generalization of the findings of this study in other settings needs careful consideration due to capacity in service delivery and client flow differences.
- Limitations of literatures on preconception care globally and NO literature was found on prenatal care in developing countries including Ethiopia.

CHAPTER EIGHT: Conclusions and Recommendations

8.1. Conclusion:

Generally the study has identified some of the barriers and enablers to the delivery and uptake of preconception care, this study revealed that more than one third of pregnant mothers had low knowledge on preconception care and more than half of them had low experience on preconception care utilization. understanding the views of pregnant mothers and care providers theoretical and skill basis for changing their behavior will be essential when designing effective implementation strategies for improving delivery and uptake of preconception care.

The information to be provided to the pregnant mothers was a foundational step for improving PCC.

8.2. Recommendation:

In this study lack of knowledge was seen on clients and care providers regarding preconception care which could diminish the quality of care that is given for reproductive age women's. To improve the quality of care that is to be provided pre-pregnancy the following recommendation were forwarded for different concerned bodies.

FMOH

- had better to incorporate preconceptional care alone and monitor for its implementation

Health facilities:

- Should assimilate a preconception care service with integrated and sustainable supplies and encouraging health care providers to properly deliver the service.

Curriculum designers

- Should give focus in incorporate prenatal care alone.

NGO

- ❖ Should facilitate trainings to maximize knowledge of health care providers on prenatal care.

Researchers

- ❖ To do further studies on the topic with mixed methodology and in other area that helps to explore more.

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Annexes:

Annex I: Information sheet

Subject Information Sheet (English Version)

Addis Ababa University, College of Health Sciences, Department of Nursing and Midwifery

Graduate Studies

Dear participant!

Here, I the undersigned, at Addis Ababa University College of Health Sciences, School of Allied Health Science, Department of Nursing and Midwifery Graduate Study Program, currently I will be undertaking research on a topic entitled as assessment of barriers towards utilization of preconception care among pregnant mothers attending ANC at public health centers, in west shoa zone. For this study, you will be selected as a participant and before getting your consent, you need to know all necessary information related to the study which will be detailed as follows.

Purpose of the study: the purpose of this study is assessment of barriers towards utilization of preconception care among pregnant mothers attending ANC at public health centers, in west shoa zone.

Participants to be included: all pregnant mothers on ANC visit sampled by systematic random sampling technique will be included in the study

Benefits: For your participation in the study no payment will be granted or has no any special privilege to you. Your responses to the following questions are beneficial to you and other pregnant women's as input in improvement to overcome barriers towards preconception care utilization so that recommendations will be made to responsible organizations to fill those gaps.

Risks: The study will be conducted through interviews and you are being asked for a little of your

time, a maximum of 20 min, to help us in this study. There is no possible risk associated with participating in this study except the time spent for responding to the questionnaire.

Confidentiality: Your name will not be written in this form and any information you tell us will not be disclosed to third party. Your participation is voluntary and you are not obligated to answer any question you do not wish to answer. If you feel discomfort with the question, it is your right to drop it any time you want.

If you have questions regarding this study or would like to be informed of the results after its completion, please feel free to contact the principal investigator.

Address of the principal investigator:

Andualem Gezahegn

Cell phone: +251911780110, e-mail: andbicha@gmail.com

Are you satisfied with the information provided so far?

1. Yes…….. Continue to the next page
2. No …… I won't participate

Annex II. Consent form (English Version)

In undersigning this document, I am giving my consent to participate in the study entitled as "assessment of barriers towards utilization of preconception care among pregnant mothers attending ANC at public health centers, west Shoa zone Oromia" I have been informed that the purpose of this study is to asses barriers towards utilization of preconception care among pregnant mothers attending ANC in west Shoa zone health centers, Oromia. I have understood that participation in this study is entirely voluntarily. I have been told that my answers to the questions will not be given to anyone else and no reports of this study ever identify me in any way. I have also been informed that my participation or non-participation or my refusal to answer questions will have no effect on me. I understood that participation in this study does not involve risks. I understood that Andualem Gezahegn is the contact person if I have questions about the study or about my rights as a study participant.

Respondent's signature_____

Interviewer

Name_____Signature_____Date_____

Thank you for the time you devoted!!!

Annex III. Questionnaire

Part I. Socio demographic characteristics

1. Age in years _____
2. What is your marital Status?
   - A. Married
   - B. Separated
   - C. Divorced
   - D. Widowed
   - E. cohabited
3. What is your educational status?
   - A. No formal school
   - B. 1- 4 grade completed
   - C. 5-8 grade completed
   - D. 9-12 completed
   - E. College & above
4. What is your religion?
   - A. Orthodox
   - B. Muslim
   - C. Protestant
   - D. Catholic
   - E. Other(indicate)_____
5. What is your ethnicity?
   - A. Oromo
   - B. Amhara
   - C. Tigre
   - D. Gurage
   - E. Other(indicate)_____
6. Family size
   - A. 1-2
   - B. 3-4
   - C. 5-6
   - D. >7
7. Occupation
   - A. House wife
   - B. Student
   - C. Gov't employee
   - D. NGO employee
   - E. Private business
   - F. Other(indicate)_____
8. Monthly income_____
9. Source of income?
   - A. Monthly salary
   - B. Private business
   - E. Other (indicate)_____
   - C. Crop production
   - D. Source from animal product

Part II. Knowledge based Questions

1. Do you know about Preconception care services before Pregnancy? If yes answer question no.2:

   A. Yes B. No

2. What kinds of preconception care service do you know?

   A. HIV counseling and testing
   B. Nutrition
   C. Ferrous supplementation
   D. Immunization
   E. Other (indicate) _____

3. Before you became pregnant, did you consider participating in prenatal screening for this particular pregnancy?

   A. Yes
   B. No
   C. I don't remember

4. Were you given any information about prenatal screening before you became pregnant? If No respond to question no.5

   A. Yes
   B. No
   C. I don't remember

5. If you haven't had any information on prenatal screening why you do think is that?

   A. Because I were not in need of it
   B. I don't think that it will benefit me during period of conception
   C. I don't have enough time for that
   D. I were engaged with several duties

6. Did you receive information about prenatal screening from your midwife or obstetrician, before this particular pregnancy? (1 answer only)

   A. Yes, I received information about prenatal screening from my midwife / obstetrician
   B. No, I did not receive information about prenatal screening from my midwife /obstetrician
   C. I don't remember

7. If your answer to question no.6 is No, why do you think is that?

A. Because, I didn't know as there was such a service

B. Health care providers didn't told me to have the service

C. I'm not certain that preconception will benefit me

D. Due to lack of integrated preconceptional care

E. Other (indicate)_____

8. How did you respond, if you wanted to be informed about prenatal screening during this particular pregnancy?

A. Yes, I wanted information about prenatal screening

B. No, I did not want any information about prenatal screening

Part III. Questions related to experience of preconception care

1. Do you think that preconception care will benefit the couples? If **yes** respond to question no.2?
   A. Yes B. No
2. Have you ever had a prenatal screening prior to conception? If **yes** respond to question no.3? If No skip to question no.9
   A. Yes B. No
3. Did you encountered challenges while in service for prenatal screening? If **yes** respond to question no.4
   A. Yes B. No
4. What are the challenges you faced during preconceptional screening?
   A. negligence from health care providers
   B. services are not integrated
   C. consumption of extended time
   D. lack of privacy assurance
   E. shortages of materials and supplies
   F. other (indicate)_____
5. Were you influenced socially during period of care?
   A. Yes B. No
6. Where are sources for those unfairness for threats
   A. From nearby mother and other women's
   B. From husband
   C. From close friends and relatives(neighbors')
   D. Traditional mal practices in the community
7. Do you have support from your husband for preconception care
   A. Yes B. No

8. Why do you think is the reason for his refusal towards care
    A. due to lack of knowledge on how the service benefits couples
    B. attitudinal trouble
    C. he looks that, time spent for prenatal care as a wastage
    D. fear of wrong outlooks in the community
    E. other (indicate)_____

9. Looking back in retrospect, do you wish you had received information about prenatal screening before you became pregnant?
    A. Yes
    B. No
    C. I don't remember

10. If YES to item no.9; what are the most important reasons for this?
    A. I think it would have made it easier for me to make a decision
    B. I think I would have made a better decision
    C. I would not have had to worry about this during my pregnancy
    D. I would have had more time to discuss my choice with other people
    E. I appreciate being timely informed about what to expect
    F. Other

11. If NO to item no.9; what are the most important reasons for this?
    A. I had not given any thought to prenatal screening before I became pregnant
    B. I did not know that prenatal screening for me was possible
    C. I did not want to receive information about prenatal screening, because I wanted to become pregnant first
    D. I would have been concerned for no reason
    E. I don't think I would have understood it well enough, because I was not concerned about it.
    F. I would have received too much information
    G. I think it's better not to know everything beforehand
    H. I just want to concentrate on my pregnancy without having to think about what could go wrong
    I. Other(specify)_____

አማርኛ መጠይቅ ፡

፩. ግለ ታሪክን በተመለከተ

1. እድሜ _____
2. ያለሽበት የጋብቻ ሁኔታ?

ሀ. ያገባችና አብራ የምትኖር
መ. የሞተባት
ለ. የተራራቁ
ሠ. ሌላ ካለ----------
ሐ. የተፋታች

3. የትምህርት ደረጃ

ሀ. ምንም መደበኛ ትምህርት የለም
መ. ከ9ኛ-12ኛ ክፍል ያጠናቀቀች
ለ. ከ1ኛ- 4ኛ ክፍል ያጠናቀቀች
ሠ. ኮሌጅ ና ከዚያ በላይ
ሐ. ከ5ኛ-8ኛ ክፍል ያጠናቀቀች

4. የየትኛዉ ሀይማኖት ተከታይ ነሽ?

ሀ. ኦርቶዶክስ
መ. ካቶሊክ
ለ. ፕሮቴስታንት
ሠ. ሌላ ካለ----------
ሐ. ሙስሊም

5. ብሔር

ሀ. ኦሮሞ
ሐ. ትግሬ
ሠ. ሌላ ካለ
ለ. አማራ
መ. ጉራጌ

6. የቤተሰብ ብዛት

ሀ. 1-2
ሐ. 5-6
ለ. 3- 4
መ. >7

7. የስራ ሁኔታ

ሀ. የቤት እመቤት
መ. መንግስታዊ ያልሆነ ድርጅት ሠራተኛ
ለ. ተማሪ
ሠ. የግል ንግድ
ሐ. የመንግስት ሠራተኛ
ረ. ሌላ ካለ----------

8. የወር ገቢ _____

9. የገቢ ምንጭ

ሀ. ወርሀዊ ደምዎዝ
ሐ. ከግብርና ምርት
ለ. የግል ንግድ
መ. ከቤት እንስሳት ምርት

፪. እዉቀት ላይ የተመረኮዙ ጥያቄዎች

1. ከእርግዝና በፊት የቅድመ እርግዝና ምርመራ አገልግሎት መኖሩን ታዉቂያለሽ? መልስዎ አዎ ከሆነ ጥያቄ ቁ.2 ን ይመልሱ

ሀ. አዎ
ለ. አላዉቅም

2. ምን ምን የቅድመ እርግዝና ምርመራ አገልግሎቶችን ታዉቂያለሽ

ሀ. የኤች.አይ.ቪ ምክር ና ምርመራ አገልግሎት
መ. ክትባት
ለ. ስነ-ምግብ
ሠ. ሌላ
ሐ. አይረን ድጎማ

3. ይህን እርግዝና ከማርገዝሽ አስቀድሞ የቅድመ እርግዝና ምርመራ አገልግሎት ስለ መጠቀም ታስቢ ነበር?

ሀ. አዎ
ሐ. አላስታዉስም
ለ. የለም

4. ከማርገዝሽ በፊት በቅድመ እርግዝና ወቅት ስላለዉ የምርመራ አገልግሎት መረጃ ተሠጥቶሻል?

ሀ. አዎ
ሐ. አላስታዉስም
ለ. የለም

5. በቅድመ እርግዝና ወቅት ስላለዉ የምርመራ አገልግሎት ምንም መረጃ ከሌለሽ ያ ለምን ይመስልሻል?

ለ. በእርግዝና ወቅት ይጠቅመናል ብየ ስለማላስብ

ሀ. ፍላጎቱ ስላልነበረኝ
ሐ. ለሱ በቂ ጊዜ ስላልነበረኝ
መ. ሌሎች ብዙ ስራዎች ስላሉኝ

6. በዚህኛዉ የእርግዝና ወቅት ሚድዋይፍ ወይም ሐኪሞች ስለ ቅድመ እርግዝና ምርመራ መረጃ ሊሠጡሽ ቢፈልጉ እንዴት ትመልሺላቸዋለሽ

   ሀ. አዎ መረጃ ማግኘት እፈልጋለሁ ለ. ምንም አይነት መረጃ አልፈልግም

7. ከዚህኛዉ እርግዝና በፊት ስለ ቅድመ እርግዝና ምርመራ አገልግሎት ሚድዋይፍ ወይም ልሎች ሐኪሞች መረጃ አጊኝተሽል

   ሀ. አዎ ስለ ቅድመ እርግዝና ምርመራ አገልግሎት ከሚድዋይፎች ወይም ልሎች ሐኪሞች መረጃ አጊኝቻለዉ

   ለ. የለም ስለ ቅድመ እርግዝና ምርመራ አገልግሎት ከሚድዋይፍም ይሁን ከልሎች ሐኪሞች መረጃ አላገኘሁም

   ሐ. አላስታዉስም

8. ለተራቁጥር 7 ጥያቄ መልስሽ የለም ከሆነ ለምን

   ሀ. እንደዚህ አይነት መረጃ መኖሩን ስለማላዉቅ

   ለ. የጤና ባለሙያዎች ይህንአገልግሎት እንድጠቀም ስላልነገሩኝ

   ሐ. የቅድመ እርግዝና ምርመራ አገልግሎት ይጠቅመኛል ብዬ ስለማላስብ

   መ. የቅድመ እርግዝና ምርመራ አገልግሎት አሰጣጥ የተደራጀ አለመሆን

   ሠ. ሌላ_____

፫. ዝንባሌና አጠቃቀም ላይ የተመረኮዙ ጥያቄዎች

1. የቅድመ እርግዝና የምርመራ አገልግሎት ጥንዶችን ይጠቅማል ብለሽ ታስቢያለሽ? መልስሽ አዎ ከሆነ ጥያቄ ቁ.2 መልሺ

   ሀ. አዎ ለ.የለም

2. የቅድመ እርግዝና የጤና ምርመራ አገልግሎት አድርገሽ ተዉቂያለሽ? መልስሽ አዎ ከሆነ ጥያቄ ቁ.3 መልሺ

   ሀ. አዎ ለ. የለም

3. የቅድመ እርግዝና ምርመራ አገልግሎት በተጠቀምሽበት ወቅት ያጋጠመሽ ችግር ነበር? መልስሽ አዎ ከሆነ ጥያቄ ቁ.4 መልሺ

   ሀ. አዎ ለ. የለም

4. በቅድመ እርግዝና ምርመራ አገልግሎት ወቅት ያጋጠሙሽ ችግሮች ምን ምን ናቸዉ?

   ሀ. የጤና ባለሞያዎች ለአገልግሎት አሠጣጥ ዝንጉ መሆን

   ለ. የሚሠጠዉ አገልግሎት የተሳለጠ አለመሆን

   ሐ. በአገልግሎት አሠጣጥ ወቅት ሠዓት ማባከን

   መ. በአገልግሎቱ ምስጢራዊነትን አለመጠበቅ

   ሠ. የመገልገያ እቃዎች እጥረት መኖር

   ረ. ሌላ_____

5. በአገልግሎት ወቅት የማህበረሰብ ተጽዕኖ ነበረብሽ? መልስሽ አዎ ከሆነ ቀጣዩን ጥያቄ መልሺ

   ሀ. አዎ ለ. የለም

6. ለተጽኖዎቹ ምክንያት መነሻዉ ከየት ሊሆን ይችላል?

   ሀ. ከእናትና በአቅራቢያዉ ካሉ ሴቶች ሐ. ከቅርብ ጓደኞች ና ጎረቤቶች

   ለ. ከባል መ. በማህረሰቡ ያሉ ባህላዊ ልማዶች

7. ለቅድመ እርግዝና ምርመራ አገልግሎት ከባለቤትሽ እገዛ ነበረሽ? የለም ከሆነ ወደ ጥያቄ ቁጥር 8 መልሺ

   ሀ. አዎ ለ. የለም

8. ለዚህ ምክኒያቱ ምን ይመስልሻል

   ሀ. የምርመራዉ ጥቅም ለጥንዶቹ ስለመሆኑ እዉቀት ያለመኖር

   ለ. የአመለካከት ችግር

   ሐ. ለቅድመ እርግዝና ምርመራ የሚዉለዉን ሠዓት እነደ ጊዜ ማባከን ስለሚቆጥረዉ

   መ. በማህበረሰብ ዉስጥ ያለዉን የተሳሳተ አመለካከት ፍራቻ

   ሠ. ሌላ ካለ ይጠቀስ----------

9. አሁን ላይ ሆነሽ ወደ ኋላ ስታስቢዉ ከማርገዝሽ አስቀድሞ የቅድመ እርግዝና ምርመራ በኖረኝ ብለሽ ታስቢያለሽ

   ሀ. አዎ (ወደ ጥያቄ ቁ.10)

   ለ. የለም (ወደ ጥያቄ ቁ.11)

   ሐ. አይመስለኝም

10. የቅድመ እርግዝና ምርመራ አገልግሎት መረጃ ቢኖረኝ መልካም ነበር ያልሽባቸዉ ምክኒያቶች ምንምነ ናቸዉ (ከአንድ በላይ መልስ ይቻላል)

ሀ. የምወስናቸዉን ዉሳኔዎች ቀላል ያደርግልኛል ብዬ ስለማስብ

ለ. ምወስናቸዉን ዉሳኔዎችን የተሻለ የደርግልኛል ብዬ ስለ አሰብኩኝ

ሐ. በሚኖረኝ የእርግዝና ጊዜያት በአንድ አንድ ጉዳዮች ጥርጥር እንዳይገባኝ

መ. ከሌሎች ሰዎች ጋር ለመወያየት ሰፊ ጊዜያት እንዲኖረን ያደርጋል

ሠ. ወደፊት ሊኖረኝ ስለሚችል ዉጤት በወቅቱ ቅድመ መረጃ እንዲኖረኝ ያደርጋል

11. በቅድመ እርግዝና ወቅት ምንም አይነት የቅድመ እርግዝና ምርመራ አገልግሎት አልፈልግም ያልሽባቸዉ ዋነኛ ምክኒያቶች ምን ምን ናቸዉ

ሀ. ከማርገዜ አስቀድሞ ሊኖረኝ ስለሚገባ የቅድመ እርግዝና ምርመራ ምንም መረጃ ስለሌለኝ

ለ. የቅድመ እርግዝና ምርመራን ማደረግ እንደምችል ስለማላዉቅ

ሐ. ምንም አይነት የቅድመ እርግዝና ምርመራ መረጃ አልፈልግም፤ምክኒያቱም መጀመርያ ማርገዝ ስለምፈልግ

መ. ለየትኛዉም አይነት ምክኒያት ስለማልጨነቅ

ሠ. ወደ ፊት ስለሚሆነዉ ስለ ምንም ነገር ስለማያስጨንቀኝ

ረ. ከአሁን በፊት ብዙ መረጃዎች ሳላሉኝ

ሠ. ነገሮች ከመፈጠራቸዉ አስቀድሞ ማወቁ ጥሩ ስላልሆነ

ሸ. ወደ ፊት ስለሚሆነዉ ነገር ሳላስብ እርግዝናዉ ላይ ብቻ ማትኮር ስለምፈልግ

ቀ. ሌላ ካለ

GUUCA AFAAN OROMOO

Kutaa I. Gaafilee jireenya dhuunfaa irati xiyeefatan

1. Umurii _____
2. Haala gaailaa amma irra jirtu?
   A. Heerumtee kan waliin jirtu
   B. Kan wal iraa fagaatan
   C. Kan wal hiikan
   D. Kan abbaan manaa jalaa du'e
3. Sadarkaa barnootaa:
   A. Barumsa qalamaa kan hi qabne
   B. Kutaa 1- 4 kan xumurtte
   C. Kutaa 5- 8 kan xumurtte
   D. Kutaa 8- 12 kan xumurtte
   E. Sadarkaa kooleejii fi isaa oli
4. Amantaa kam hurdofta?
   A. Ortodoksii
   B. pirootestaantii
   C. Musliima
   D. Kaatolikii
   E. Kan biro_____
5. sabumaa
   A. Oromoo
   B. Amaara
   C. Tigree
   D. Guraagee
   E. Kanbiroo_____
6. Baay'ina miseensa maatii
   A. 1-2
   B. 3-4
   C. 5-6
   D. >7
7. haala hojii
   A. Hojii mana keesaa
   B. Barattu
   C. Qacaramttuu dhabata mootumaa
   D. Qacaramttuu dhabata miti-mootumaa
   E. Daldala dhuunfaa
   F. Kan biro
8. Galii ji'aa_____
9. Madda galii
   A. Mindaa ji'aa
   B. Daldala dhuunfaa
   C. Omisha qonaa
   D. Galii bu'aa beeladootaa
   E. Kan biro

<u>KUTAA II</u>: GAAFILEE BEEKUMSA IRRATI XIYEEFATAN

1. Waayee tajaajila yaalaa ulfa duraa ni beektaa? Eeyee yoo ta'e gaafii lakk.2 deebisii
    A. Eeyee
    B. Hin beeku
2. Tajaajiloota ulfa duraa kam fa'i beekta?
    A. Tajaajila gorsaa fi qoranoo HIV
    B. Sirna nyaataa
    C. Ayiiranii dabalataa
    D. Talaalii fayaa
    E. Kanbiroo
3. Ulfa isa kana Ulfaa'u keetin dura waayee tajaajila qoranoo ulfa dura taasifamuu qabuuf yaadee beektaa?
    A. Eeyee
    B. Hin taasifne
4. Odeefanoo tajaajila qoranoo ulfa duraa kenamu ulfaa'u keetiin dura argateetaa?
    A. Eeyee
    B. Hin arganne
    C. Hin yaadadhu
5. Yoo odeefanoo waayee tajaajila qoranoo ulfa duraa hin arganne ta'e kuni maaliif ta'e siti fakaata?
    A. Waanan qoranoo sana hin barbaaneef
    B. Tajaajilichi yeroo ulfaa na fayada jedhee waanan hin yaaneef
    C. Yeroo gahaa isaaf waanan hin qabaaneef
    D. Hojiilee heduu waanan qabuuf nati hin tolu
6. Yoo miidwaayifiin ykn ogeessi waayee tajaajila qoranoo ulfa duraa irratti odeefanoo siif kenuu barbaadan akkamin simatta?
    A. Eeyee, odeefanoo waayee qoranoo ulfa duraa irrati kenamu nan barbaada
    B. odeefanoo waayee qoranoo ulfa duraa irrati kenamu hin barbaadu
7. Ulfa isa kanaan duraatiif odeefanoo waayee qoranoo ulfa duraa midwaayifii ykn ogeessa irraa argateetaa?
    A. Eeyee, odeefanoo waayee qoranoo ulfa duraa midwaayifii ykn ogeessa irraa argadheera
    B. Lakki, odeefanoo waayee qoranoo ulfa duraa midwaayifii ykn ogeessa irraa hin argane
8. Yoo deebiin kee gaafii lakk.7 tiif lakki ta'e maaliif?
    A. Odeefanoon akkasii akka jiru hin beeku ture
    B. Ogeesoni fayaa akkan tajaajilicha fayadamu nati hin himne
    C. Qoranoo ulfa duraa taasisuun koo nafayada jedhee waanan hin yaadneef
    D. Tajaajili qoranoo ulfa diraa kan wal hin simne waan ta'eef
    E. Kan biro

<u>KUTAA III</u>: GAAFILEE HAALA MUUXANNO TAJAAJILA ULFA DURAA IRRATI XIYEEFATAN

1. Tajaajila qoranoo ulfa duraa taasisuun gaailtoota ni fayada jetee yaadaa?
   A. Eeyee B. Miti
2. Ulfaa'uu keetiin dura qoranoo ulfa duraa taasiftee ni beektaa?
   A. Eeyee B. Hin beeku
3. Yeroo tajaajila qoranoo ulfa duraa fayadamaa turteti rakkooleen si muudatan jiru ture?
   A. Eeyee B. Lakki
4. Rakoleen yeroo qoranoo ulfa duraa taasiftu si muudatan maal fa'i?
   A. Ogeesa fayaa iraa keniinsa tajaajila arrati xiyeefanoo dhabuu
   B. Tajaajili kenamu kan wal hin simnne ta'uu
   C. Yeroo qoranootiif sa'aatii dheeraa fudhachu
   D. Icitiin qoranoo egamuu dhabuu
   E. Hanqina meeshaalee yaalaa
   F. Kan biro
5. Yeroo tajaajila qoranoo ulfa duraa fayadamaa turteti hubaatiin gama hawaasaatiin sira gahe niraa? Yoo deebiin kee eeyee ta'e gaafii itti aannu deebisi
   A. Eeyee B. Lakki
6. Maddi hubaatiiwan si muudatanii eessa iraa ture
   A. Harmee koo fi dubartoota naanichaa iraa
   B. Abba waraa iraa
   C. Hiriyoota dhiyoo iraa
   D. Barmataalii hawaasichaa keessa jiran iraa
7. Tajaajila qoranoo ulfa duraatiif gargaarsa abbaa manaa kee iraa argateetaa? Yoo hin argane ta'e gaafii itti lakk.8 deebisi
   A. Eeyee B. Lakki,hin arganne
8. Sababni abaan manaa kee akka tajaajilichaargatuuf si hin gargaareef maal siti fakaata?
   A. Tajaajilichi akka gaa'iltota lameen fayadu beekumsa dhabuuraan kan ka'e
   B. Rakkoo ilaalchaatiin walqabatee
   C. Sa'aatii qorinichaaf oolu akka yeroo baleesuutii waan ilaaluuf
   D. Ilaalcha dogogoraa hawaasa keessa jiru soda
   E. Kan biro

9. Gara booddati deebitee yoo ilaaltu tajaajila qoranoo ulfa duraa taasisun nara jira ture jetee yaadaa?
    A. Eeyee (gaafii lakk.10 deebisi)
    B. Lakki (gaafii lakk.11 deebisi)
    C. Murteesuu hin danda'u
10. Yoo deebiin gaafii lakoofsa 9 eeyee ta'e sababni isaa maalifi?
    A. Akkan murtee salphaati murteesu na taasisa
    B. Murtee faayida qabeesa akkan murteesu nagargaara
    C. Yeroo ulfaa waayee dhima kanaaf shakuu hin qabu
    D. Namoota biro waliin wayee filanoo kootii bal'inaan akkan haasa'u na gargaara
    E. Waanta fuuldurati na muudachuu danada'u dursa na hubachiisa
    F. Kan biro
11. Yoo deebiin gaafii lakoofsa 9 lakki ta'e sababni isaa maalifi?
    A. Barumsi tajaajilacha qoranichaa irrrati ulfa dura naaf kenname waan hin jireef
    B. Qoranoon suni anaaf akka dandaa'amu waanan hin beekneef
    C. Odeefanoo wayee qoranoo ulfa duraa irate hin barbaadu sababni isaas dura ulfa'u waanan barbaaduuf
    D. Dhima kamiifuu waanan hin cinqamneef
    E. Odeefanoo heduu fudhadhera
    F. Waantoota gara fuulduraati muudachuu danda'an dursa beekuun bayeesa miti
    G. Waanta gara fuulduraati uumamuu danda'aniif yaada'uu irra waayee ulfatii qofa iratiin xiyeefachuu waanan barbaaduuf
    H. Kan biroo

Annex IV: Schematic Diagram of sampling framework

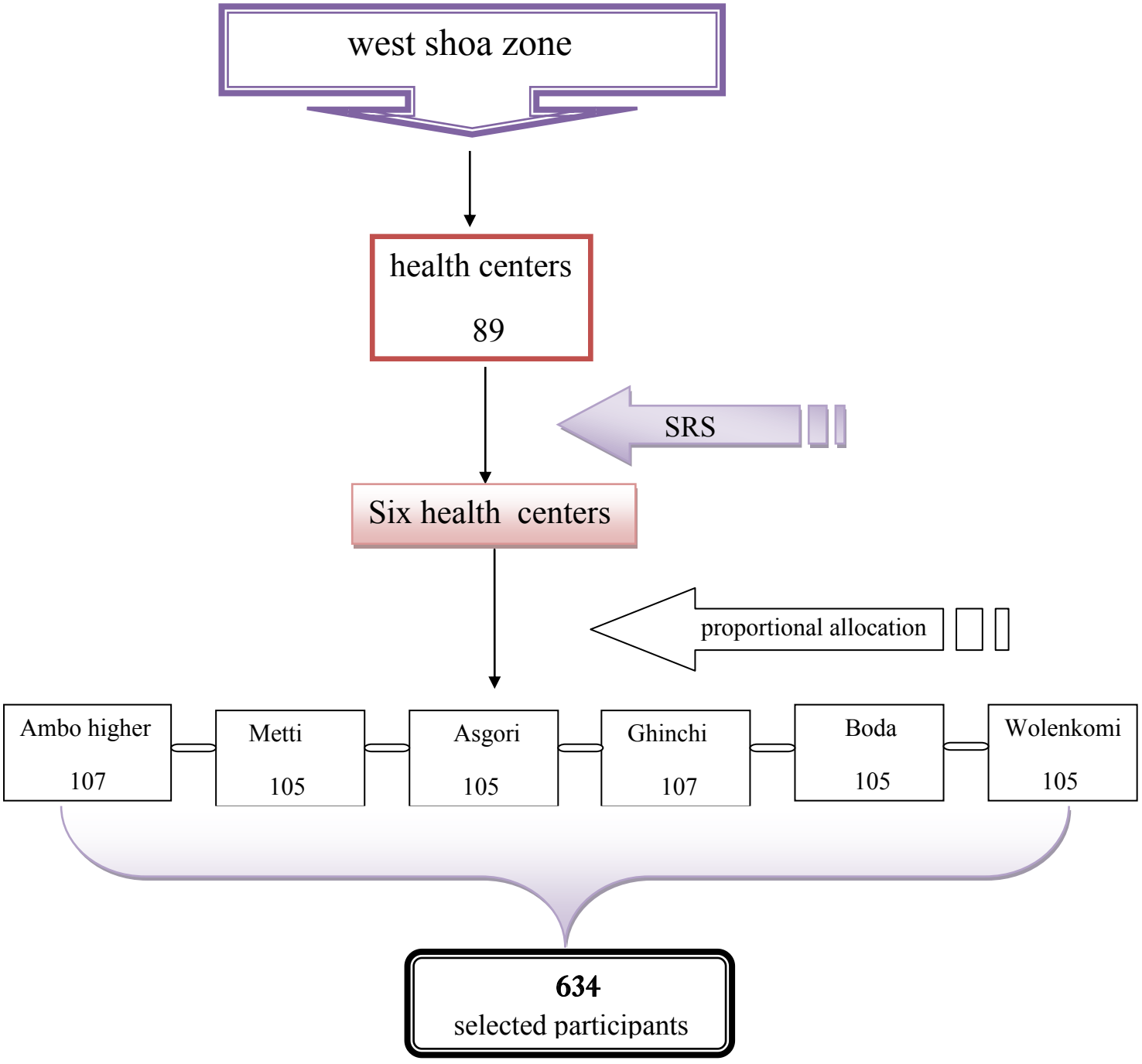

Figure 2: schematic presentation of sampling procedure