FACTORS AFFECTING CONTINUITY IN ATTENDING ANTENATAL CARE SERVICES AMONG PREGNANT WOMEN IN CHEMBA DISTRICT

FACTORS AFFECTING CONTINUITY IN ATTENDING ANTENATAL CARE SERVICES AMONG PREGNANT WOMEN IN CHEMBA DISTRICT

By

Aziza Hamisi

A Dissertation Submitted to the School of Public Administration and Management in Partial Fulfilment of the Requirements for the Award of the Masters of Health Systems Management of Mzumbe University.

2019

CERTIFICATION

We, the undersigned, certify that we have read and hereby recommend for acceptance by the Mzumbe University, a dissertation/thesis entitles ***"Factors Affecting Continuity in Attending Antenatal Care Services among Pregnant Women in Chemba District"*** in partial fulfilment of the requirement for award of the degree of Master of Health Systems Management at Mzumbe University.

Signature

_____ Date ----------

Major Supervisor

Signature

_____ Date ----------

Internal Examiner

Accepted for the Board of School of Public Administration and Management

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_____

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DECLARATION

I, Aziza Hamisi, declare that this dissertation is my own original work and that it has not been presented and will not be presented to any other university for a similar or any other degree award.

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Finally, May God bless us!

DEDICATION

This dissertation is dedicated to my lovely Husband Zubery Henry Kassimu and our children who have been a source of my strength and joy. They provided me a great source of encouragement throughout my study and did everything within their ability to make things happen.

LIST OF ABBREVIATIONS

ANC	-	Antenatal Care
FANC	-	Focused Antenatal Care
GDHS	-	Ghana Demographic and Health Survey
IPV	-	Intimate Partner Violence
LMICs	-	Less & Middle Income Countries
MDG	-	Millennium Development Goals
MHC	-	Maternal Health Care
MMR	-	Maternal Mortality Rate
MOH	-	Ministry of Health
MoHSW	-	Ministry of Health and Social Welfare
PHC	-	Primary Health Centre
TDHS	-	Demographic Health Survey
TBAs	-	Traditional Birth Attendants
WHO	-	World Health Organization

ABSTRACT

Background: Maternal mortality has remained to be the leading cause of death among women of reproductive age. In developing countries like Tanzania, the occurrence of maternal deaths has been linked with low level of attendance and utilization of skilled maternal health services like Antenatal Care (ANC) services. This is because some deaths among pregnant mothers could have been prevented if women early utilize skilled maternal health services especially ANC services.

Objective: This study aimed to determine the factors affecting continuity in attending antenatal care services among pregnant women.

Methodology: The study adopted a cross-sectional design. Data were collected from 384 conveniently selected respondents enrolled in 7 health facilities of Chemba. Questionnaire was used during data collection. SSPS version 17 was used for data analysis.

Findings: The findings of this study indicated that description of ANC services from health care workers (HCW) (Harsh or irrelevant description of ANC by HCW to clients), awareness on the day to start ANC and awareness on the frequency in which a pregnant mother is supposed to attend ANC services are the client related hindrances for continuity of ANC attendance. Service providers related factors that hinder continuity of attendance to ANC include long waiting hours of ANC services, modality of counselling for HIV test and STI test, provision of ANC services by male health providers, provision of ANC services by younger health providers, and shortage of medicines and medical equipments. The socio-economic factors that hinder continuity of ANC attendance include low family monthly income, religion objections, lack of spouse's escort to ANC, lack of spouse's financial support, family responsibilities, existence of traditional birth attendants and long distance from ANC clinics.

Conclusion: In respect to the findings of this study, planners and implementers should consider multiple factors such as client related factors, service providers' related factors and socio-economic factors in order to enhance continuity of ANC attendance among pregnant mothers.

Key words: Continuity: Antenatal Care: Pregnant Women: Chemba District

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CHAPTER ONE

INTRODUCTION

1.1 Background to the study

A leading cause of deaths among women of reproductive age is maternal mortality. Many maternal deaths occurring in developing nations are mostly attributed to low attendance to utilize the skilled maternal health services. Ensuring sufficient maternal healthcare (MHC) is an essential step that could reduce or address the maternal mortality rate (MMR). Moreover, it is an increase in the rate of pregnant women in visiting health care that contribute to improve their health as well as the health of infant.

Globally, majority of women are dying due to complications during pregnancy and childbirth which contribute to more than half of deaths among women annually (Chorongo et al., 2016). The number of deaths remain unacceptably high especially in low-income countries where 99% of these deaths occur (Guimei, 2017). The World Health Organization (WHO) recommends that under normal circumstances a pregnant women should have at least four antenatal care (ANC) visits (Rahman, Rahman, Tareque, Ferdos, & Jesmin, 2016). However, majority of pregnant women are not meeting these WHO recommendations. For instance in Myanmar, the maternal death rate is estimated at over 300 deaths per 100,000 live births whereby women continue to use these services unsatisfactorily, which reflects the insufficient progress towards Millennium Development Goals (MDG) 5 (Wai et al., 2015). In Bangladesh, more than one third (36%) of pregnant women still do not receive any professional ANC services (Rahman et al., 2016), though women who had experienced Intimate Partner Violence (IPV) were less likely to visit ANC (Wai et al., 2015). On other hands, in United Arab Emirates ANC coverage was 100% with MMR of 8 per 100,000 while Ukraine had 99% ANC coverage and MMR of 23 (Fagbamigbe & Idemudia, 2015).

In developing countries, it is evident that the high rate of maternal deaths is associated with low attendance to MHC (Rahman et al., 2016). According to the WHO, developing countries accounted for 286,000 of maternal deaths as a result of preventable complications in 2013 (Wai et al., 2015). Recent estimates indicate that the number of women in Less & Middle Income Countries (LMICs) attending at least one antenatal appointment increased from 64% in 1990 to 81% in 2009, and those attending four or more times rose from 35% to 51% over the same period (Finlayson & Downe, 2013). However, Ghana had ANC coverage of 96% and MMR of 380/100000; Chad had 43% ANC coverage and a MMR of 980/100,000, and Nigeria had ANC coverage of 61% and MMR of over 560 (Fagbamigbe & Idemudia, 2015). In Kenya the first and second ANC visits stand at (90% and 80% respectively) while the third and fourth visits stand at 50% and 35.2% respectively (Chorongo et al., 2016). In Uganda the ANC services are characterized by poor attendance (Tetui et al., 2012) while in Ethiopia, was generally very low about 27.6% by the year 2005 (Alemayehu, Haidar, & Habte, 2010).

On other hands, Tanzania has adopted the WHO recommendation for a minimum of four goal- oriented ANC visits during a woman's pregnancy. Therefore, continuity of ANC attendance means the attendance of a pregnant mother to ANC according to the recommended number of visits (at least four visits). According to the WHO, 87.8% of pregnant women in Tanzania attended at least one antenatal visit (Annie Kearns, Taylor Hurst, Jacouelyn Caglia, 2014) although, younger women had significantly higher odds of making four ANC visits as compared to women in older age groups (Guimei, 2017). However, despite this high rate of initial attendance, only 42.8% of women attended four or more visits, and only 20% attended their first ANC visit during the first trimester of pregnancy. According to Alenoghena, Isah, and Isara (2015) only 2% of women attending for postnatal services in Tanzania. Although health workers spent an average of 46 minutes providing ANC to a first time client, and 36 minutes for a revisiting client, there is still low visiting to ANC (Lincetto, Mothebesoane-anoh, Gomez, & Munjanja, 2013).

In Dodoma region where Chemba District is found, 97.8% of pregnant women attend at least one antenatal check-up (Mahiti et al., 2015). Moreover, a study of Lilungulu and Gesase (2016) found12.0% of women had one visit of antenatal clinic and 54.0% were the highest with two visits; three were 18.6% and four visit were 12.4%. However, 92.2% of women know that, a woman needs at least five visits of antenatal follow up throughout her pregnancy. According to Ngowi, Kamazima, Kibusi, Gesase, and Bali (2017) , 69% and 31% of deliveries occurred at the health facilities and at home respectively in Dodoma region.

Specifically in Chemba District, according to the District Health Information System 2 (DHIS2) of Chemba district (2017), 92.7% of pregnant women were reported to visit at least one antenatal clinic, while 68.3% found to have two visits, and 41.5% of pregnant women attended at least three antenatal clinic; up to 10.3% of pregnant women attended four antenatal clinic. However, little has been known regarding variation of ANC attendance among pregnant women in Chemba district. This prompted the need to investigate on the reasons for a variation of continuity in attending antenatal clinic in Chemba district.

1.2 Statement of problem

Failure to visit the recommended antenatal care services contributes to the high rate of maternal morbidity and mortality among the pregnant women (WHO, 2016). The recommended visits by WHO are four visits throughout pregnancy(Kearns et al., 2014). The ANC service attempts to identify pregnant women who are not at risk and those who are at risk groups based on their previous pregnant or current historical or clinical factors. In Tanzania, among of the strategies for reducing maternal morbidity and mortality is by improving access and timely visit for maternal health care services (Ngowi et al., 2017).

Various efforts have been made by the government of Tanzania to improve utilization of maternal health services to reducing maternal death and disabilities. The government committed to MDGs 3, 4 and 5, by the agreement to promote

gender equality and empower women, to reduce the under-five mortality rate and the maternal mortality rate by 2015 (Lilungulu & Gesase, 2016). The government also committed to improve its network of primary health facilities with maternity health care services; conduct health promotion campaigns targeting women of reproductive age and exempt fees for maternal services including delivery at any a government facility. However, only 14% of pregnant women in Tanzania start ANC during the first trimester as per the national guidelines. The median number of months that women are pregnant at their first visit is 5.4 months. One third of women do not visit ANC until their sixth month or later (Lilungulu & Gesase, 2016). Specifically in Chemba district, only 10.3% of the pregnant women attend at least four antenatal check-up (Chemba District DHIS2, 2017). Despite the government's efforts, the rates of women in rural areas in Tanzania tend to receive less ANC visits than urban women.

Utilization of antenatal care services is a complex behavioral phenomenon. Empirical studies of preventive and curative services have often found out the underutilization of the antenatal care services due to low attendance among pregnant women especially in rural setting (Belayneh, Adefris, & Andargie, 2014). For this reasons there was needs to investigate the reasons for low ANC attendance, specifically in Chemba District among pregnant women. Therefore, this study aimed at identifying the factors that affect continuity in attending antenatal care services among pregnant women in Chemba District in Tanzania.

1.3 Research Objectives

1.3.1 General Objective

The main aim of this study was to examine the factors affecting continuity in attending antenatal care services among pregnant women in Chemba District in Tanzania.

1.3.2 Specific Objectives

i. To determine the client related factors affecting continuity in attending antenatal care services among pregnant women in Chemba district of Tanzania.
ii. To determine the service provider related factors affecting continuity in attending antenatal services among pregnant women in Chemba district of Tanzania.
iii. To determine the socio-economic related factors affecting continuity in attending antenatal care services among pregnant women in Chemba district of Tanzania.

1.4 Research questions

1.4.1 General research question

What are the factors affecting continuity in attending antenatal care services among pregnant women in Chemba District in Tanzania?.

1.4.2 Specific research questions

i. What are the clients' related factors affecting continuity attending antenatal care services among pregnant women in Chemba district of Tanzania?
ii. What are the service providers' related factors affecting continuity in attending antenatal services among pregnant women in Chemba district of Tanzania?
iii. What are the socio-economic related factors affecting continuity in attending antenatal care services among pregnant women in Chemba district of Tanzania?

1.5 Research hypotheses

1.5.1 General hypothesis

The selected factors hinder continuity of ANC attendance among pregnant women in Chemba district of Tanzania

1.5.2 Specific hypotheses

i. Client related factors hinder continuity of ANC attendance among pregnant women in Chemba district of Tanzania
ii. Service providers related factors hinder continuity of ANC attendance among pregnant women in Chemba district of Tanzania
iii. Socio-economic related factors hinder continuity of ANC attendance among pregnant women in Chemba district of Tanzania

1.6 Significance of the study

The study findings will be used in policy making as well as in designing suitable programs and services for the rural population of Dodoma. The decrease of maternal mortality needs early identification of pregnancies with high risk through the suitable antenatal care. This helps to get ready for the mechanism to ensure timely access to referral facilities. Moreover, this study also add the information to the health policy makers to see how essential it is that they intervene and the suggestion made helps direct the implementation of the primary health care programme particularly to visit ANC services among pregnancy women specifically in Chemba district of Dodoma region. Therefore, good health care will be offered for mother as well as child hence diminishes of maternal mortality and under-five deaths.

1.7 Scope of the study

This study specifically focused on examining the hindrances of client related factors, service providers related factors and socio-economic factors on the continuity of ANC attendance among pregnant mothers in Chemba district. The clients related

factors that were measured whether in any way hinder continuity of ANC attendance among pregnant mothers included the description of ANC services from health care workers, medical terms/ language used by HCW, awareness on starting date of ANC, awareness on the number of visits to ANC, alcohol consumption and laziness to attend to ANC. The variables that were assumed as service providers related hindrances on continuity of ANC among pregnant women included privacy and confidentiality of HCW, waiting hours, modality of HIV counselling, STI test during ANC visits, provision of ANC services by male health providers, provision of ANC services by young aged health providers and availability of medicine and medical equipments. On the side of socio-economic hindrances, this study focused on family monthly income, religion objections, spouse's escort to ANC, spouse's financial support, family responsibilities, distance from ANC and availability of traditional birth attendants. This study primarily focused on the opinions and answers provided by pregnant mothers who have remained with at least two months before delivery. On the side of area coverage, the study focused of government health facilities found in Chemba district including 4 health centres namely Hamai, Mrijo, Makorongo, and Kwamtoro. And, 31 Dispensaries namely Kelema, Kidoka, Chambalo, Gwandi, Mondo, Goima, Igunga, Chandama, Tandala, Tumbakose, Churuku, Jangalo, Soya, Mrijo Juu, Mwaikisabe, Itolwa, Kubhunko, Babayu, Chase, Maziwa, Gonga, Farkwa, Msaada, Motto, Sanzawa, Lalta, Lahoda, Ovada, Jogolo, Kinyamshindo and Mpendo.

1.8 Limitations of the study

A number of limitations that might reduce the reliability and validity of findings from this study were considered. Due to limited time the findings of this study relied only on the responses provided by pregnant mothers, living behind the opinions of other stakeholders especially health care providers. However, this open avenue for further studies that incorporate the responses from pregnant mothers, health care providers and other important stakeholders.

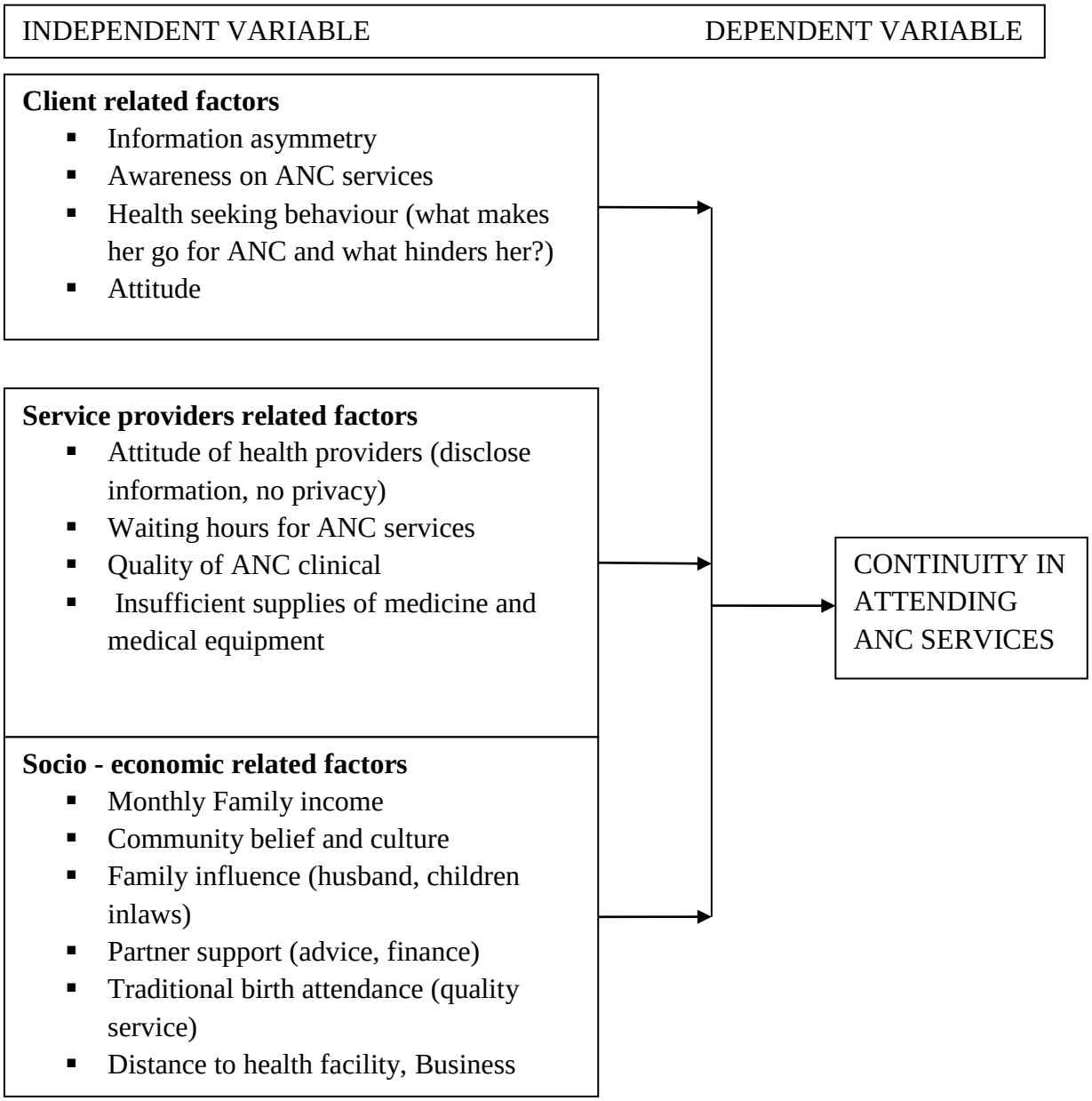
There were also cross sectional study design related limitations including failure to establish whether the exposure factor started before the outcome variable. This is because exposure factor and the outcome are measured simultaneously. Another limitation is that due to use of questionnaire as a tool for data collection the responses depended on memory of respondents so memory variations among respondents may reduce the precision and accuracy when exposure and effects occurred.

1.9 Conceptual framework

Figure 1.1 is a conceptual framework which illustrates the relationship between the independent and the dependent variables. The figure provides theoretical basis for thoughts concerning what we do as well as what it means. Parenthetically, it outlines the summary of ideas and practices that shape the way this study conducted. Therefore, this framework has three major factors including client related factors, socio- economic factors, and service providers' factors as the key factors affecting continuity in attending antenatal services among pregnant women. These three factors was reliable in a way as well as determined whether a woman could fully attend ANC.

Moreover, the dependent variable in this study is continuity in attending ANC services; and independent variable is constituted by client related factors, socio-economic factors, and service providers' factors. The conceptual framework shows relationship between them.

Figure 1.1 Conceptual Framework



Source: Researcher's own construction (2018*)*

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This section provides theoretical settings and empirical framework that guided the study. The theoretical review discusses relevant concepts, theories and assumptions of the research base. An empirical literature presents a review of relevant literature based on the contributions of previous researchers on the research topic and related concepts. Generally, the theoretical and empirical review focuses attendance and utilization of antenatal services among pregnant women.

2.1 Theoretical Literature Review

2.1.1 An overview on Antenatal Care (ANC)

The WHO defined ANC as the care provided by skilled health-care professionals to pregnant women and adolescent girls in order to ensure the best health conditions for both mother and baby during pregnancy. The components of ANC include: risk identification; prevention and management of pregnancy-related or concurrent diseases; and health education and health promotion (WHO, 2016).

According to Lincetto et al. (2013) demonstrated that the goal of the ANC package is to prepare for birth and parenthood as well as prevent, detect, alleviate, or manage the three types of health problems during pregnancy that affect mothers and babies including complications of pregnancy itself, pre-existing conditions that worsen during pregnancy, and effects of unhealthy lifestyles. ANC also provides women and their families with appropriate information and advice for a healthy pregnancy, safe childbirth, and postnatal recovery, including care of the new-born, promotion of early, exclusive breastfeeding, and assistance with deciding on future pregnancies in order to improve pregnancy outcomes.

Moreover, it improves the survival and health of babies directly by reducing stillbirths and neonatal deaths and indirectly by providing an entry point for health contacts with the woman at a key point in the continuum of care.

WHO (2002) outlined the role of the health care worker during the ANC including promote health activities, prevent ill health, provide curative services, lease with other services such as specialist care and antenatal education, teach the woman both knowledge and skills regarding her own health care, become a supportive provider who is approachable and willing to listen to the woman's needs and to assist with any concerns she or her family may have about the pregnancy, birth or postpartum period.

2.1.2 Antenatal care service in Tanzania

The Ministry of health of Tanzania (2008) indicated that during Antenatal period women should have at least 4 antenatal care visits for normal pregnancies, including one visit within the first 3 months of pregnancy.

The major services offered in antenatal clinic include confirmation of pregnancy, monitoring of progress of pregnancy and assessment of maternal fatal well-being, prevention, care and treatment for HIV/AIDS (PMTCT), Other include tetanus toxoid immunization, counselling on nutrition, breastfeeding, healthy life style, and insecticide treated bed nets, and development of birth preparedness plan, emergencies, referral care in case of complication, breastfeeding and advice on danger signs. In addition, antenatal care services also comprises screen for protein and anaemia including blood group, iron and folic acid supplementation, deworming, identification and treatment of bacteriuria, identification and treatment of problems complicating pregnancy: It also involves hypertension, bleeding, malpresentation, multiple pregnancy, screening and treatment of syphilis and malaria (IPT and promotion of ITN), and assessment for female genital mutilation ((MoHSW, 2008).

According to Tanzania Demographic Health Survey (TDHS) of 2010 indicated that 98% of women who gave birth in the 5 years before the survey received antenatal care from a skilled provider for their most recent birth. Twenty-four percent of pregnant women started antenatal care in their first trimester, and over half (51%) had four or more ANC visits as recommended. The majority of women have a blood sample taken (87%), their blood pressure measured (71%), and a urine sample collected (60%) during antenatal care.

They are more likely to take iron tablets/syrup (81%) than antimalarial (71%) or anti-parasitic (63%) drugs during pregnancy. The majority (66%) of mothers and newborns (58%) are not receiving recommended postnatal care within 2 days after birth (MoHSW, 2016).

2.1.3 Theoretical relationship

2.1.3.1 The relationship between clients related factors and continuity of ANC attendance among pregnant mothers

This study assumed that the clients related factors such as information asymmetry, awareness on ANC services, health seeking behaviour (what makes her go for ANC and what hinders her?) and attitude have an influence on continuity of ANC attendance among pregnant mothers.

2.1.3.2 The relationship between service providers related factors and continuity of ANC attendance among pregnant mothers

This study assumed that several service providers related factors have an influence on continuity of ANC attendance among pregnant mothers. These factors include attitude of health providers (disclose information, no privacy), waiting hours for ANC services, quality of ANC clinical and insufficient supplies of medicine and medical equipment.

2.1.3.3 The relationship between socio-economic factors and continuity of ANC attendance among pregnant mothers

This study assumed that socio-economic factors such as monthly family income, community belief and culture, family influence (husband, children inlaws), partner support (advice, finance), traditional birth attendance (quality service) and distance to health facility have an influence on continuity of ANC attendance among pregnant mothers.

2.2 Empirical Literature Review

Alemayehu et al. (2010) studied on the utilization of antenatal care services among teenagers in Ethiopia. The study was aimed at estimate the utilization of antenatal care (ANC) services among teenagers (13-19 years) during delivery in Ethiopia. This cross-sectional study revealed that majority of women (80.4%) delivered at home without any assistance from a skilled personnel. The study also found that 27.3% of mothers who had childbirth recently had at least one ANC visit, whereby amongst them 21% had their first visit in the first trimester of pregnancy. Several factors were pointed out to have an influence on ANC attendance. These factors include education level of couples (women and men), urban residence and better wealth index. Conclusively, education of women and their partners, urban residence and better wealth index are the factors influencing ANC utilization among teenage women. The study concludes that education of partners, rich wealth index and urban residence seemed to encourage teenagers to utilize ANC. It was advised that more emphasis should be put on women teenagers living in rural areas with poor socio-economic status. This group should be targeted and provided with appropriate interventions that shall bring about awareness on the importance of ANC utilization.

Nketiah-Amponsah, Senadza, and Arthur (2013) conducted a study on determinants of utilization of antenatal care services in developing countries: Recent evidence from Ghana. The study objective was to estimate the key socio-economic and demographic factors influencing the utilization of antenatal care services in Ghana.

The study utilized the most recent Ghana Demographic and Health Survey (GDHS V) data. The findings of this study indicated that age, wealth status, education level, health insurance ownership, birth order, place of residence and religion have significant influence on adherence to ANC utilization. Therefore, it was recommended that health insurance enrolment should be sensitized especially in rural areas as a way to enhance adherence to ANC utilization.

Gupta et al. (2015) carried a study concerning the factors associated with four or more antenatal care visits and its decline among pregnant women in Tanzania between 1999 and 2010. The study aimed at identifies factors associated with utilization of ANC 4 and ANC 4 decline among pregnant women over time. The findings of this study indicated that high quality of services, higher education level of women, HIV counselling and testing and receiving malaria prevention doses (Sulphadoxine Pyrimethamine) are the factors positively associated with utilization of ANC 4. On the other hand, age and geographic zone of women at delivery are the factors that have significant association with decline in utilization of ANC 4. The study also found that decline of ANC utilization can be linked with the interconnected nature of health systems in Tanzania. For instance, introduction of new programs could have unintended effects on the existing programs.

Kwambai et al. (2013) argued on the perspectives of men on antenatal and delivery care service utilization in rural western Kenya. This study aimed at exploring men's perceptions of antenatal and delivery care services and identified factors that facilitated or constrained their involvement in rural Western Kenya. This qualitative study found that men have positive views towards ANC services and majority often encourage and force their partners/spouse to utilize ANC services. It was also revealed that lack of spouse' escort to ANC clinics, negative attitudes of health care workers towards men's participation and poor infrastructures of ANC and delivery unit are the identified barriers towards ANC utilization. Conclusively, although men have reported to have positive attitude towards ANC utilization by their wives, their practice in terms of adherence to ANC schedules is still poor.

Therefore, men should be considered as a target group in campaigns for awareness creation in order to enhance ANC utilization and utilization of its associated services such as family planning and HIV counselling and testing.

Mwendwa (2015) carried the study on the factors influencing attendance to antenatal care services among the Somali women in east Leigh Nairobi county, Kenya. The study objectives were to establish the influence of the presence of Traditional Birth Attendants (TBAs) in antenatal services seeking behaviour among Somali women in Eastleigh, Nairobi; investigate the extent to which level of awareness influences attendance to antenatal care by the Somali women in Eastleigh, Nairobi County; and investigate how cultural beliefs towards modern reproductive services affect antenatal seeking behavior among the Somali women in Eastleigh, Nairobi. The study also sought to find out how economic status contributes to the number of Somali women who seek antenatal care.

The study revealed that there was great reliance of TBAs with a strong correlation between attendance of antenatal care and the final delivery aid where 81.4% of the respondents reported to have relied on the same service providers during their delivery period. Moreover, the study established great need of awareness programmes geared towards enlightening the Somali women with 63.6% of the respondents unaware since most of them were illiterate. He suggested that women be encouraged to undertake entrepreneurial activities since there was high relationship of economic status and attendance to antenatal clinics.

Adanikin, Onwudiegwu, and Loto (2013) conducted a study on the influence of multiple antenatal counselling sessions on modern contraceptive uptake in Nigeria. The study aimed to determine the influence of multiple contraceptive counselling sessions during antenatal care on use of modern postpartum contraception. The study demonstrated that the use of modern contraceptive methods among women is highly influenced by attending to antenatal contraceptive counselling. This is because; modern contraceptive use among women is higher to the women who attended

multiple contraceptive counselling sessions than women who had a single antenatal contraceptive counselling session. Conclusively, the multiple antenatal contraceptive counselling sessions improve the use of modern postpartum contraception.

Lund et al. (2014) conducted a study on mobile phones improve antenatal care attendance in Zanzibar: a cluster randomized controlled trial. This study examined the influence of mobile phone interventions on ANC utilization in a resource-limited setting. This study used a cluster randomized controlled trial. The findings of this study indicated that the mobile phone intervention has significant influence on enhancing antenatal care attendance. The findings of this study revealed that 44% of women utilized ANC services four and above 4 times, against 31% of women in the control group who utilized ANC services four times and above. Also, mobile intervention has an influence on improving ANC services in terms of timing and quality however the association had to statistical significance. Therefore this study concluded that; mobile phone intervention has a significant association with the increased proportion of women utilizing four recommended ANC visits.

In addition, the quality of ANC services can be improved through the use of mobile phone interventions, which in turn the proportion of women utilization ANC's associated services such as HIV counselling and testing and disease prevention services shall be increased and pregnancy complications reduced. Finally, this study suggested that policy makers and other stakeholders should consider the implementation of mobile phone interventions as a means to enhance ANC attendance among pregnant mothers especially in resource-limited settings and contribute to the improvement of maternal and child health.

Akowuah, Agyei-baffour, and Asibey (2018) carried a qualitative study on the Pathways to Evidence-Based Antenatal Care in Periurban Ghana. The study aimed at exploring the facilitators and barriers to antenatal care use in Periurban Ghana. The findings of this study indicated that although the provision of free maternal health care was introduced, the factors like long time of travelling, long waiting hours,

service cost, transport cost, attitude of health care workers and quality of services were identified as the barriers towards ANC utilization. However, this study wind up that antenatal care and time to time monitoring to health facilities enhanced utilization of skilled maternal health. The suggestion from the study was to ensure adequate utilization, the government and other stakeholders should offer support to the less-privileged mothers. Moreover, services should be easily available at facilities to pregnant women even if they are to be bought. The study further suggested that antenatal care services should be reoriented and clinical psychologists should be placed at all health centers to empower health staff on the best attitude towards clients. Interventions if mainstreamed into the national maternal health policy could be useful.

Chorongo et al. (2016) argued on the factors influencing the utilization of focused antenatal care services in Malindi and Magarini sub-counties of Kilifi County, Kenya. The study purpose was to identify the socio-demographic and economic characteristics, knowledge and attitude and health service provision for focused antenatal care (FANC) services. The study employed a cross-sectional comparative study were it demonstrated that about 35% of women sought 1st and 2nd ANC services at the health facilities.

These women went ahead to complete the recommended 4 minimum visits as recommended by WHO.

Compared to Catholics, Muslims were less likely to attend a rural health facility. According to education levels, those with secondary or tertiary levels of education were less likely to seek FANC at rural facility. Women seeking rural ANC services started at 2nd or 3rd trimester while those in urban setup start at 1st trimester. Among the women who were aware of FANC, only 27% utilized its services. Long waiting hours, unavailability of services, and departmental disharmony were major causes of dissatisfaction to mothers visiting the facilities. The study concluded that utilization and awareness of FANC services in both rural and urban health facilities

among women in Malindi and Magarini Sub Counties continues to be low which is associated by socio-demographic characteristics, and health facility inefficiencies. Therefore, there is need to standardize services across health facilities and increase awareness on FANC in both rural and urban.

Alenoghena et al. (2015) carried a study on the Maternal Health Services Uptake and its Determinants in Public Primary Health Care Facilities in Edo State, Nigeria. The objectives of the study were to assess the uptake of maternal health services; its determinants and the perception of users about these services. The findings revealed that the utilization of the ANC services was 79% and 81% for the sub-urban and rural communities respectively. As for delivery services, it varied from 60.2% to 81.3% for the sub-urban and rural communities respectively. The predictors of the antenatal services utilization were educational status, cost per illness, self-assessment of health, clean environment and sources of information on maternal care. Marital status, average income and type of community were the predictors of family planning services utilization. The study concludes that the utilization of maternal services was good; being higher than the national average with the exception of postnatal service, which was completely absent. There is need for the provision of the minimum service components of maternal health care services especially postnatal service at the Primary Health Centre (PHC) facilities.

Onyeonoro et al. (2014) conducted a study on the perception of quality of maternal healthcare services among women utilizing antenatal services in selected primary health facilities in Anambra State, Southeast Nigeria. The study objective was to assess antenatal care service attendees' perception of quality of maternal healthcare (MHC) services in Anambra State, southeast Nigeria. The study employed a cross-sectional descriptive study where it demonstrates that utilization of facility for both antenatal and natal services were quite high. Generally, most of the women were satisfied with MHC services (89.7%). Most of them were satisfied with the staff attitude (85.1%), waiting time (84.1%) and cost of services (79.5%). The study concluded that, the high level of satisfaction with quality of maternal health services

among antenatal attendees and highlights the need to strengthen interventions that increase uptake of formal MHC services.

Yadav (2017) assessed the Knowledge Regarding Antenatal Care among Pregnant Women with a View to Develop Information Booklet at Selected Clinics of District of Punjab. The study objective was to assess the knowledge regarding antenatal care among pregnant women with a view to develop information booklet at selected clinics of district of Punjab. The study employed a descriptive research design and found that the knowledge of the pregnant mothers (50%) is having good knowledge. They are below 30 years of age. Majority of mothers (80%) is having good knowledge score and they are literate. Half of mothers (50%) are having good knowledge they are working mothers. 40% mothers are having average knowledge score one children in their family. There was significant association among demographic variables and knowledge of pregnant women regarding antenatal care. The study concludes that Knowledge regarding antenatal care to the pregnant mothers is less to those who are prim gravid and prim Para, low socio-economic status, low educational level.

2.3 Research gap

Despite the empirical evidence that have been provided in previous studies conducted within the country and outside the country, more studies are required. This is because the current statistics shows that the number of pregnant mothers who fulfil the recommended number of four visits to antenatal care is still low and majority do not have their first visit before four months of pregnancy. For instance, only less than half of women in Tanzania receive the recommended minimum number of visits. Furthermore, only 15.1% of women attend their first ANC visit before four months of pregnancy. In addition, there are substantial discrepancies between urban and rural areas concerning Maternal and Child Health, for instance; 82.4% of urban women delivered at health facility in 2010, compared to only 41.9% of rural women; also 54.8% of urban women in 2010 had at least 4 ANC visits, compared to only 39.1%

of rural women (Kearns et al., 2014). Chemba district, the proposed area for this study has minimal ANC attendance among pregnant mothers, as according to Chemba District DHIS2, (2017) only 10.3% of the pregnant women attend at least four antenatal check-up. For this reasons there was needs to investigate the reasons for low ANC attendance, specifically in Chemba District among pregnant women. Therefore, this study aimed at examining the factors that affect continuity in attending antenatal care services among pregnant women in Chemba District in Tanzania. In particular, the selected factors were client related factors, service providers related factors and socio-economic factors.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the research methodology. It comprises of study area, research design, target population, sample size and sampling procedures. Moreover, the chapter explains the data collection methods and analysis tools and ethical considerations employed in this research.

3.2 Study Area

The study was conducted in Chemba District, specifically in Health Centre and dispensaries. This is because Chemba district has no district hospital. Chemba District is among of the seven districts of the Dodoma region of Tanzania. It was split off from Kondoa District and formed a district in 2010. The administrative seat of the Chemba district is the town of Chemba. It is bordered to the east by Manyara region, to the north by Kondoa district, to the west by Singida region, and south by Chamwino district and Bahi district. According to the Tanzania National Census of 2012, Chemba district had population of 235711, and it was administratively divided into 20 wards.

On the other hand, the health delivery system of Chemba district comprises of government and private health services. Nevertheless, private health services do not offer ANC services. These government health facilities include 4 health centres namely Hamai, Mrijo, Makorongo, and Kwamtoro. Also, the 31 Dispensaries namely Kelema, Kidoka, Chambalo, Gwandi, Mondo, Goima, Igunga, Chandama, Tandala, Tumbakose, Churuku, Jangalo, Soya, Mrijo Juu, Mwaikisabe, Itolwa, Kubhunko, Babayu, Chase, Maziwa, Gonga, Farkwa, Msaada, Motto, Sanzawa, Lalta, Lahoda, Ovada, Jogolo, Kinyamshindo and Mpendo.

Chemba District was an area of research because majority of the pregnant women do not reach the WHO recommendation of at least four visits for ANC services before delivery. The data shows that only 10.3% of pregnant women visit at least four for ANC; while 41.5%, 68.3% and 92.7% attended antenatal clinic at least three, two and one respectively (DHIS2 of Chemba district, 2017). Moreover, most of the studies have previously focused on the utilization of antenatal services among pregnant women in Tanzania and little attention has been given regarding factors affecting continuity in attending to ANC services among pregnant women specifically the districts as the case study. Therefore, this study on factors affecting continuity in attending antenatal services among pregnant women in Chemba district adds the information to the district as well as Tanzania on the whole.

3.3 Research Design

A cross sectional study design was employed in this study whereby the data was collected in a single time period for each sample unit. This involves administration of a questionnaire for a sample or an entire population in order to get real picture regarding the study on factors affecting continuity in attending ANC among pregnant women. This research design was used because it gives a chance to compare more than one variable at the same time with little or no extra cost. Again, it is capable of employing data from a large number of subjects different to other types of research designs which are geographically bound. Furthermore, the shortfall of cross sectional study design is that the changes in phenomena of the study area cannot be measured as it offers a snapshot of a single moment in time.

3.4 Target Population

The target population of this study was all pregnant women who have remained with at least two months before delivery. This enabled the researcher to determine the number of visits that pregnant women involved in this study visited to RCH clinics found in Chemba district.

The total population of pregnant women was the meaningful of determination of factors affecting continuity in attending ANC in the study area.

3.5 Sample Size

Since the population was unknown, the formula for calculating sample size for infinite population was used. The following formula was used to obtain the sample size of this study.

$$n = \frac{Z^2 \times p\,(1-p)}{M^2}$$

Where:

n = Sample size for infinite population

Z = Level of confidence (1.96 for 95% confidence interval)

p = Population proportion (expressed as decimal) (assumed to be 0.5 (50%)

M = Margin of Error at 5% (0.05)

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

$$n = 384$$

Table 3.1. The distribution of the sample size

No.	Selected Health facilities	Population	Percentage (%) of Population	Sample
1	Hamai Health Centre	474	14.7	57
2	Mrijo Health Centre	659	20.5	79
3	Makorongo Health Centre	244	7.6	28
4	Kwamtoro Health Centre	408	12.6	49
5	Soya dispensary	494	15.4	59
6	Lahoda dispensary	492	15.3	59
7	Goima dispensary	447	13.9	53
	Total	**3218**	**100.0**	**384**

Source: *MTUHA Focal person, Chemba District Council (2017)*

3.6 Sampling Procedure

3.6.1 Purposive sampling

This technique was used to select health facilities. Thus 4 health centres and 3 dispensaries were selected. Purposive sampling was chosen specifically to select health centres because in Chemba district. There is no district hospital and for that reason all dispensaries are reporting to health centres as referral point. Moreover, dispensaries were selected based on the high enrolment of pregnant women per year. Purpose sampling was very easy and cheap as well as more suitable for sampling.

3.6.2 Convenient sampling

The study employed convenient sampling technique whereby the respondents was selected based on their availability. The method was used because it was cheaper, simpler and does not need a list of population.

3.7 Data Collection Techniques

3.7.1 Questionnaires

The study employed questionnaire that comprised of close-ended questions. This technique enabled research to reach a large number of respondents. Questionnaires were used to collect quantitative data from pregnant women. Moreover, questionnaires provide an even stimulus possibly to large numbers of people at the same time and give the investigation with an easy gathering of data. The questionnaires were divided in to four parts where first part comprises the background information of the respondents. The other parts comprised the questions regarding independent variables that are client related factors, service provider related factors, and socio-economic related factors. The questionnaires were filled in for approximately time of 15–20 minutes. Questionnaire was prepared in English language and then translated to Swahili language.

The researcher was reading the questions to the respondent and records the answers as they answered by the respondents.

3.8 Pre-testing

This was done at Mnenia Health Centre, which was not part of the catchment area of the study. This health centre was chosen so as to evade bias which might ascend in case same women who involved in the pretesting might have been re-sampled in the actual study. Authorisation attained from the administration of the hospital, to permit pregnant women to join in pretesting of the study tools. A team of research assistants run the pre-testing for data collection. Moreover, pretesting was conducted in two weeks before definite data collection to permit for the corrections and reforms to the questionnaire. Research assistants rehabilitated on some aspects of the questionnaire as well as how to administer it after pre-testing. However, some questions reframed to obtained consistent retorts when requested by different investigation assistants. To enable pregnant women to participate freely in expressing their views, certain culturally sensitive words associated to reproductive health was revised.

3.9 Data handling

Data was checked for comprehensiveness and validity of information by the investigator as soon as questionnaires were collected back from the health facilities. The reason for this was to cross-check the mistakes including the missing data so as to escape nonconformities as well as errors in the collected data. Moreover, the data sheets that were corrected were numbered in sequence by the investigator. The researcher then kept the cross-checked questionnaires ready for data processing and analysis.

3.10 Data Analysis

Data was properly handled to guarantee quality results. Coding, recording, cleaning, processing, analysing and finally output of the results were conducted carefully for valid and reliable results. Quantitative data was entered and analysed using SPSS

statistical software or window version 16. This involves descriptive statistics including frequencies and percentages; it was run to generate output on all variable. After analysis, the results was summarized and presented using frequency tables, and percentages. In addition, logistic regression was used to determine the association between independent variables and dependent variables as well as to address the confounders, while Chi-square was used to test the hypotheses and to measure the significance of association.

Table 3.2: Plan for data analysis

Doman	**Variables**	**Measurement**	**Type of data**	**Statistical analysis by SPSS**
Demographics	Age	Number of years	Continuous data	Frequencies
	Marital status	Whether the respondents is single, married, divorced, separated or widow	Categorise d data	Frequencies
	Number of children	Whether respondents have few (less or equal to 5) or many children (Above 5)	Continuous data	Frequencies
	Level of education	Whether respondents have low level or high level of education	Categorise d data	Frequencies
	Current occupation	Whether respondents have any job or just a house mother	Categorise d data	Frequencies
	Monthly family income	Cash earned per month	Continuous data	Frequencies
The hindrance of client related factors on continuity to ANC attendance	Whether description from HCW hinder continuity of ANC attendance	No/Yes	Binary data	Frequencies, Chi-square, logistic regressions
	Whether medical terms/ language used by HCW hinder continuity of ANC attendance	No/yes	Binary data	Frequencies, Chi-square, logistic regressions
	Whether awareness on starting date of ANC hinder continuity of ANC attendance	No/Yes	Binary data	Frequencies, Chi-square, logistic regressions
	Whether awareness on the number of visits to ANC hinder continuity of ANC attendance	No/Yes	Binary data	Frequencies, Chi-square, logistic regressions
	Whether alcohol consumption hinder continuity of ANC	No/Yes	Binary data	Frequencies, Chi-square, logistic

	attendance			regressions
	Whether laziness to attend to ANC hinder continuity of ANC attendance	No/Yes	Binary data	Frequencies, Chi-square, logistic regressions
The hindrance of service providers related factors towards continuity of ANC attendance	Whether privacy and confidentiality hinder continuity of ANC attendance	No/Yes	Binary data	Frequencies, Chi-square, logistic regressions
	Whether waiting hours hinders continuity of ANC attendance	No/Yes	Binary data	Frequencies, Chi-square, logistic regressions
	Whether modality of HIV counseling hinder continuity of ANC attendance	No/Yes	Binary data	Frequencies, Chi-square, logistic regressions
	Whether STI Test during ANC visits hinder continuity of ANC attendance	No/Yes	Binary data	Frequencies, Chi-square, logistic regressions
	Whether male health providers hinder continuity of ANC attendance	No/Yes	Binary data	Frequencies, Chi-square, logistic regressions
	Whether young age of health providers hinder continuity of ANC attendance	No/Yes	Binary data	Frequencies, Chi-square, logistic regressions
	Whether availability of medicine and medical equipments hinder continuity of ANC attendance	No/Yes	Binary data	Frequencies, Chi-square, logistic regressions
The hindrance of socio-economic factors towards continuity of ANC attendance	Whether family monthly income hinder continuity of ANC attendance	No/Yes	Binary data	Frequencies, Chi-square, logistic regressions
	Whether religion objections hinder continuity of ANC attendance	No/Yes	Binary data	Frequencies, Chi-square, logistic regressions
	Whether spouse's escort to ANC hinder continuity of ANC attendance	No/Yes	Binary data	Frequencies, Chi-square, logistic regressions
	Whether spouse's financial support hinder continuity of ANC attendance	No/Yes	Binary data	Frequencies, Chi-square, logistic regressions
	Whether family responsibilities hinder continuity of ANC attendance	No/Yes	Binary data	Frequencies, Chi-square, logistic regressions
	Whether traditional birth attendants hinder continuity of ANC attendance	No/Yes	Binary data	Frequencies, Chi-square, logistic regressions
	Whether distance from ANC hinder continuity of ANC attendance	No/Yes	Binary data	Frequencies, Chi-square, logistic regressions

3.11 Ethical Considerations

The research followed all the protocols of research which include following approval of the research proposal by the Supervisor, further written permission requested from Directorate of Research, Publications and Post Graduate Studies in Mzumbe University. Researcher requested authority to collect data from pregnant women at the health facilities in Chemba District. Throughout field work, ethical consideration was considered in which the respondents was assured that the information they provided was kept confidential. Appropriate respect was paid to the people's values, attitudes and beliefs throughout data collection.

CHAPTER FOUR

RESEARCH FINDINGS

4.1 Introduction

The chapter presents findings on selected factors affecting continuity in attending antenatal care services in Chemba district which was the main objective of the study. The specific objectives of the study were:

i. To determine the client related factors affecting continuity in attending antenatal care services among pregnant women

ii. To determine the service provider related factors affecting continuity in attending antenatal services among pregnant women, and

iii. To determine the socio-economic related factors affecting continuity in attending antenatal care services among pregnant women.

The collected data is organised and reports produced in verbal form and descriptive tables and/or charts.

4.2 Demographic characteristics of the respondents

The study sought demographic characteristics of the respondents. This includes age, level of education, marital status, number of children, current occupation, and family month income. The responses are shown in table 4.1

Table 4.1 Characteristics of respondents (N=384)

Variable	Sub variable	Frequency	Percentage (%)
Age	18-25	185	48.2
	26-33	113	29.4
	34-41	65	16.9
	42-49	21	5.5
Marital status	Single	38	9.9
	Married	320	83.3
	Divorced	17	4.4
	Separated	7	1.8
	Widow	2	0.5
Number of children	1 – 2	133	33.8
	3 – 4	200	50.9
	5 – 6	42	10.9
	7+	9	2.3
Level of education	No formal education	23	6.0
	Primary education	306	79.7
	Secondary education	42	10.9
	Tertiary education	13	3.4
Current occupation	Housewife	272	70.8
	Small business	96	25.0
	Formal employment	9	2.3
	Any other	7	1.8
Monthly family income	Below 100,000	180	46.9
	100,001 – 200,000	135	35.2
	200,001 – 300,000	54	14.1
	300,001 – 400,000	11	2.9
	400,001 – 500,000	3	0.8
	500,001+	1	0.3

Source: Field data (2019)

4.3 Demographic factors associated with continuity in attending ANC services

Before presenting the association between selected factors and continuity in attending ANC services, this study presents the association between demographic factors including age, marital status, number of children, education level and occupation. The findings of this study indicate that demographic factors including marital status (P=0.000), number of children (p=0.000), level of education (0.008) and occupation (0.003) are significantly associated with continuity in attending ANC services. These findings imply that marital status, number of children, level of education and education hinder continuity of ANC attendance. However, the findings of this study shown that age (p=104) is not significantly associated with continuity in attending ANC services.

This implies that age is not the demographic factor that hinders continuity in attending ANC services. These findings are as summarized in table 4.2.

Table 4.2 Association between demographic factors and continuity of ANC attendance using crude measures of association (N=384)

Variables	Variable categories		Continuity of ANC attendance		P-Value
			Absent to ANC	Present to ANC	
		N	n (%)	n (%)	
Age	18-33	298	185 (62.1)	113 (37.9)	0.104
	34-49	86	45 (52.3)	41 (47.7)	
Marital status	Not married	64	13 (20.3)	51 (79.7)	0.000
	Married	320	217 (67.8)	103 (32.2)	
Number of children	1-4	333	222 (66.7)	111 (33.3)	0.000
	5 and above	51	8 (15.7)	43 (84.3)	
Level of education	At least primary level	329	206 (62.6)	123 (37.4)	0.008
	At least secondary level	55	24 (43.6)	31 (56.4)	
Occupation	House wife	272	176 (64.7)	96 (35.3)	0.003
	Small business/employed	112	54 (48.2)	58 (51.8)	

Source: Field data, 2019

4.4 Client related factors associated with continuity in attending ANC

The study set to determine whether client related factors hinder continuity of attendance to ANC services. Such factors include description of ANC services from health care providers, medical terms/language used by health care providers, awareness on the day to start ANC and awareness on the number of visits which a pregnant mother is supposed to attend ANC services. Others are alcohol consumption and laziness of pregnant mother to attend ANC services.

The findings of this study show a significant association between exposure factors including description of ANC from health care providers (OR=2.3, 95% CI 1.215-4.556, P=0.010), awareness on the day to start ANC (OR=44.5, 95% CI 24.293-81.410, P=0.000) and awareness on the number which pregnant mother is suggested to attend ANC services (OR=32.4, 95% CI 17.509-59.944, P=0.000) and outcome factor which is continuity of attendance to ANC services (See table 4.3 and table

4.4). These findings imply that the factors which hinder continuity of ANC attendance included description of ANC services from health care workers, awareness on the day to start ANC and awareness on the number which pregnant mother is suggested to attend ANC services.

However, other variables such as medical terms/language used by health care providers during ANC services (P=0.221), alcohol consumption (P=0.284) and laziness (P=901) do not hinder continuity of ANC attendance. These findings are illustrated in table 4.3.

4.5 Service providers related factors associated with continuity in attending ANC services

This study also determined whether service providers related factors hinder continuity of attendance to ANC services. Such factors relate to privacy and confidentiality provided by health care providers during the provision of ANC services, waiting hours of ANC services, modality of counseling for HIV test and STI test, provision of ANC services by male health providers and younger health providers and availability of medicines and medical equipments.

The factors that have shown a significant association with continuity of ANC attendance included waiting hours of ANC services (OR=6.9 95% CI 2.648-17.732, P=0.000), modality of counseling for HIV test (OR=9.1, 95% CI 3.565-23.449, P=0.001) and STI test (OR=9.8, 95% CI 4.355-21.894, P=000), provision of ANC services by male health providers (OR=2.8, 95% CI 1.525-5.052, P=0.001) and younger health providers (OR=15.591, 95% CI 6.991-34.768, P=0.000) and availability of medicines and medical equipments (OR=9.5, 95% CI 4.002-22.601, P=0.000) (See table 4.3 and table 4.4). These findings imply that the service providers related factors that hinder continuity of attendance to ANC include waiting hours of ANC services, modality of counseling for HIV test and STI test, provision of ANC services by male health providers and younger health providers and availability of medicines and medical equipments.

However, privacy and confidentiality provided by health care workers did not hinder continuity in attending ANC services (P=0.078). Table 4.3 illustrates these findings.

4.6 Socio-economic related factors associated with continuity in attending ANC services

Furthermore, this study determined whether socio-economic related factors such as family monthly income, religion objections, spouse's escort to ANC, spouse's financial support, family responsibilities, existence of traditional birth attendants and distance from ANC clinics hinder continuity of attendance to ANC services.

The findings of this study have shown a significant association between exposure factors including family monthly income (OR=15.9, 95% CI 7.117-35.387, P=0.000), religion objections (OR=35.2, 95% CI 15.738-78.562, P=0.000), spouse's escort to ANC (OR=6.7, 95% CI 2.570-17.246, P=0.000), spouse's financial support (OR=5.3, 95% CI 2.046-13.983, P=0.000), family responsibilities (OR=4.47, 95% CI 1.694-11.794, P=0.001), existence of traditional birth attendants (OR=23.1, 95% CI 10.671-50.113, P=0.000) and distance from ANC clinics (OR=6.7, 95% CI 2.570-17.246, P=0.000) and outcome factor which is continuity of attendance to ANC services (See table 4.3 and 4.4). These findings imply that all selected socio-economic factors including family monthly income, religion objections, spouse's escort to ANC, spouse's financial support, family responsibilities, existence of traditional birth attendants and distance from ANC clinics hinder continuity of attendance to ANC.

Table 4.3 Association between selected exposure factors and continuity of ANC attendance using crude measures of association (N=384)

Variables	Variable categories		Continuity of ANC attendance		P-Value
			Absent to ANC	Present to ANC	
		N	n (%)	n (%)	
Client related factors					
Whether description from HCW hinder continuity of ANC attendance	No Yes	54 330	41 (75.9) 189 (57.3)	13 (24.1) 141 (42.7)	0.010
Whether medical terms/ language used by HCW hinder continuity of ANC attendance	No Yes	47 337	32 (68.1) 198 (58.8)	15 (31.9) 139 (41.2)	0.221
Whether awareness on starting date of ANC hinder continuity of ANC attendance	No Yes	235 149	208 (88.5) 22 (14.8)	27 (11.5) 127 (85.2)	0.000
Whether awareness on the number of visits to ANC hinder continuity of ANC attendance	No Yes	259 125	214 (82.6) 16 (12.8)	45 (17.4) 109 (87.2)	0.000
Whether alcohol consumption hinder continuity of ANC attendance	No Yes	43 341	29 (67.4) 201 (58.9)	14 (32.6) 140 (41.1)	0.284
Whether laziness to attend to ANC hinder continuity of ANC attendance	No Yes	39 345	23 (59) 207 (60)	16 (41) 138 (40)	0.901
Service providers related factors					
Whether privacy and confidentiality hinder continuity of ANC attendance	No Yes	49 335	35 (71.4) 195 (58.2)	14 (28.6) 140 (41.8)	0.078
Whether waiting hours hinders continuity of ANC attendance	No Yes	48 336	43 (89.6) 187 (55.7)	5 (10.4) 149 (44.3)	0.000
Whether modality of HIV counseling hinder continuity of ANC attendance	No Yes	59 325	54 (91.5) 176 (54.2)	5 (8.5) 149 (45.8)	0.000
Whether STI Test during ANC visits hinder continuity of ANC attendance	No Yes	80 304	73 (91.3) 157 (51.6)	7 (8.8) 147 (48.4)	0.000
Whether male health providers hinder continuity of ANC attendance	No Yes	72 312	56 (77.8) 174 (55.8)	16 (22.2) 138 (44.2)	0.001
Whether young age of health providers hinder continuity of ANC attendance	No Yes	105 279	98 (93.3) 132 (47.3)	7 (6.7) 147 (52.7)	0.000
Whether availability of medicine and medical equipments hinder continuity of ANC attendance	No Yes	70 304	64 (91.4) 166 (52.9)	6 (8.6) 148 (47.1)	0.000
Socio-economic related factors					
Whether family monthly income	No	106	99 (93.4)	7 (6.6)	0.000

hinder continuity of ANC attendance	Yes	278	131 (47.1)	147 (52.9)	
Whether religion objections hinder continuity of ANC attendance	No	151	144 (95.4)	7 (4.6)	0.000
	Yes	233	86 (36.9)	147 (63.1)	
Whether spouse's escort to ANC hinder continuity of ANC attendance	No	47	42 (89.4)	5 (10.6)	0.000
	Yes	337	188 (55.8)	149 (44.2)	
Whether spouse's financial support hinder continuity of ANC attendance	No	40	35 (87.5)	5 (12.5)	0.000
	Yes	344	195 (56.7)	149 (43.3)	
Whether family responsibilities hinder continuity of ANC attendance	No	35	30 (85.7)	5 (14.3)	0.001
	Yes	349	200 (57.3)	149 (42.7)	
Whether traditional birth attendants hinder continuity of ANC attendance	No	306	222 (72.5)	84 (27.5)	0.000
	Yes	78	8 (10.3)	70 (89.7)	
Whether distance from ANC hinder continuity of ANC attendance	No	47	42 (89.4)	5 (10.6)	0.000
	Yes	337	188 (55.8)	149 (44.2)	

Source: Field data, 2019

Table 4.4: Association between selected exposure factors and continuity of ANC attendance using logistic regressions (N=384)

Association between client related factors and continuity of ANC attendance using logistic regressions			
Variable	**Odds ratio**	**95% CI**	**P-value**
Whether description from HCW hinders continuity of ANC attendance	2.3	1.215-4.556	0.010
Whether awareness on starting date of ANC hinders continuity of ANC attendance	44.5	24.293-81.410	0.000
Whether awareness on the number of visits to ANC hinders continuity of ANC attendance	32.4	17.509-59.944	0.000
Association between service providers related factors and continuity of ANC attendance using logistic regressions			
Variable	**Odds ratio**	**95% CI**	**P-value**
Whether waiting hours hinders continuity of ANC attendance	6.9	2.648-17.732	0.000
Whether modality of HIV counselling hinders continuity of ANC attendance	9.1	3.565-23.449	0.000
Whether STI Test during ANC visits hinders continuity of ANC attendance	9.8	4.355-21.894	0.001
Whether male health providers hinder continuity of ANC attendance	2.8	1.525-5.052	0.000
Whether young age of health providers hinder continuity of ANC attendance	15.6	6.991-34.768	0.000
Whether availability of medicine and medical equipments hinder continuity of ANC attendance	9.5	4.002-22.601	0.000
Association between socio-economic related factors and continuity of ANC attendance using logistic regressions			
Variable	**Odds ratio**	**95% CI**	**P-value**
Whether family monthly income hinder continuity of ANC attendance	15.9	7.117-35.387	0.000
Whether religion objections hinder continuity of ANC attendance	35.2	15.738-78.562	0.000
Whether spouse's escort to ANC hinder continuity of ANC attendance	6.7	2.570-17.246	0.000
Whether spouse's financial support hinder continuity of ANC attendance	5.3	2.046-13.983	0.000
Whether family responsibilities hinder continuity of ANC attendance	4.47	1.694-11.794	0.000
Whether traditional birth attendants hinder continuity of ANC attendance	23.1	10.671-50.113	0.000
Whether distance from ANC hinder continuity of ANC attendance	6.7	2.570-17.246	0.000

Source: Field data, 2019

CHAPTER FIVE

DISCUSSION OF THE FINDINGS

5.1 Introduction

This chapter presents a discussion of the findings obtained through questionnaire in respect to the sequence of specific objectives of this study and in line with the findings of other previous literature.

5.2 Client related factors associated with continuity in attending ANC services

If the description from health care workers for ANC services is not clearly understood it can hinder continuity of ANC attendance. For example, this study reported that description from HCW is the factor that hinders continuity of ANC attendance (See table 4.4). The findings of this study are in line with the findings from other previous studies. For instance, Yadav (2017) observed that information asymmetry like provision of clear description of ANC service and advice to pregnant women about the cure and related complication has significant association with continuity in attending Antenatal Care services.

Awareness on the starting date of ANC services if not taken into consideration can hinder continuity of ANC attendance. This is because through awareness on the starting date of ANC services, the pregnant women have the opportunity to get knowledge about reproductive and child health as well as the clear schedule about the number of visits recommended throughout the time of pregnancy and ANC services. As reported in chapter four (Table 4.4), the findings of this study indicated that limited awareness on starting date of ANC services significantly hinders continuity in attending Antennal Care Services. The findings of this study are in line with some previous studies. For instance, the results obtained from the study conducted by Majrooh, Hasnain, Akram, Siddiqui, & Memon (2014) demonstrated that low attendance to ANC services among pregnant women is a result of low awareness about the starting date of ANC services. This is because the pregnant

women become less informed about the whole schedule of attendance to ANC throughout the time of pregnancy.

Awareness on the number of ANC visits if not taken on board by pregnant women hinders continuity of ANC attendance. According to WHO, pregnant women who have no significant medical problems are recommended to have at least four (4) ANC visits throughout the time of pregnancy (Nda Jibril, 2017). Hence, this study noted that limited awareness on the recommended number of visits to ANC services hinders continuity in attending ANC services among pregnant women. This alternative hypothesis was accepted because the findings of this study indicated that limited awareness on the number of visits to ANC services significantly hinders continuity in attending Antenatal Care Services (See table 4.4). The findings of this study are in line with the findings by Chorongo et al. (2016), who established that little awareness on the number of visits to Antenatal Care services is an obstacle to the continuous attendance to ANC.

5.3 Service providers related factors associated with continuity in attending ANC services

Long waiting hours of ANC services by pregnant women, if not taken under consideration, can hinder continuity of ANC attendance. For instance, long waiting hours have its related costs like loss of time and income. The current study confirmed that waiting hours of ANC services is associated with continuity in attendance to ANC services. The alternative hypothesis was accepted because the findings of this study as reported in chapter four (Table 4.4) indicated that waiting hours during ANC services significantly hinders continuity in attending Antenatal Care Services. The findings of this study are in line with the findings, for instance, by Fagbamigbe and Idemudia (2015). The author evidenced that long waiting hours to ANC services have its related costs including loss of time and income for the sake of obtaining ANC services. This has an effect to the continuity in attending to ANC services especially for patients with less patience.

Also, the findings obtained from the study conducted by Alenoghena et al., (2015) indicated that pregnant women in Nigeria were discouraged by the long waiting hours at ANC services, and led to decrease in the number of ANC visits among pregnant women.

Provision of ANC services by male health care providers if not positively perceived by pregnant mothers, hinders continuity of ANC attendance. This is because pregnant mothers may be afraid to show off their pregnancy to male service providers as a result it hinders continuity of ANC attendance. As reported in chapter four (Table 4.4), the provision of ANC services by male health providers is significantly hinders continuity in attending Antenatal Care services. The findings of this study are in line with the results obtained from the study conducted by Afolayan and Oladimeji (2012) that pregnant women were discouraged by being attended by the male services providers; this has an effect on the continuity in attending ANC services.

Furthermore, provision of ANC services by young aged service providers if not positively perceived by pregnant women hinders continuity of ANC attendance. This is because some pregnant mothers care about the age of health providers who attend them. Based on this, the current study assumed that young age of health providers present a factor which hinders continuity in attending ANC services. The alternative hypothesis was accepted because the findings of this study as reported in chapter four (Table 4.4) indicated that provision of ANC services by young aged health providers significantly hinders continuity in attending Antenatal Care services. The findings of this study are in line with some previous studies. For instance the findings obtained from the study conducted by De Jongh et al. (2016) revealed that pregnant women are afraid to be served by the young service providers. This implies significant effect on the continuity in attending ANC services.

The modality of counselling for HIV test and STI test if not clearly understood and positively accepted by pregnant mothers hinders continuity of ANC attendance. As

reported in chapter four (Table 4.4) the modality of counseling for HIV test significantly hinders continuity in attending Antenatal Care Services. The findings of this study indicated that STI test during ANC services significantly hinders continuity in attending Antenatal Care Services. These findings are in line with the findings obtained from previous studies, for instance; the study conducted by Kwambai et al., (2013) pointed out that that way STI, HIV counseling and testing are provided has two results, either can encourage or discourage pregnant women to attend to ANC, hence if the pregnant women are discouraged it have a lead the dropout of ANC visits.

Availability of medicine and medical equipments if not ensured and sufficiently distributed in health facilities hinders continuity of ANC attendance. As reported in chapter four (Table 4.4); the limited availability of medicines and medical equipments significantly hinders continuity in attending Antenatal Care services. These findings are in line with the findings from previous studies. For instance, the results obtained from the study conducted by to Nisar, Aurangzeb, Dibley, and Alam (2016) indicated that availability of medicine and its associated medical supplies and equipments is significantly associated with continuous attendance to ANC. Pregnant women are more influenced to attend ANC services by assurance of medicine and medical equipment at ANC clinic. Hence, improving this section in health centers can enhance the attendance of pregnant women to ANC services.

5.4 Socio-economic related factors associated with continuity in attending ANC services

The problem of limited family monthly income if not taken under consideration like the increase of exceptions in ANC services hinders the continuity of ANC attendance. This is because income facilitates several issues related to the attendance to ANC services such as transport costs, food at the time of waiting hours in case they are long as well as to cover for medical requirements that are not exceptional for pregnant women. Hence, in this study it was assumed that family monthly income

hinders continuous attendance to ANC services. This alternative hypothesis was accepted because the findings of this study as reported in chapter four (table 4.4) indicated that family monthly income significantly hinders continuity in attending Antenatal Care services. These findings are in line with the findings from several other studies. For instance, the findings obtained from the study conducted by Gebremeskel, Dibaba, & Admassu (2015) established that family monthly income influence timely utilization of antenatal care services among pregnant women. In addition, Pandey and Karki (2014) in their findings established that the higher the family income the higher the ANC attendance among the pregnant women.

If the objections of religion are not taken on board, it may hinder continuity of ANC attendance among pregnant mothers. Religion was considered in this study because it has an influence on social and health issues including matters concerning reproductive and child health. For instance, in this study it was assumed that religion objections hinder continuity in attending ANC services. The alternative hypothesis was accepted because the findings of this study as reported in chapter four (Table 4.4) indicated that religion objections significantly hinder continuity in attending Antenatal Care services. These findings are in line with the findings established by other previous studies, for instance, Afolayan and Oladimeji (2012) observed a significant relation between people belief, culture specifically religion and their utilization of antenatal care services including exposing body parts or attended to by a male service providers which contradict with their religion values

Spouse's support through escorting his pregnant wife or partner to the ANC clinic if not provided hinders continuity of ANC attendance. This is because attendance of pregnant women to ANC services in one way or another may be influenced by the support of spouse, including their escort to ANC clinics. This is the reason why this study assumed that spouse's escort is associated with continuity in attending to ANC services. This alternative hypothesis was accepted because the findings of this study as reported in chapter four (Table 4.4) indicated that spouse's escort to ANC services if not provided it significantly hinders continuity in attending Antenatal Care

services. These findings are in line with the findings from other previous studies. For instance, Kwambai et al. (2013) established that continuous attendance to ANC is highly influenced by attendance of male spouses. The same study established that men who do not escort their partners/wives to ANC services present obstacles to the continuous attendance of pregnant women to ANC clinic.

Spouse's financial support if not provided hinders continuity of ANC attendance among pregnant women. This alternative hypothesis was accepted because the findings of this study as reported in chapter four (Table 4.4) indicated that spouse's financial support if not provided it significantly hinders continuity in attending Antenatal Care services.

These findings are in line with the findings obtained from the study conducted by Wai et al., (2015) suggested that the husbands who support their spouse financially encourage their women to attend to ANC services.

Family duties and responsibilities of pregnant mothers at home if not reduced hinders continuity of ANC attendance. The findings in chapter four (Table 4.4), indicated that family responsibilities if not addressed well can hinder women continuity in attending Antenatal Care services. These findings are in line with the findings obtained from the study conducted by Abosse, Woldie and Ololo (2010) that family responsibilities is amongst the barriers faced by women in attending o ANC services continuously.

Existence of traditional birth attendant if not take on board by sensitizing pregnant women to attend ANC services, hinders continuity of ANC attendance. Traditional birth attendants provides some sort of switching of pregnant women from reproductive and child health provided by health care facilities to the traditional birth attendants. For example this study assumed that existence of traditional birth attendant is associated with continuity in attending to ANC. The alternative hypothesis was accepted because the findings of this study indicated that existence of traditional birth attendants is significantly associated with continuity in attending

Antenatal Care services. These findings are in line with the findings from the study conducted by Agus & Horiuchi (2012) that the community with low literacy level influence the pregnant women to attend to traditional birth attendants. This is contrary to the findings from the study conducted by Iyaniwura and Yussuf (2009), which demonstrated that pregnant women are highly motivated to seek ANC services to the government and private facilities than traditional birth attendant services. This influence health development of both mother and child and contributes to the decrease of maternal and child mortality rate in the community.

Distance if not taken under consideration by health programmers and all stakeholders hinders continuity of ANC attendance. Distance is a big predictor of accessibility of reproductive and child health including ANC services, as the issues of remoteness of relatives and health care facilities, unfavourable infrastructures such as roads as well as high transport costs are problems directly or indirectly related to distance.

The current study assumed that distance is associated with continuity in attending to ANC services. This alternative hypothesis was accepted as the findings of this study indicated that distance from ANC clinics is significantly associated with continuity in attending Antenatal Care services. These findings are in line with the findings from the study conducted by Mbai (2015), which indicated the long distance is amongst the factor discouraging continuity in attending ANC services. The same study elaborated that the problem of distance determines the time taken to reach the services, cost of transport to service area, and means of transport facility used by the pregnant women.

To wind up, the findings of this study is not as different from previous studies that have been conducted within and outside the country. For instance, the client related factors including unclear description of ANC by health care workers, awareness on the number of visits a pregnant mother is supposed to attend to ANC and awareness on the starting date of ANC have been identified by this study as hindrances to continuity of ANC attendance among pregnant mothers, have also been identified so

by previous studies such as Majrooh, Hasnain, Akram, Siddiqui, & Memon (2014), Yadav, (2017) and Chorongo et al. (2016). The same applied to service providers' related hindrances on continuity of ANC among pregnant women such as long waiting hours, modality of HIV counselling, STI test during ANC visits, provision of ANC services by male health providers, provision of ANC services by young aged health providers and availability of medicine and medical equipments. It applied also to socio-economic hindrances such as family monthly income, religion objections, spouse's escort to ANC, spouse's financial support, family responsibilities, distance from ANC and availability of traditional birth attendants. This implies that, not only the findings of this study have been proved as valid, but also provided strong indicative data for planners and implementers, which, if taken into considerations will enhance continuity of ANC attendance.

CHAPTER SIX

SUMMARY, CONCLUSION AND RECOMMENDATIONS

6.1 Summary

This study aimed to determine the clients' related factors affecting continuity in attending antenatal care services among pregnant women in Chemba district of Tanzania. The findings of this study have shown a significant association between factors including description of ANC from health care providers (OR=2.3, 95% CI 1.215-4.556, P=0.010), awareness on the day to start ANC (OR=44.5, 95% CI 24.293- 81.410, P=0.000). Other conditions relate to awareness on the number which pregnant mother is suggested to attend ANC services (OR=32.4, 95% CI 17.509-59.944, P=0.000) and outcome factor which is continuity of attendance to ANC services. These findings imply that factors which hinder continuity of ANC attendance included description of ANC services from health care workers, awareness on the day to start ANC and awareness on the number which pregnant mother is required to attend ANC services. However, other variables such as medical terms/language used by health care providers during ANC services (P=0.221), alcohol consumption (P=0.284) and laziness (P=901) did not hinder continuity of ANC attendance.

The study further determined the service providers' related factors affecting continuity in attending antenatal services among pregnant women in Chemba district of Tanzania. The factors that have shown a significant association between continuity of ANC attendance and such factors as waiting hours of ANC services (OR=6.9 95% CI 2.648-17.732, P=0.000), modality of counselling for HIV test (OR=9.1, 95% CI 3.565-23.449, P=0.001) and STI test (OR=9.8, 95% CI 4.355-21.894, P=000). This also includes factors like provision of ANC services by male health providers (OR=2.8, 95% CI 1.525-5.052, P=0.001) and younger health providers (OR=15.591, 95% CI 6.991-34.768, P=0.000) and availability of medicines and medical equipments (OR=9.5, 95% CI 4.002-22.601, P=0.000). These

findings imply that the service providers' related factors that hinder continuity of attendance to ANC include waiting hours of ANC services, modality of counseling for HIV test and STI test, provision of ANC services by male health providers and younger health providers and availability of medicines and medical equipments. However, privacy and confidentiality provided by health care workers did not hinder continuity in attending ANC services (P=0.078)

Furthermore, this study aimed to determine the socio-economic related factors affecting continuity in attending antenatal care services among pregnant women in Chemba district of Tanzania. The findings of this study have shown a significant association between exposure factors including family monthly income (OR=15.9, 95% CI 7.117-35.387, P=0.000), religion objections (OR=35.2, 95% CI 15.738-78.562, P=0.000), spouse's escort to ANC (OR=6.7, 95% CI 2.570-17.246, P=0.000), spouse's financial support (OR=5.3, 95% CI 2.046-13.983, P=0.000) and family responsibilities (OR=4.47, 95% CI 1.694-11.794, P=0.001). This is extended to existence of traditional birth attendants (OR=23.1, 95% CI 10.671-50.113, P=0.000) and distance from ANC clinics (OR=6.7, 95% CI 2.570-17.246, P=0.000) and outcome factor which is continuity of attendance to ANC services. These findings imply that all selected socio-economic factors including family monthly income, religion objections, spouse's escort to ANC, spouse's financial support, family responsibilities, existence of traditional birth attendants and distance from ANC clinics hinder continuity of attendance to ANC.

6.2 Conclusion

This paper concludes that description of ANC services from health care workers, awareness on the day to start ANC and awareness on the number which pregnant mother is suggested to attend ANC services are client related factors which hinder continuity of ANC attendance. Service providers' related factors that hinder continuity of attendance to ANC include waiting hours of ANC services, modality of counseling for HIV test and STI test, provision of ANC services by male health

providers and younger health providers and availability of medicines and medical equipments. Furthermore, the selected socio-economic factors including family monthly income, religion objections, spouse's escort to ANC, spouse's financial support, family responsibilities, existence of traditional birth attendants and distance from ANC clinics hinder continuity of attendance to ANC.

Although this study depended on the responses of only pregnant women, the findings of this study have provided strong indicative data for planners and implementers, which, if taken into considerations will enhance continuity of ANC attendance. However, this opens avenues for further studies on the same area, to incorporate the opinions as well as responses of ANC service providers.

6.3 Recommendations

The following are recommendations endorsed to promote and increase attendance of ANC services among pregnant women;

i. The reproductive health programs should be evaluated, reinforced, guaranteed and make sure they reach the intended audience so as to achieve the primary objective of ensuring the health of mother and child.
ii. The sufficient supervision and follow up at all levels of health care specifically to the health facilities should be emphasized so as to ensure all actors are responsible and accountable for the duties.
iii. Community sensitization programs should be implemented through the local administration, women and youth's organizations, cultural groups, and in education curriculums in universities and schools.
iv. Information disseminating should be continued on the antenatal care services, delivery as well as postnatal care services to improve approachability for all pregnant mothers.
v. Husband of the pregnant women are supposed to support their spouse to access the antenatal care services by all means such as escorting them to ANC clinics.

6.4 Areas for further studies

This study opens the room for further studies to be done on the same area but different tittles and perspective, or even this title can be used for other researchers. For instance, the findings of this study relied on the answers provided by pregnant mothers, therefore, other studies can incorporate the answers provided by pregnant mothers, health care providers and other stakeholders found in the government and non-government organizations. To cut the story short, this study has reached to the following comments that could contribute to areas for further studies:-

1. This study depended on the responses of only pregnant women. Therefore, further studies should be undertaken to incorporate the opinions as well as responses of ANC service providers.
2. This study apply only questionnaire as data collection tool. Other study should incorporate different data collection instruments including interview, focused group discussion so as to obtain detailed information that would support advance delivery of ANC services.
3. Moreover, it would be more advantageous to conduct the study across many other cultural backgrounds and demographics to arise appropriate measures to overwhelmingly address this risk.

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APPENDICES

Appendix 1: Questionnaire for examine selected factors affecting continuity in attending Antenatal Care Services among pregnant women: A case study of Chemba District.

Questionnaire number …….

Date …….

INTRODUCTION

Dear respondent

My name is Aziza Hamisi a postgraduate student at Mzumbe University, pursuing Master's Degree of Health System Management. I am carrying out a study on the *"**Selected factors affecting continuity in attending Antenatal Care Services among pregnant women: A case study of Chemba District**"*. The findings of this study will be used by ministry of health, policy makers, and district's management particularly Chemba district, to have a clear understanding of the continuity in attending Antenatal Care Services among pregnant women and would deploy tactics that will insure increase in attendance to Antenatal Care Services in the district.

Kindly please fill the questionnaire as honestly as possible. The information you provide will be used purely for academic purposes and the recommendations made will be of enormous importance to Chemba district and other districts in Tanzania. The information you provide will be treated with extreme confidentiality.

Thank you for participating

Instructions: <u>Please circle the most appropriate answer</u>

No	Background information	Response	Codes
1	How old are you?	…… ……	
2	Indicate your marital status	Single	0
		Married	1
		Divorced	2
		Separated	3
		Widow	4
3	How many children do you have?	…….. ……	
4	What is your highest level of education?	No formal education	0
		Primary level	1
		Secondary level	2
		Tertiary level	3
5	What is your current occupation?	Housewife	0
		Runs small business	1
		Formal employment	2
		Any other….. (Justify)… …… …….	3
6	Approximately how much do your family earn on monthly basis (Tshs)	…….. …….	
	Client Related Factors		

7	In your experience, has the description from ANC service providers during ANC check-ups been among the hindering factors for your continuity to attend ANC clinics?	No	0
		Yes	1
8	In your experience, has the medical terms/language from ANC service during ANC visit been among the hindering factors for your continuity to attend ANC clinics?	No	0
		Yes	1
9	In your experience when a pregnant woman should start Antenatal Care Services?	Never	0
		1st Trimester (1-3 months)	1
		2nd Trimester (4-6 months)	2
		3rd Trimester (7-9 months)	3
		I don't know	4
10	If you don't know when to starting ANC services, is that been among the factors affecting your continuity in attending ANC clinic?	No	0
		Yes	1
11	In your experience how many visits should a pregnant woman take to the Antenatal Care Services during the entire period of pregnancy?	Never	0
		Only one time	1
		Twice	2
		Thrice	3
		Four times	4
		I don't know	5

12	If you don't know how many visit (question 11), is that been among the factors affecting your continuity in attending for ANC clinic?	No	0
		Yes	1
13	In your experience has alcohol consumption during pregnant been among the hindering factors for your continuity to attend ANC clinics?	No	0
		Yes	1
14	In your experience has laziness during pregnant been among the hindering factors for your continuity to attend ANC Clinics?	No	0
		Yes	1
15	In your experience, how do you perceive ANC service?	Just a Normal services	0
		A key services	1
16	In your experience, are you comfortable of showing off the pregnancy during ANC visit?	No	0
		Yes	1
	Services Providers Related Factors		
17	In your experience, Is Patient's privacy been among hindering factors for your continuity to attend ANC services?	No	0
		Yes	1
18	In your experience, Is confidentiality from health care providers been among the	No	0
		Yes	1

	hindering factors for your continuity to attend ANC services?		
19	In your experience, is the waiting hours during the ANC services been among the hindering factors for continuity for attend ANC clinics?	No	0
		Yes	1
20	Approximately how long did it take to obtain service at ANC clinic	…….. ……..	
21	In your experience has the way of counselling for HIV test at ANC services been among the hindering factors for your continuity to attend ANC services?	No	0
		Yes	1
22	If yes (question 21),please explain how	…….. ……. …… ……	
23	In your experience has STI test during ANC services been among the hindering factors for your continuity to attend ANC services?	No	0
		Yes	1
24	In your experience has male service provider at ANC service	No	0

	been among hindering factors for your continuity to attend ANC services?	Yes	1
25	In your Experience is young age of service providers at ANC clinic been among your hindering factors for your continuity to attend ANC services?	No	0
		Yes	1
26	In your experience has ANC services providers' communication been among the hindering factors for your continuity to attend ANC services?	No	0
		yes	1
27	How do you rate the availability of essential drugs/medicine, medical supplies, reagents, and vaccines	Very poor	0
		Poor	1
		Average	2
		Good	3
		Very good	4
28	Is the status above (question 25), been among the hindering factors for your continuity to attend ANC services?	No	0
		Yes	1
	Socio-Economic Related Factors		
29	Has your monthly income level been among the hindering factors for your continuity to attend ANC services?	No	0
		Yes	1

30	Has your religion objection about Family planning services been among hindering factors for your continuity to attend ANC services?	No	0
		Yes	1
31	In your experience has your spouse escort support to ANC services been among hindering factors for your continuity to attend ANC services?	No	0
		Yes	1
32	In your experience has your spouse financial support been among hindering factors for your continuity in attending ANC services?	No	0
		Yes	1
33	In your experience has family responsibilities been among hindering factors for your continuity to attend ANC services?	No	0
		Yes	1
34	In your experience has existing traditional birth attendants services in your community been among hindering factors for your continuity to attend ANC services?	No	0
		Yes	1

35	If yes, how do you rate the services from traditional birth attendance?	Very poor	0
		Poor	1
		Average	2
		Good	3
		Very good	4
36	In your experience has travel distance to ANC services been among hindering factors for your continuity to attend ANC services?	No	0
		Yes	1
37	How long did it take to reach the ANC clinic?	……. ……	
38	What kind of transport do you use to reach the ANC clinic	Walking	0
		Bicycle	1
		Car	2
		Other (specify)……..	3
	Continuity in attending to ANC		
	Do you continuously attend to the ANC clinic	No Yes	0 1
39	Do you have other comment(s)/recommendation(s)?		

THANK YOU FOR YOUR PARTICIPATION

DODOSO LA KISWAHILI

Dodoso la kuchunguza sababu zinazochangia muendelezo wa mahuzurio ya huduma za mama mjamzito kabla hajajifungua: Sehemu ya utafiti ni wilaya ya Chemba.

Dodoso namba……

Tarehe ……..

Ndugu mpendwa

Jina langu naitwa Aziza Hamisi, ni mwanafunzi wa Chuo Kikuu cha Mzumbe. Nasomea shahada ua Uzamili ya Menejimenti ya Mfumo wa Afya. Ninafanya utafiti juu ya ***"kuchunguza sababu zinazochangia muendelezo wa mahuzurio ya huduma za mama mjamzito kabla hajajifungua katika Wilaya ya Chemba"*.** Utafiti huu ni moja ya sehemu ya masomo yangu ili kuweza kuhitimu shahada ya Uzamili katika Menejimenti ya Mifumo ya Afya. Matokeo ya utafiti huu yatatumiwa na wizara ya afya, watunga sera, na usimamizi wa wilaya hasa wilaya ya Chemba, baada ya kujua na ufahamu wazi sababu zinazochangia muendelezo wa mahuzurio ya huduma za mama mjamzito kabla hajajifungua ili kutumia mbinu ambazo zitahakikisha kuongezeka kwa mahuzurio ya huduma za mama mjamzito katika kipindi cha ujauzito.

Tafadhali kujaza dodoso kwa uaminifu iwezekanavyo. Taarifa unazoyatoa itatumika kwa madhumuni ya kitaaluma na mapendekezo yaliyofanywa yatakuwa muhimu sana kwa wilaya ya Chemba na wilaya nyingine nchini Tanzania. Taarifa unayotoa itatunzwa kwa usiri mkubwa.

Maelekezo: Tafadhali piga tiki (√) jibu sahihi zaidi

Na	Swali	Chaguo	Alama
1	Una umri wa miaka mingapi?	…… ……	
2	Eleza hali yako ya ndoa	Hujaolewa	0
		Umeolewa	1
		Talaka	2
		Mmeachana	3
		Mjane	4
3	Una watoto wangapi?	…… . ……	
4	Kiwango chako cha juu cha elimu?	Hakuna elimu rasmi	0
		Msingi	1
		Sekondari	2
		Elimu ya juu	3
5	Kazi yako halisi ni ipi?	Mama wa nyumbani	0
		Biashara ndogondogo	1
		Mwajiriwa	2
		Kazi nyingine….. (Zitaje)… …… …….	3
6	Kwa makisio ni kiasi gani familia yako inapata kwa kila mwezi (Shilingi)	……. . …….	

	Sababu zinazohusiana na Mteja		
7	Katika uzoefu wako, je namna maelekezo yanavyotolewa kliniki wakati wa uchunguzi wa mama mjamzito inaweza kuwa miongoni mwa sababu inayochangia muendelezo wako wa kuhudhuria huduma za Mama mjamzito kabla hajajifungua?	Hapana	0
		Ndio	1
8	Katika uzoefu wako, je namna lugha za kitabibu zinavyotumika kliniki wakati wa uchunguzi wa mama mjamzito inaweza kuwa miongoni mwa sababu inayochangia muendelezo wako wa kuhudhuria huduma za mama mjamzito kabla hajajifungua?	Hapana	0
		Ndio	1
9	Katika uzoefu wako, Ni wakati gani mwanamke mjamzito anapaswa kuanza kuhudhuriahuduma ya kliniki ya mama mjamzito?	Hatakiwi	0
		Mwezi wa 1-3 (1st Trimester)	1
		Mwezi wa 4-6 (2nd Trimester)	2
		Mwezi wa 7-9 (3rd Trimester)	3
		Sijui	4
10	Ikiwa hujui wakati wa	Hapana	0

	kuanzisha huduma za mama mjamzito kabla hajajifungua, je, hiyo inaweza kuwa miongoni mwa sababu inayochangia muendelezo wako wa kuhudhuria huduma za mama mjamzito kabla hajajifungua?	Ndio	1
11	Kwa uzoefu wako, ni mara ngapi mwanamke mjamzito anapaswa kuhudhuria huduma ya mama mjamzito kabla hajajifungua katika kipindi chote cha ujauzito mmoja?	Hatakiwi kuhudhuria	0
		Mara moja	1
		Mara mbili	2
		Mara tatu	3
		Mara nne	4
		Sijui	5
12	Kama hujui ni mara ngapi anatakiwa kuhudhuria (swali 11), je hiyo inaweza kuwa miongoni mwa sababu inayochangia muendelezo wako wa kuhudhuria huduma za mama mjamzito kabla hajajifungua?	Hapana	0
		Ndio	1
13	Katika uzoefu wako, je matumizi ya pombe wakati wa ujauzito yanaweza kuwa miongoni mwa sababu inayochangia muendelezo wako wa kuhudhuria huduma za mama mjamzito kabla hajajifungua?	Hapana	0
		Ndio	1

14	Katika uzoefu wako, je tabia ya uvivu wakati wa ujauzito unaweza kuwa miongoni mwa sababu inayochangia muendelezo wako wa kuhudhuria huduma za mama mjamzito kabla hajajifungua?	No	0
		Yes	1
15	Katika uzoefu wako, je unathamini vipi huduma za mama mjamzito kabla hajajifungua?	Ni huduma za kawaida	0
		Ni huduma muhimu	1
16	Katika uzoefu wako, je unajisikia huru kuonyesha hali yako ya ujauzito kipindi unahudhuria huduma za mama mjamzito kabla hajajifungua?	Hapana	0
		Ndio	1
	Sababu zinazohusiana na watoa huduma		
17	Katika uzoefu wako, namna faragha ya mgonjwa inavyozingatiwa inaweza kuwa miongoni mwa sababu inayochangia muendelezo wako wa kuhudhuria huduma za mama mjamzito kabla hajajifungua?	Hapana	0
		Ndio	1
18	Katika uzoefu wako, je namna watoa huduma za afya wanavyotunza siri za wagonjwa inaweza kuwa miongoni mwa sababu inayochangia muendelezo wako wa kuhudhuria huduma za mama	Hapana Ndio	0 1

	mjamzito kabla hajajifungua?		
19	Kwa uzoefu ulionao, je muda unaotumia kusubiria huduma za mama mjamzito kabla hajajifungua unaweza kuwa miongoni mwa sababu inayochangia muendelezo wako wa kuhudhuria huduma za mama mjamzito kabla hajajifungua?	Hapana	0
		Ndiyo	1
20	Kadiria ni muda gani unatumia wakati ukipewa huduma za mama mjamzito kabla hajajifungua	……. …….	
21	Kwa uzoefu ulionano, je namna ushauri wa kupima VVU unavyotolewa na wahudumu wa afya inaweza kuwa miongoni mwa sababu inayochangia muendelezo wako wa kuhudhuria huduma za mama mjamzito kabla hajajifungua?	Hapana	0
		Ndiyo	1
22	Kama ndiyo (swali la 21), tafadhali eleza ni kwa jinsi gani?	……. ……. ……	
23	Kwa uzoefu ulionao, Je zoezi la kupima magonjwa ya zinaa	Hapana	0

	wakati wa huhuma za mama mjamzito kabla hajajifungua inaweza kuwa miongoni mwa sababu inayochangia muendelezo wako wa kuhudhuria huduma za mama mjamzito kabla hajajifungua?	Ndiyo	1
24	Kwa uzoefu ulionao, je kuhudumiwa na mwanaume katika kliniki ya mama mjamzito kabla hajajifungua inaweza kuwa miongoni mwa sababu inayochangia muendelezo wako wa kuhudhuria huduma za mama mjamzito kabla hajajifungua?	No	0
		Yes	1
25	Kwa uzoefu ulionao, je kuhudumiwa na mtoa huduma mwenye umri mdogo Zaidi yako inaweza kuwa miongoni mwa sababu inayochangia muendelezo wako wa kuhudhuria huduma za mama mjamzito kabla hajajifungua?	Hapana	0
		Ndio	1
26	Kwa uzoefu ulionao, je mahusiano ya watoa huduma za mama mjamzito kabla hajajifungua kwa mama mjamzito yanaweza kuwa miongoni mwa sababu inayochangia muendelezo wako wa kuhudhuria huduma za mama mjamzito kabla hajajifungua?	Hapana	0
		Ndio	1

27	Je, unatoa alama gani kwa kiwango cha upatikanaji wa dawa muhimu, vifaa vya matibabu, na chanjo?	Mbaya sana	0
		Mbaya	1
		Wastani	2
		Nzuri	3
		Nzuri sana	4
28	Je, alama uliotoa hapo juu (swali la 25), inaweza kuwa miongoni mwa sababu inayochangia muendelezo wako wa kuhudhuria huduma za mama mjamzito kabla hajajifungua?	Hapana	0
		Ndio	1
	Sababu zinazohusiana na Kiuchumi na kijamii		
29	Je, kiwango cha kipato chako cha mwezi kinaweza kuwa miongoni mwa sababu inayochangia muendelezo wako wa kuhudhuria huduma za mama mjamzito kabla hajajifungua?	Hapana	0
		Ndiyo	1
30	Je, Dini yako inakataa juu ya huduma za uzazi wa mpango ambapo inaweza kuwa miongoni mwa sababu inayochangia muendelezo wako wa kuhudhuria huduma za mama mjamzito kabla hajajifungua?	Hapana	0
		Ndiyo	1

31	Kwa uzoefu ulionao, je kusindikizwa na mumeo/baba motto wako kwenda kliniki inaweza kuwa miongoni mwa sababu inayochangia muendelezo wako wa kuhudhuria huduma za mama mjamzito kabla hajajifungua?	Hapana	0
		Ndiyo	1
32	Kwa uzoefu ulionao, je msaada wa kifedha kutoka kwa mumeo/baba motto wako unaweza kuwa miongoni mwa sababu inayochangia muendelezo wako wa kuhudhuria huduma za mama mjamzito kabla hajajifungua?	Hapana	0
		Ndiyo	1
33	Katika uzoefu wako je, majukumu ya kuhudumia familia yanaweza kuwa miongoni mwa sababu inayochangia muendelezo wako wa kuhudhuria huduma za mama mjamzito kabla hajajifungua?	Hapana	0
		Ndiyo	1
34	Kwa uzoefu ulionao, je uwepo wa wakunga wa jadi katika jamii unayoishi inaweza kuwa miongoni mwa sababu inayochangia muendelezo wako wa kuhudhuria huduma za mama mjamzito kabla hajajifungua?	Hapana	0
		Ndiyo	1
35	Kama ndio, je unazipa kiwango	Mbaya sana	0

	gani cha alama huduma zinazotolewa na wakunga wa jadi?	Mbaya	1
		Wastani	2
		Nzuri	3
		Nzuri sana	4
36	Kwa uzoefu ulionao, Je umbali unaotembea kufuata huduma za mama mjamzito kabla hajajifungua unaweza kuwa miongoni mwa sababu inayochangia muendelezo wako wa kuhudhuria huduma za mama mjamzito kabla hajajifungua?	Hapana	0
		Ndio	1
37	Je, unatembea umbali wa kilometa ngapi kufuata huduma za mama mjamzito kabla hajajifungua?	……. ……	
38	Je, Unatumia usafiri wa aina gani hadi kufika kliniki ya mama mjamzito kabla hajajifungua?	Kutembea	0
		Baiskeli	1
		Gari	2
		Nyingine (taja)…….. ……. .	3
39	Je, una maoni mengine/mapendekezo (s)?		

ASANTE KWA KUSHIRIKI