FACTORS AFFECTING UTILIZATIONOF ANTENATAL CARE (ANC) SERVICES AMONG WOMEN OF CHILDBEARING AGE IN, HARGEISA, SOMALILAND

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Abstract

Background: Antenatal care (ANC) is the care provided by skilled healthcare professionals to pregnant women in order to ensure the best health conditions for both mother and baby during pregnancy. Hargeisa, Somaliland has a well-defined antenatal care services program provided at the Maternal and child health centers (MCHs). However, the utilization of antenatal care services is low with country indicators stating only 20% of pregnant women utilize antenatal care services (MOHD, 2013). The low rates are suggested to be due to low levels of trust and confidence with the healthcare providers in the MCHs, confidence with the care provided by traditional birth attendants at home. **Objective:** The general objective of this study is to assess factors affecting utilization of Antenatal care services among women of childbearing age in Hargeisa, Somaliland. **Methods:** Quantitative data with descriptive cross sectional study was conducted to determine the availability, accessibility, acceptability, and affordability of antenatal care services among 258 women of childbearing age from 5 districts in Hargeisa, Somaliland. Questionnaires and structured interview schedules were used as tools for data collection. The questionnaires were personally administered by the researcher after getting consent from participants and those women who were unable to fill the questionnaires were interviewed.
Conclusions: The study reflected that literacy has a part to play in determining whether a mother will utilise maternal and child health services or not, as well as bad attitude by health care workers and long waiting time towards clients will discourage them from coming for the services. Most of the respondents prefer private facility than the public hospitals; where most of the respondents get permission from husband (decision maker) when attending ANC, but unfortunately majority of husband doesn't accompany to ANC checkups to their women. According to the affordability majority of the respondents rated some of the services including delivery and caesarean section an expensive, This is because the economic activity may determine whether a mother will get money during pregnancy to seek the services.

Keywords: *Factors, Utilization, Antenatal care, availability, accessibility, acceptability, affordability, women of childbearing age,*

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ABBREVIATIONS AND ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal care
FANC	Focused Antenatal Care
HCP	Health Care Providers
IMR	Infant Mortality Rate
MCH	Mother and child health
MDG	Millennium Development Goal
MICS	Multiple Indicator Cluster Survey
MMR	Maternal Mortality Rate
MOHD	Ministry of Health Development
PMTCT	Prevention of HIV, mother to child transmission
PPP	Post-Partum Period
SARA	Service Availability and Readiness Assessment
SBA	Skilled birth attendant
TBA	Traditional birth attendant

UNFPA	United Nations Population Fund
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
WHO	World Health Organisation

Operational terms

Women of childbearing age: when women can get pregnant and bear children from puberty when they start getting their menstrual period to menopause when they stop getting it

Utilization: refers to use of antenatal care services by women of child bearing age

Affordability: is the ability of women of childbearing age to pay for the cost of visit card, drugs, transportation, immunization, delivery, and caesarean section.

Accessibility: the degree to which women of childbearing age are able to gain entry and receive antenatal care services

Availability: refers to obtainability of antenatal care services at the maternal and child health centres and sufficiency of drugs, equipment and staff

Acceptability: refers to satisfaction of women of childbearing age with the antenatal care services provided at the MCHs

CHAPTER ONE:

INTRODUCTION

1.1 Background to the study

In 2016, at the start of the Sustainable Development Goals (SDGs) era, pregnancy-related preventable morbidity and mortality remains unacceptably high. While substantial progress has been made, countries need to consolidate and increase these advances, and to expand their agendas to go beyond survival, with a view to maximizing the health and potential of their populations. Sustainable development Goal 3 is to ensure healthy lives and promote well-being for all at all ages. This goal calls for achieving universal access to sexual and reproductive health care, reducing global maternal death rates, and ending the AIDS epidemic by 2030. Reproductive health problems are a leading cause of ill health and death for women and girls of childbearing age in developing countries. Global strategies have been designed to increase access to antenatal care that provides high quality service, but there are barriers to compliance. Women and society may not consider antenatal care a necessity during pregnancy. The women less likely to attend ANC have been described as having their residence in rural areas, possessing a low level of education and few socioeconomic resources. (WHO et al 2003). Antenatal care is the most important method for detecting pregnancy problems in the early period, because Antenatal care is the best mechanism to minimize maternal mortality, and give a good information for pregnant women about their birth and how to prevent related problems. The best and most advantage of Antenatal Care is to protect the health of women's and their infants as well as indicating the danger signals that will be occurred and needs to be further treated by advanced health professionals. However, Antenatal Care have such attractive benefits and strategies, according to the United Nations Millennium Development Goals, every year, at least half a million women and girls die as a result of complications during pregnancy, childbirth or the six weeks following delivery. Almost all (99%) of these deaths occur in developing countries. This shows that the Antenatal care activity is very weak in developing country.

However, many women in Africa, under-utilize FANC services. Usually they come late for the services and make fewer than recommended number of FANC visits. In Niger Delta, 77% of the pregnant women start utilizing FANC in the second trimester (Ndidi and Oseremen 2010) while

in Kenya 45% in the third trimester (Magadi et al. 1999). In Malawi 48% of the pregnant women start utilizing FANC in the second trimester (Malawi Demographic and Health Survey 2010). In terms of number of visits, in developed countries, 97% of the pregnant women make at least one antenatal visit and 99% of these pregnant women deliver with skilled birth attendants (Mrisho et al. 2009). To the contrary, in developing countries, including Malawi, 49% of pregnant women make at least have one FANC visit and oftentimes two thirds of these women deliver with unskilled birth attendants (Mrisho et al. 2009; MDHS 2010). Studies have linked low utilization to poor pregnancy outcomes, which ultimately lead to higher maternal and neonatal morbidity and mortality (Raatikainen et al. 2007).

In Somaliland access to health care services is improving, the country has faced challenges in increasing health care utilization and the proportion of women who give birth with the assistance of skilled attendants is the lowest in Sub-Saharan Africa. Somaliland is a republic situated north of the equator on the horn of Africa. The country is sharing borders with the Republic of Djibouti, Federal Republic of Ethiopia and Somalia to the east. The government of Somaliland uses a republican system with three arms of government namely: the Legislative, Executive and the Judiciary, with each arm exercising its exclusive powers independently as accorded under the Constitution. Somali is the official language, but Arabic and English are other official languages used and the religion practiced is Islam. Hargeisa is the capital city of Somaliland, in MaroodiJeex Region, and other five regions in Somaliland are Awdal, Sahil, Togdheer, Sool and Sanaag. The backbone of the economy is livestock exports in the Middle Eastern countries. The approximate population of Somaliland is 3.85 million. 2009 with an annual population growth rate of 3.14%. The life expectancy at birth is between 49 and 60 years. Half of the population lives in rural and urban areas and the other half are nomads. About 65% of the population depends either directly or indirectly on livestock and livestock products for their livelihood. The health care system was seriously damaged during to the civil war and conflicts in the 1990s. This led to low socio-economic status especially among many women and girls and caused a lack of education and health care services. Currently, the government of Somaliland aims to rebuild, establish health institutions and improve the health care system for the entire population (UNHCR 2014). While comprehensive information for Somaliland is not available it is estimated that the country's maternal and child mortality rates are among the highest in the world. The maternal mortality ratio for Somaliland was estimated at (MMR 980/100,000 live births, IMR 72/1000 live births) in 2013, a reduction from 1300 per 100 000 live births in 1995 (WHO 2014). Almost one out of 10 children is estimated to die before their first birthday. The leading causes of infant mortality are illnesses like neonatal disorders, pneumonia and diarrhea. Women die due to pregnancy related causes, only 9 % have access to an SBA during childbirth and the service of maternal and reproductive health care is very low. The modern contraceptive rate, which is typically used for birth spacing purposes, is only 1 %. This together with low access to maternal health care, family planning, skilled birth attendance and high fertility rates put the women in Somaliland at a high risk of mortality and morbidity related to pregnancy and childbirth (WHO 2014).

It's perceived that one of the reasons behind these high rates include low utilization of antenatal care services in Somaliland. Empirical evidence has shown that antenatal care services play an important role in improving maternal and newborn health outcomes. The focus of antenatal care

services includes ensuring availability, accessibility, affordability and acceptability of these services. As such provision of antenatal care services creates a platform for educating the mother on pregnancy danger signs, detecting any complications at an early stage and advising the pregnant women to seek appropriate treatment on time. Hargeisa, Somaliland has a well-defined antenatal care services program provided at the Maternal and child health centres (MCHs). However, the utilization of antenatal care services is low with country indicators stating only 20% of pregnant women utilize antenatal care services (MOH, 2013). The low rates are suggested to be due to low levels of trust and confidence with the healthcare providers in the MCHs, confidence with the care provided by traditional birth attendants at home.

Previous studies conducted have indicated that factors affecting utilization of antenatal care services include: availability, accessibility, affordability and acceptability (Onasoga et al, 2012; Ganle, Otupiri & Fitparrick, 2015; Lechthaler et al, 2018). Availability of antenatal care services refers to obtainability of antenatal care services at the maternal and child health centers and sufficiency of drugs, equipment and staff. Another factor that affects utilization of antenatal care services as mentioned is accessibility. This is the degree to which women of childbearing age are able to gain entry and receive antenatal care services. Affordability is also a known factor associated with antenatal care services. This is the ability of women of childbearing age to pay for the cost of visit card, drugs, transportation, immunization, delivery, and caesarean section. Acceptability of antenatal care services means refers to satisfaction of women of childbearing age with the antenatal care services provided at the MCHs (Fagbamigbe&Idemudia, 2015; Kanyangarara, Munos &Walker, 2017;Mbuagbaw et al. 2017). Despite the knowledge that these factors are predictors of utilization of antenatal care services, these factors have not been investigated before in Hargeisa. Investigating these factors to unravel the factors contributing to low utilization of antenatal care services will inform development of pragmatic programs that will be implemented to increase utilization rates of antenatal care services in Hargeisa.

1.2 Statement of the problem

Strategies have been designed globally to increase access to high quality antenatal. Somaliland has the intention to follow the globally designed strategies. Previous studies have shown that there are barriers to compliance of global and national strategies when establishing ANC services. In Hargeisa, Somaliland, the rate of utilization antenatal care services is very low estimated at 20% according to the Ministry of Health Somaliland Report of 2013. This is known to contribute towards the high maternal mortality rate in Somaliland standing at 732/100, 000 live births according to the 2015 Ministry of Health report. Since more knowledge is needed to identify specific barriers to ANC among the most vulnerable female population in Somaliland. Therefore this study aims at determining factors influencing utilization of Antenatal Care services among women in Hargeisa, Somaliland. Further the study will determine the specific factors under availability, accessibility, affordability and acceptability that affect utilization of antenatal care

services in the district. Moreover, the study will inform the design of strategies that will seek to improve the uptake of ANC services thereby positively impacting on reducing high infant and maternal mortality in Somaliland.

1.3 Purpose of the study

1.3.1 General objective:

To assess antenatal care utilization factors among women of childbearing age in Hargeisa, Somaliland

1.3.2 Specific objectives include:

1. To determine availability of antenatal care services in Hargeisa District.
2. To establish accessibility of antenatal care services in Hargeisa District
3. To determine the acceptability of antenatal care services in Hargeisa District
4. To determine affordability of antenatal care services in Hargeisa District

1.4 Significance of the study

This study is intended to assess antenatal care services utilization factors among women of childbearing age in Hargeisa. The delivery of antenatal care services in an appropriate way may enable the pregnant women utilize these services thereby reducing on the cases of maternal mortality and morbidity, still births and early neonatal deaths within the community. The findings of the study can be useful to the country's health care system in decision making on the provision of antenatal services in different health care facilities, and will also serve as a reference for giving intervention accordingly by the Ministry of Health Development and others who concerned; for conducting further researches, the findings of this study will have special importance for health care providers because it will serve as base line for filling gaps of the actual practices on antenatal care by improving uptake of these services.

1.5 Limitations of the Study

One of the limitations encountered during the study was language barrier for the mothers who were either illiterate or unable to read and write in English.

Somalis are verbal society, they like talking and sharing information so participating in qualitative interviews fits the society very well. It could be seen as a limitation that it the questionnaire were written in English. However, it was a strength that the researcher was translating each question

into Somali when asking for the mothers. The other challenge that was encountered was fear of victimization especially when the participants reported weaknesses in the services. This was overcome by assuring the participants that the study was not meant to punish or victimise anyone and that they were not to indicate their particulars on the questionnaire or interview schedule. Another limitations included in adequate financial resources during the data collection period

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Antenatal care is an important determinant of maternal health outcomes and one of the basic components of maternal care on which the life of mothers and babies depend. It is the entry point to the health care system and determines whether a mother will deliver in a health facility and whether she will take the baby for preventive services like immunizations and growth monitoring. According to Chuma and Thomas (2013), only a minority of pregnant women (36.1%) make the required minimum of four ANC visits in public health facilities in Kenya. This implies that we are unlikely to achieve sustainable development goals number 3.

The purpose of antenatal care is to permit the midwives to make the primary role for the pregnant mother and her unborn baby to take history and make physical assessment, so the professional behaviour of the midwives is very crucial, midwives are anticipated to have a good and positive attitude towards mothers during antenatal visits and also to use their knowledge and experience to show mothers a sympathetic feeling, the midwives are expected to be considerate patient and to be addressed mothers need immediately after attending the antenatal care section in order to save time (McCrea & Wright, 2008).The role of the midwives is also defined as lifesavers, teachers, and counselors health promoters and so on. (Adesokan, 2010).

The maternal mortality ratio (MMR) per 100 000 live births is approximate to be 920 in Africa, 330 in Asia 10 in Europe. 1 up to 80% of these maternal deaths is directly due to five problems: hemorrhage, sepsis, eclampsia, rupture of the uterus, obstructed labor and complications of abortion, but all of these mentioned problems can prevent by providing mothers good and respectful antenatal care. (Khan KS &Wojdyla 2012).In Tanzania, the ministry of health and social welfare implemented the focused antenatal care policy in 2002 and used it for cascading health worker training on central regional and district level (Tibaijuka. GM &Rwamushaija, 2014).Somaliland is one of the worst maternal mortality rates in the globe: the maternal mortality ratewas 732 per 100,000 (UNECEF & WHO 2015), with an infant mortality rate is 73 per 1,000

births at the same time as the under five mortality is around 117/1,000 (UNICEF 2012). The estimated utilization rate of antenatal care services as indicated in the Ministry of Health report of 2015 is 2013.

2.2 Availability of antenatal care services

After the civil war Somaliland started a new national life through rehabilitation of health institutions, calling back migrated trained health personnel and working for other development activities, although all this exists, but still the maternal mortality is the leading cause of death among women of reproductive age(UNICEF 2011). Women in Somaliland have a one in 15 risk of dying of maternal related causes. Access to health care is a major problem for the nomads. According to studies conducted previously, availability refers to whether there is a primary health care facility i.e. maternal and child health centre (MCH) within the reach of pregnant women, whether the MCH has drugs, equipment, ambulance, whether the MCH has qualified staffs, whether the MCH has health workers with good attitude, whether services are provided within a short time, whether there is a flexibility of clinical schedules.

Empirical evidence has shown that availability of MCH is associated with increased rates of utilization of antenatal care services. If the MCH has drugs, equipment and ambulance, pregnant women will prefer to visit that facility because they will receive all the services they require and in case of an emergency they can be transferred to another facility. MCHs with highly competent staff and with staff demonstrating good communication skills, professionalism and good attitude are likely to receive many women during pregnancy for care. Most of the time pregnant women don't like waiting for long hours to be attended, MCHs providing healthcare services within a short time are likely to attract many pregnant women visiting the facility for antenatal care.

2.3 Accessibility of antenatal care services

Lack of access to, and low utilization of essential services and high-impact interventions, together with poor quality of health services, may be partially responsible for this lack of progress. In Kitui district hospital, out of the 2927 pregnant mothers who were within the catchment area in 2014, only 747 (25%) of them attended the recommended 4 ANC visits (DHIS, 2015). Assessing the determinants of utilization of antenatal care services in Kitui district hospital is therefore necessary since the findings are likely to help the hospital improve the quality of services and attract more clients.

Some of the factors relating to accessibility of antenatal care services include: is the facility private or public, the proximity of the MCH to the pregnant women homes, and whether transport is readily available. Previous studies done in developed and developing countries have indicated that the type of health facility can either attract or discourage women from attending that facility for antenatal care services. Private hospitals most of the time are preferred due to the high quality of care they provide, with highly competent staff, modern equipment and availability of good drugs(He,Toloo, Hou &FitzGerald, 2016), while the public hospitals are often faced with lots of challenges including, lack of modern equipment, shortage of drugs and sometimes not highly qualified staff.

2.4 Acceptability of antenatal care services

Empirical study has shown that Utilization of antenatal care package mainly depends on both the health care providers and pregnant women. On the part of the providers, there are issues of the availability of ANC services and the delivery to the clients. Firstly, it is not all ANC providers that can provide focused ANC (FANC) package. Secondly, not all the providers are culturally competent to deliver FANC. With regards to the consumers, acceptance of FANC is influenced by religious beliefs, cultural norms and values. ANC providers should be culturally competent and monitored to ensure that they offer adequate and quality ANC service delivery. The pregnant women need to be sensitized about the benefits of accepting ANC package.

Regarding acceptability of the antenatal services where by satisfied clients, preferred the healthcare services as the services did not contradict with the religious and cultural beliefs and service provider behavior.

2.5 Affordability of antenatal care services

In Kenya efforts have been made to improve the knowledge among community health workers at health centers in order to provide and deliver curative care and care during child birth. Kenya focuses on antenatal care (ANC) and tries to offer this to every pregnant mother, including management and prevention of HIV, mother to child transmission (PMTCT), syphilis screening and treatment; and encouraging every mother to do laboratory tests during their first visit. In western Kenya 80% of the women delivered outside a health facility and 42% were assisted by a TBA, 36% were assisted by laypersons and 22% had no assistance at all (Van Eijk et al 2006). In 2006, the Minister of Health in Kenya decided to make delivery services free, however women are commonly asked to pay a small fee for the basic delivery supplies such as gloves, cotton wool, and maternal pads.

Likert scale was used to measure affordability of antenatal care services under variables such as the cost of visit card, drugs, transportation, immunization, delivery, and caesarean section. The scale had the options: free, cheap, medium and expensive.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter deals with research design, study population, sample size and sampling procedures, research instruments, data collection procedures, data analysis techniques, and ethical considerations

3.2 Study Design

Descriptive cross sectional study was used which quantitative data was gathering which questionnaire tools were conducted factors affecting utilization of Ante-natal care services among women of childbearing age in Hargeisa, Somaliland.

3.3 Study Period:

The study was conducted from March 2017 to May 2018.

3.4 Study participants:

The study population was women of child bearing age in 6 districts of Hargeisa, Somaliland.

Inclusion criteria: Women of childbearing age in Hargeisa

Exclusion criteria: Non- child bearing women

3.5 Sample size determination and sampling procedure:

Online raosoft sample size calculator was used to calculate the sample size. With 5% margin of error, 95% CI, population size 345, 000 women in reproductive age, i.e (23% of 1.5 million population in Hargeisa, and 80% population proportion of women not utilizing ANC services. The sample size formula gave a sample size of 246, and 5% was added to cater for non response rate giving sample size of 258.

The study included 258 mothers visiting 6 Maternal and Child Health Centres (MCH) in Hargeisa, Somaliland. Purposive sampling was used in this study to recruit mothers visiting the maternal and child health centres in Hargeisa and mothers living within the catchment population of the maternal and child health centres. Clients who consented and met the inclusion criteria were enrolled cumulatively until the required sample size was obtained. The maternal and child health centres where participants were recruited included: Iftin MCH, Guryosamo MCH, New

Hargeisa MCH, Cawadle MCH, Sacaardiid MCH. Each MCH selected represented each of the five districts in Hargeisa, and these MCHs were selected because they serve the largest catchment populations. The sample sizes in each of the MCHs and the catchment population were calculated proportionally giving the samples shown in Table 1.

Table 1 Showing Sample Sizes for the Study, in MCHs Selected and the Community

Districts in Hargeisa and MCH Selected in the District	**Number of Participants Recruited in the MCH**	**Number of Participants Recruited in the Community Catchment Population of the MCH**	**Totals**
Ahmed Dhagax District (Iftin MCH)	42	42	84
Mohamud Haybe (Guryosamo MCH)	47	47	94
Gacanlibah (New Hargeisa MCH)	10	10	20
Koodbuur (Sacaardiid MCH)	14	14	28
26th June (Cawadle MCH)	16	16	32
Total	129	129	258

Response rate was 99.2% and this was above the minimum required % of 95.

3.6 Study Area:

The study area is Ahmed Dhagah, Mohamud Haybe, Mohamed Mooge, 26 June, Kodbur, and GacanLibah districts in Hargeisa and the estimated population of women of childbearing age is 340,000. The study area has an estimated 20% utilization rate of ANC services. The MCHs in Hargeisa include Iftin MCH, Guryosamo MCH, New Hargeisa MCH, Mohamed Mooge MCH, Sacaardiid MCH, and Cawadle MCH. These MCHs provide a wide range of primary health care services including antenatal care, delivery services, postnatal services, family spacing services and expanded program of immunization services.

3.7 Research instruments

Questionnaires and structured interview schedules were used as tools for data collection. There was a structured questionnaire for women and those who were unable to fill the questionnaires were interviewed. According to Orodho (2009), questionnaires are instruments used to gather data which allows the measurements for or against a given view point. The advantage of questionnaires is that they can be administered to a large number of people at the same time (Fraenkel and Wallen, 2003). The questionairre had three sections; Part A with sociodemographic data, Part B with maternal health factors and Part C with healthcare

system related factors which included availability, accessibility, acceptability and affordability of healthcare services.

3.8 Pilot and pre-testing of the instrument

A pilot study was carried out in ANC clinic at Ahmed Dhagah and MohamudHaybe districts in Hargeisa from November- December 2017. A total of 10 participants were sampled for the pilot. During the pilot testing, the instrument was assessed for clarity and ease of use. Information obtained during the pilot testing was used to revise the study instruments. Validity of the instrument was conducted indicating a content validity ratio of 0.87, showing the instrument had questions appropriate to answer the research questions. Reliability of the instrument was also done indicating a reliability co-efficient of 0.8 indicating the instrument consistency for use in different settings.

3.9 Data collection procedure:

The data was collected using a structured questionnaire regarding factors affecting utilization of Ante-natal care services among women of childbearing age in Hargeisa, Somaliland. The questionnaires were personally administered by the researcher after getting written consent from participants. Participants filled the questionnaires at the MCHs and also in the selected households. The participants who were unable to fill the questionnaires were interviewed. Each questionnaire was filled in and collected before leaving to the next selected study participant.

3.10 Data processing and analysis

Data was analyzed using SPSS-version 22. Collected data was cleaned and entered in SPSS version 22 database for analysis. Descriptive statistics was used to analyze the four main objectives of the study namely: (i) availability of antenatal health services, (ii) accessibility of antenatal health services, (iii) affordability of antenatal health services and (iv) acceptability of antenatal health services. Data was presented in narrative and tables.

3.11 Ethical Considerations

Regarding Ethics, the author followed World Medical Association (2008) and Declaration of Helsinki guidelines and principals (Research Council 2013). The World Medical Association's (2008) guidelines regarding informed written consent, informed choice, confidentiality and the possibility to withdraw from participation at any time were followed (WMA 2015). The author protected the human rights of the participants by taking into accounts the privacy and confidentiality requirements for research involving humans (Declaration of Helsinki, 2008). This research proposal was approved both by the ethical committee at the University of Hargeisa and the Ministry of Health Development in Somaliland. All study participants were informed about the study and will be given both written and verbal consent prior to participation.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1Introduction

Responses were received from 258 study participants. This was mainly because the researcher administered the tools to each participant at a time and collected them immediately they were filled. The questionnaire response rate was therefore 100 per cent. This was an excellent response rate since according to Mugenda and Mugenda (2003), a response rate of 70% and above is very good.

4.2 Results

4.2.1 Study Respondents' Sociodemographic Information

The sociodemographic factors of study participants are shown in Table 1. Regarding the place of residence, majority 94 (36%) of the study participants resided in Mohamud Haybe district. In terms of age, most of the study participants' ages ranged between 25 and 34 years (60.4%). Majority of participants were married 252 (97.7%), terms of family size half the participants has family between 4-6 including mother and father 114 (44%), in educational level 63(24%) were university graduates, majority of study participants 204 (79%) were unemployed mothers, according to father occupation 135 (52.3 %) were office work/ services work and more than half of the participants 162(62.8%) had family income between 100----499 USD per month.

Table 2 Sociodemographic Factors of Study Participants

Residence	**n=258**	**%**
Ahmed Dhagah	84	32.8
Mohamud Haybe	94	36
26 June	20	7.8
Ibrahim Kood-buur	28	10.9
Gacan-Libaah	32	12.5

Age	**n=258**	**%**
15-24 years	51	19.8
25-34 years	156	60.4
35-44 years	51	19.8
Marital_Status	**n=258**	**%**
Married	252	97.7
Divorced	6	2.3
Family_Size	**n=258**	**%**
1-3	57	22
4-6	114	44
7-10	59	23
Above 10	28	11
Educational_Level	**n=258**	**%**
Never gone to school	53	20.5
Quran/Madarasah School	24	9.4
Primary School	55	21.5
Intermediate School	27	10.5
Secondary School	36	14.1
University graduate	63	24
Mothers_Occupation	**n=258**	**%**
Unemployed	204	79
Office work, non-manual work or service work	42	16.3
Manual work (cleaners)	9	3.5
Student	3	1.2
Fathers_Occupation	**n=258**	**%**

Unemployed	24	9.3
Office work, non-manual work or service work	135	52.3
Manual work	99	38.4
Family_Income	**n=258**	**%**
Below 30 USD	6	2.3
30-59 USD	9	3.5
60-99 USD	21	8.1
100-499 USD	162	62.8
500-999 USD	42	16.3
1000 USD and above	18	7.0

4.2.2 Obstetric Characteristics of Study Participants

A data collected 258 study participants form five districts in Hargeisa showing that 135 (52.3%) give birth 1-3 children, at least half of the participants 93 (36%) had history of obstetric problem including abortion and still birth, while 197 (76.4%) exclusively breastfeeding for the first six month of child age, while majority of the participants 141 (54.7%) were received TT1/TT2 immunization, 56 (21.7%) mothers had history of food restrictions during pregnancy including major nutrient and majority of participants 174(67.4%) were not using different method of family planning.

Table 3 Obstetric Related Factors

Gravida	n=258	%
1 to 3	135	52.3
4 to 7	77	29.9
Above 8	46	17.8
History_of_Still birth	n=258	%
Yes	93	36

No	165	64
Did_You_Practice_Exclusive_Breastfeeding	**n=258**	**%**
Yes	197	76.4
No	61	23.6
Maternal_History_of_immunization	**n=258**	**%**
TT1/TT2	141	54.7
TT1	71	27.5
Not immunized	46	17.8
Are_there_any_food_restrictions_during_pregnancy	**n=258**	**%**
Yes	56	21.7
No	202	78.3
Do_You_Practice_Family_Planning	**n=258**	**%**
Yes	84	32.6
No	174	67.4
Did_you_have_any_obstetric_problems_with_previous_pregnancy	**n=258**	**%**
Yes	95	36.8
No	163	63.2

4.2.3 Availability of Antenatal Care services

According availability of MCH Facility as showing below table majority of participants 237 (91.9%) had MCH facility available, half of the participants 215(83.3%) have full equipped MCH facility including essential drugs, basic Equipment and Ambulance, more than half of total participants 220 (85.3%) had qualified staff in their nearest health facility, at least 50 (19.4) proclaiming health professional had bad attitude, in terms of short waiting hours 106(41.1%) had

long waiting hours in their Respective health facility and 76(29.5) had experience non flexible clinical schedules

Table 4 Availability of Antenatal Care Services

Is_MCH_Available	n=258	%
Yes	237	91.9
No	21	8.1
Drugs_Equipment_Ambulance_available	**n=258**	**%**
Yes	215	83.3
No	43	16.7
Qualified_Staffs	**n=258**	**%**
Yes	220	85.3
No	38	14.7
Health_worker_attitude	**n=258**	**%**
Good	208	80.6
Bad	50	19.4
Short_waiting_hours	**n=258**	**%**
Yes	152	58.9
No	106	41.1
Flexibility_of_clinical_schedules	**n=258**	**%**
Yes	182	70.5
No	76	29.5

4.2.4 Accessibility of Antenatal Care Services

A total of 258 study participants 158 (61.2) prefer private facility while seeking medical advice, 218 (84.5.2%) had distance of 5K/M and Below, and more than half of the participants 175 (67.8) have transport available

Table 5 Accessibility of Antenatal Care Services

Which antenatal centre do you prefer	**n=258**	**%**
Public	100	38.8
Private	158	61.2
Distance_from_home_to_health_center	**n=258**	**%**
5 Km and below	218	84.5
6 km to 10 km	33	12.8
Above 10 km	7	2.7
Is_transport_to_ANC_available	**n=258**	**%**
Available	175	67.8
Not Available	83	32.2

4.2.5 Acceptability of Antenatal Care Services

Study participants of 258 mother 238 (92.2%) were preferring MCH facility, while 67(26%) had third visit in their last pregnancy, while 184 (71.3%) go MCH facility for checkups during pregnancy while 16 (6.2%) mother go for delivery, 128 (49.6%) get health promotion during ANC Visit, while 192 (74.4%) received good quality of care from MCH facility, 39 (15.1%) mother preferring to deliver home, while 142 (55%) need permission to go ANC check UP, 177 (68.6%) got permission from their husband, 207 (80.2%) does not spouse accompanied during ANC visit, 219 (84.9%) mentioned that their husband is the decision maker, where 26(10.1%) receive their husband support, encouragement, and follow-up on women's condition during ANC Visit, a total of 155 (60.1%) come ANC For normal ANC checkups while 157 (60.8%) visit ANC when they

feel un well and 151 (58.5%) do not have any ANC traditional barriers, which is in hinted to not go ANC .

Table 6 Acceptability of Antenatal Care Services

Whats_your_preference_and_Satisfaction	**n=258**	**%**
MCH	238	92.2
TBA	20	7.8
Number of ANC Visits in your last pregnancy	**n=258**	**%**
0	15	5.8
1	21	8.1
2	58	22.5
3	67	26
4	50	19.4
More than 4 visits	47	18.2
Why do you go for ANC	**n=258**	**%**
Check Up	184	71.3
Immunization	13	5.1
Health Education	31	12
Delivery	16	6.2
None	14	5.4
What treatment or advise did you get	**n=258**	**%**
Nutrition Advice	84	32.6
Health Promotion	128	49.6

Family planing/IYCF Conselling	32	12.4
None	14	5.4
Whats your experience with the quality of care	**n=258**	**%**
Good	192	74.4
Not bad	46	17.8
Bad	9	3.5
None	11	4.3
Do_you_intend_to_give_birth_at_home_or_in_hospital	**n=258**	**%**
Hospital	219	84.9
Home	39	15.1
Did_you_need_permission_to_attend_ANC	**n=258**	**%**
Yes	142	55
No	116	45
if_yes_from_who	**n=258**	**%**
Father	10	3.9
Husband	177	68.6
Mother	47	18.2
Mother in Law	13	5
Other	11	4.3
Does_your_spouse_accompany_youto_ANC	**n=258**	**%**
Yes	51	19.8
No	207	80.2

Whats the benefit of the accompaniment to RH	**n=258**	**%**
Decision Maker	219	84.9
Drop Off to the health center	7	2.7
Support, encouragement, follow-up on women's condition	26	10.1
Strengths Confidentiality between couple	6	2.3
Times a pregnant woman should Visit ANC When No Problem	**n=258**	**%**
0	2	0.8
1-3times	155	60.1
4 or More	88	34
Never	10	3.9
Don't know	3	1.2
Times a pregnant woman_ should Visit ANC When Problem Exists	**n=258**	**%**
Dont know	2	0.8
0	3	1.2
1-3	96	37.2
4 or more	157	60.8
Barriers to ANC in First Trimester	**n=258**	**%**
Yes	151	58.5
Non	104	40.3
Sometimes	3	1.2

4.2.6 Affordability of Antenatal Care services

A total 258 study participants 130 (50.5%) were received free ANC Card. While 95 (36.8%) also receives free drugs during their ANC Checkups. 90 (34.9%) get cheap transportations to the maternal and health centres. 202 (78.3%) were received free immunization while 122 (47.3%) receives medium charge, at least 38 (14.7%) had expensive delivery service and 165 (63.9%) had expensive c/section services.

Table 7 Affordability of Antenatal Care Services

Cost_of_visit_card	**n=258**	**%**
Free	130	50.5
Cheap	80	31
Medium	39	15
Expensive	9	3.5
Cost_of_drugs	**n=258**	**%**
Free	95	36.8
Cheap	89	34.5
Medium	56	21.7
Expensive	18	7
Cost_of_transportation_to_ANC	**n=258**	**%**
Free	80	31
Cheap	90	34.9
Medium	71	27.5
Expensive	17	6.6
Cost_of_immunization	**n=258**	**%**
Free	202	78.3

Cheap	26	10
Medium	27	10.5
Expensive	3	1.2
Cost of delivery	**n=258**	**%**
Free	47	18.2
Cheap	51	19.8
Medium	122	47.3
Expensive	38	14.7
Cost of caeserean Section	**n=258**	**%**
Free	33	12.8
Cheap	25	9.7
Medium	35	13.6
Expensive	165	63.9

4.3 Discussions of Findings

The descriptions in the findings can provide the reader with a better understanding of why women in Somaliland context have limited access to the available antenatal services.

The study mainly focused on availability, accessibility, acceptability, and affordability of health care services. Availability was measured by asking study participants whether MCHs are available within their reach or not, if the MCHs have drugs, equipment and ambulance, if the MCHs have qualified staff, and it was also asked was whether the health care workers had good attitude or bad attitude which can influence uptake of ANC services

Regarding the availability of antenatal care services was seen as key in understanding utilization of antenatal care services. Previous studies conducted have shown that lack of antenatal care facilities within a given geographical area and poor proximity with far location of the MCH from the pregnant woman's home as well as long waiting times to be attended to at the MCHs affects utilization of antenatal care services (Health facility assessment 2016). In this study, majority of the participants asserted that antenatal care services were available in the maternal and child

health centres. However, according to the MOHD Health Sector Strategic Plan II, utilization of MCHs for antenatal care services is very low in Hargeisa estimated at 20 percent. This shows that despite availability of the maternal and child health centres, there are other possible reasons contributing towards low utilization of maternal and child health centres for antenatal care. When participants were asked about the waiting times for receiving antenatal care services, majority said that the waiting times were acceptable, but above one third of the study participants said that it took long hours to be attended. According to previous studies conducted, it has been established that long waiting hours to receive antenatal care discourages pregnant women from visiting health facilities for antenatal care. This can be a possible explanation among others for the reason of low utilization of antenatal care services in Hargeisa.

most of the respondents indicated that the MCH is available, but few study participants pointed out that the bad attitude of the midwives have huge impact when visiting antenatal care services. Midwive's profession is the key profession in the care of women during the childbearing process, and research results indicate that they can have a major effect upon their well-being And the attitude to their newborn child (Hatem& Sandall 008). We take it as a given that all midwives want to be good midwives, Midwives are the health care providers which play an important role by providing the maximum care for the pregnant women during antenatal care period (Werkmeister& Newburn, 2008).

Regarding accessibility of the antenatal care services, this was measured by asking study participants, if they are satisfied and if they prefer the antenatal care services provided and if they are any barriers and pregnancy related traditional beliefs that prevent pregnant women from starting antenatal care services in the first semester. For instance 60% of the respondents prefer to attend private facilities than the public facilities because of quality service, or because public hospitals deal with emergencies and acute care, they found it a stressful environment, where the nursing staff were overworked. They also felt they had little choice about their care.

Regarding acceptability was to determine the acceptability of antenatal care services by mothers in Hargeisa, Somaliland. The study wanted to establish whether the women get permission from someone when attending ANC, and that could have a role in determining women's health. Therefore this study discovered that most of the respondents were getting permission from husband (decision maker) when attending ANC, then The question as to whether husband accompany to the ANC was asked and 206 (80.5) respondents responded to "No" that husband doesn't accompany to ANC checkups.

Maternal health is defined to the health of the mother during pregnancy, childbirth and the postpartum period, at the same time as motherhood is always a positive and pleasant Experience, for many mothers it is related to Complain, ill-health and even death deliberation of the requirements of pregnant women and their capability and readiness, to be present at maternal services is central to the profession of easily reached and acceptable maternal care. Mother's

happiness with maternity services is weakly understood in many developing countries. Every year, more than 528 000 women worldwide passed away from problems of pregnancy and childbirth. (Adesokan, 2011).

Another scale was used to measure affordability of antenatal care services under variables such as the cost of visit card, drugs, transportation, immunization, delivery, and caesarean section. The scale had the options: free, cheap, medium and expensive.

CHAPTER FIVE
CONCLUSIONS, RECOMMENDATIONS, AND ACKNOWLEDGEMENT

5.1 Conclusion

The study findings indicated that almost all the mothers who were took part in the study had attended some level of school. This indicates that literacy has a part to play in determining whether a mother will utilise maternal and child health services or not. This is because they can read the Information, Education and Communication (IEC) materials displayed in public places encouraging mothers to seek ANC care.

Study discovered that health care workers' attitude is an important consideration if we want to improve the uptake of ANC services. The explanations given by respondents were that bad attitude by health care workers towards clients will discourage them from coming for the services.

waiting time had influence on utilization of ANC services while more than a third of the respondents pointed that long waiting time discourages clients from coming for the services since it wastes their valuable time. This means that if the waiting time for services is usually long in the hospital, uptake of ANC services will be low.

60.9% of the respondents prefer private facility than the public hospitals; it may be the quality of health service provision.

Most of the respondents were getting permission from husband (decision maker) when attending ANC, then The question as to whether husband accompany to the ANC was asked and 206 (80.5) respondents responded to "No" that husband doesn't accompany to ANC checkups

Most of the respondents rated some of the services including delivery and cesarean section an expensive, This is because the economic activity may determine whether a mother will get money during pregnancy to seek the services.

5.2 Recommendations

Based on the findings, This study recommends:

1. This study recommends development of policies and public health programs focusing on increased awareness and behavioral change among pregnant women attending health centers to receive antenatal care services as well as other high risk groups in the population
2. Health promotion of family planning/ birth spacing through mass media. Poster and health education in MCH facility to promote family /birth spacing uptake
3. IYCF counseling session during NAC visit and postnatal check
4. Health seeking behavior activity to reduce still birth and abortion
5. Capacity building of health professional of behavior change communication massages,
6. Expanding of primary health care services and health system strengthen though resource allocation and supportive supervision.
7. Improve public health services by improve quality of health care services in the public Maternal and child health services
8. Improving male involvement of reproductive health services through male to male Interpersonal communication agents,
9. Government engagement of free health services or cost sharing mechanism.
10. Ministry of health development should implement research library to keep written documents or researches done before in order to improve data about maternal and child health which help researchers to use as reference.

5.3 Acknowledgement:

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I am especially indebted to **Khalif Bile** professor, Somali- Swedish Researchers' Association (SSRA) for his genuine support throughout this program with Somali Swedish Research Cooperation for Health (SSRCHealth), which initiated the program, and built on a shared Somali- Swedish leadership, involving Somali and Swedish universities, and Somali Expatriate Health Scholars.

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Appendix 1: Clearance letter

Dear Sir/Madam

APPLICATION FOR A NATIONAL CLEARANCE TO CONDUCT A RESEARCH STUDY ON ASSESSMENT OF HEALTHCARE UTILIZATION FACTORS AMONG WOMEN OF CHILDBEARING AGE IN, HARGEISA, SOMALILAND

I am a student at the University of Hargeisa in Health sciences. I am registered for 1 year health research training and implementation programme by the Somali Swedish Research Cooperation for Health. The study is for meeting the requirements of the mentioned programme.

I kindly request permission to conduct this research in 6 districts of Hargeisa Somaliland. Data will be collected from child bearing women using questionnaire as an administrative tool.

The purpose of the study is to assess antenatal care services utilization factors among women of childbearing age in Hargeisa, Somaliland.

All respondents will be given full information about the study and verbal consent will be sought from the participants. Issues of confidentiality, anonymity and about their right to withdraw from the study if they feel uncomfortable will also be clarified to the participants.

Please use the contact below for communication regarding the above request.

Yours Faithfully,

Hamda Ali Abdillahi

RESEARCH STUDENT

Email: Hamdi.dgl@gmail.com

Appendix 2: Information letter

My name is **Hamda Ali Abdillahi**. I am a student at the University of Hargeisa.

The aim with this study is to assess the antenatal care services among women of childbearing age in Hargeisa, Somaliland.

I would like to invite you to take part in

Your participation is voluntary and you are free to leave the study at any time you like without giving any reason.

Confidentiality will be guaranteed and it will not be possible to recognize you in any report from this study. The files will be destroyed after the analyses.

…This is to diminish any risks of discomforts for you. You will not receive payment for participating.

If you have any questions please feel free to contact...

Thank you for giving me your attention.

Name: _____

Cell phone: _____

Appendix 3 Consent form

I have read the information letter YES/NO

I have had an opportunity to ask questions YES/NO

I have got satisfactory answers to my questions YES/NO

I have received enough information about the study YES/NO

I have understood that I can withdraw from the study at any time without giving a reason YES/NO

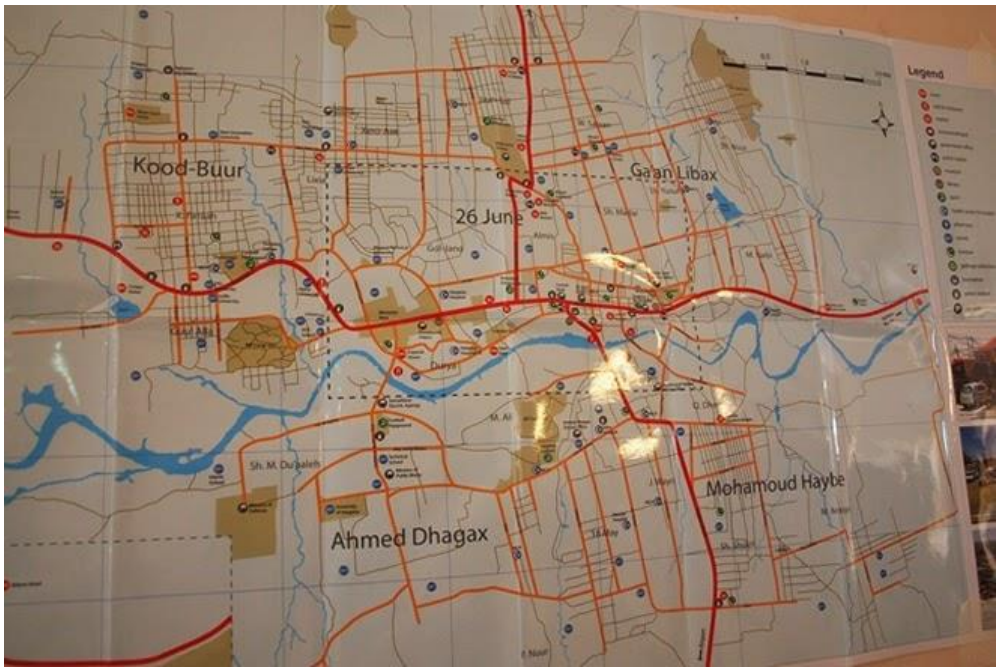
I agree to participate in a study being conducted by a student researcher from the University of Hargeisa. I have made thisdecision based on the information I have received. In addition I have had the opportunity to receive any further details I wanted about the study. I understand that I may withdraw from the study at any time, without penalty, by telling the researcher.

Participants Name: _____

Participant's signature: _____

Date: _____

Appendix 4: Map of Hargeisa, Marodijeh region in Somaliland



Appendix 5. Map of Somaliland