PREDISPOSING, ENABLING, NEED FACTORS, AND UTILIZATION OF MATERNAL HEALTHCARE SERVICES AT SELECTED FISH LANDING SITES IN BUIKWE DISTRICT, UGANDA

BY

NAMUKASA RASHIDAH

BESTM (KYU)

19/U/GMSPH/18927/PD

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DECLARATION

I, Namukasa Rashidah, hereby declare that, this dissertation is my original work and has never been presented to any university or institution for any academic award.

Sign: _____ Date: _____

APPROVAL

This dissertation was written under our supervision as the student's academic advisors and it is now being submitted for examination with our approval as her university supervisors.

1. DR. AMATRE GERALD

Signature: _____ Date: _____

2. DR. KADDUMUKASA MARTHA

Signature: _____ Date: _____

TABLE OF CONTENTS

DEDICATION

This piece of work is dedicated to my mentor and husband Mr. Kaaya Umar for the exceeding care and support for me, throughout my academic struggle and all life endeavours. Thank you for not forsaking me. May the almighty bless you and reward abundantly.

Thank you to my academic advisor Mr. Ekakoro Newton who guided me in this process and the supervisors who always guided and kept me on truck.

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LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS AND ACRONYMS

ANC: Antenatal Care

aOR: adjusted Odds Ratio

DC: Delivery Care

DHT: District Health Team

FANC: Free Antenatal Care

FCs: Fishing Communities

HCs: Health Centers

IDI: In-Depth Interviews

KII: Key Informant Interviews

LICs: Low Income Countries

MHS: Maternal Healthcare Services

MMR: Maternal Mortality Rate

PNC: Post Natal Care

SBA: Skilled Birth Attendance

SDGs: Sustainable Development Goals

TBA: Traditional Birth Attendant

WIFA: Women In Fertility Age

ABSTRACT

Healthy and productive populations start with healthy mothers. Around 800 women globally pass away each day from avoidable causes as a result of inadequate maternal healthcare. This study assessed the effect of predisposing, enabling and need factors on use of maternal healthcare services at Ssenyi, Kiyindi and Nkombwe landing sites. A cross-sectional study design with a quantitative approach was utilized in this study. A sample of 111 mothers was recruited. Semi structured questionnaires were administered to obtain information on the factors that influenced use of maternal healthcare services at landing sites. The predisposing, enabling, and need variables that significantly influenced the use of maternal healthcare services were identified using bivariate analysis, and the significant factor's impact on the use of maternal healthcare services was identified using multivariate analysis. Marital status (OR, 0.582; 95%CI: 0.163 – 2.082, $P < 0.05$), father's occupation (OR, 1.335; 95%CI: 0.059 – 8.348, $P < 0.05$) and seeking for tetanus vaccination (OR, 13.676; 95%CI: 0.326 – 574.250, $P < 0.05$) were identified as the predisposing, enabling and need factors respectively influencing use of maternal healthcare services from the quantitative approach while social roles of women, attitude and behaviour of health workers, accessibility and availability of health facilities, distance to facility, cultural norms and stopping to give birth were the factors from the qualitative approach. In conclusion, the study recommends provision of social support to women and improvement of attitude of health workers.

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

For communities to be healthy and productive, maternal health is important (Dahab & Sakellariou, 2020). Despite the UN's Millennium Development Goals' (MDGs) 2015 deadline for a 75% reduction in maternal death rates, inappropriate maternal healthcare is still to blame for a high mortality rate per day worldwide from avoidable causes (Zhao *et al.,* 2020). By 2030, the global maternal death rate is to be reduced to about 70 per 100,000 live births, according to Sustainable Development Goal (SDG) No. 3 (Barnes et al., 2020).

A total of 536,000 maternal fatalities worldwide occur per year as a result of conditions associated to pregnancy or delivery (Atahigwa *et al.,* 2020). More than half of all maternal deaths occur in Africa, where the rate is still the highest (Prata et al., 2010). Globally, the rate of over 216 fatalities per 100,000 live births has decreased by 37% since 2000 (Atuoye *et al.,* 2020). Despite this development, it has been observed that if the SDG objective is to be met by 2030, worldwide Maternal Mortality Rate (MMR) should fall by around 7.5% year, which is more than double the annual pace of reduction during the MDG era (United Nations, 2017).

Sub-Saharan Africa has the highest rates of maternal mortality, with 533 deaths for every 100,000 live births, or almost 68% of all maternal fatalities globally (Stewart & Hall, 2022). With 336 per 100,000 live births, Uganda has one of the

highest rates of mortality among mothers. Most of these deaths take place in isolated, difficult-to-reach areas, including fishing settlements, where access to social services and healthcare is still poor (Nkiriyehe *et al.,* 2021). Haemorrhage, hypertension, sepsis, unsafe abortions, as well as other indirect causes including malnutrition, Human Immune Virus (HIV), and malaria, as well as insufficient use of healthcare resources and inadequate treatment, as well as sociocultural and economic issues, frequently result in maternal mortality (Ssetaala, Nabawanuka et al. 2020).

In Uganda, Fishing Communities (FCs) have a significant economic impact (Kiwanuka *et al.,* 2014). Landing areas on the mainland and island settlements are among them. However, according to Opio *et al.*, (2013), they stand for some of the subpopulations who require the most assistance with reproductive and sexual health. These communities are particularly exposed to several hazards to their well-being (Gollen *et al.,* 2019; Woodhead *et al.,* 2018). Due to the absence of regular and dependable transportation, poverty, ignorance, and access to proper health care to address these dangers.

According to recent recommendations, the utilisation of maternal health services is still insufficient in Uganda, with differences across urban and rural hard-to-reach settings (Ministry of health, 2016). One of Uganda's hardest-to-reach resource-restricted settings is the fishing settlements on Lake Victoria, which may have access to social services restricted like Antenatal Care (ANC) and postnatal care (Bariagaber *et al.,* 2016).

There is a dearth of data on how often FCs use maternal health services, while it is assumed that this use is insufficient given the existence of characteristics associated with subpar treatment. The majority of residents spend fewer than five years in these communities, according to studies (Nunan, 2010; Abaasa *et al.*, 2015). Planning and availability to services, especially MHS, are impacted by short length of stay (Kiwanuka *et al.*, 2014; Abaasa *et al.*, 2015). Low literacy rates have been associated with poor MHS usage in different contexts in these areas (Bariagaber *et al.*, 2016; Rutaremwa *et al.*, 2015). It is logistically difficult to transfer the vital Maternal Healthcare Services (MHS) supplies to rural health institutions due to FC's remoteness, which deters trained birth attendants. Women of reproductive age living in FCs may find it difficult to obtain MHS because of their rural, difficult-to-reach locations, their members' mobility, and the communities' low maternal health and death rates.

Buikwe is one of the districts in Uganda that is largely covered with numerous hard-to-reach rural settings majorly fishing communities. It has 50 landings sites and the major ones are; Kiyindi, Ssenyi and Nkombwe being the most popular, highly populated and receptacles for people from the Island communities than the others. Much as the world MMR and the national MMR are those mentioned above, the surprisingly high rate of 540 fatalities per 100,000 live births in Buikwe occurs often among fishing villages (UBOS, 2017). This high MMR could be influenced by the failure of mothers to utilize maternal services in the district more so at the landing sites.

The population of fishermen is seen as a marginalised and unique group because of their diverse sociocultural practises, poor socioeconomic standing, low literacy rates, and maybe lack of awareness about the healthcare treatments offered. Furthermore, previous studies have highlighted the importance of maternal services (Nove *et al.,* 2021; Patel *et al.,* 2020; Wondemagegn *et al.*, 2008). Some variables that affect how often a person uses prenatal, birth, and postnatal care have been discovered by several studies (Joshi *et al.,* 2014; Tsawe *et al.,* 2014; Haider *et al.,* 2017; Nuamah *et al.,* 2019). There are no studies related to maternal health services usage at landing sites in Buikwe district. This research's goal was to determine the use of maternal healthcare taking into consideration the aforementioned information.

1.2 Statement of the problem

The World Health Organisation (WHO) advises that all women have prenatal care, delivery and postnatal care services throughout their sexual reproductive age (WHO, 2016). The Ugandan government implemented a programme of free maternal services in an effort to lower maternal deaths. The Government also implemented several interventions aimed at improving healthcare. Despite the interventions, due to their diverse sociocultural practises, poor socioeconomic position, low literacy rates, and maybe less awareness of the healthcare facilities, fishing villages in Uganda still have a high maternal death rate, at 336 per 100,000 live births, which is worse than the international average of 223 per 100,000 live births (Ssetaala, Nabawanuka et al. 2020). The maternal mortality rate in Buikwe district is 540 deaths for every 100,000 live births and many of

these occur in fishing communities (UBOS 2017). Facility based deliveries, antenatal care uptake and postnatal care acquisition continue to be low (Ssetaala *et al.,* 2020; Bakibinga *et al.,* 2020; Nanvubya *et al.,* 2020; Kwiringira *et al.,* 2021). Low utilisation of antenatal and postnatal services leads to increased home deliveries, morbidities and increased deaths. The country may miss to achieve the SDG 3 of a maternal death rate of 70/1000 live births by 2030. There are limited studies on the factors that influence the maternal healthcare service in general more so in the resource limited areas. This study therefore, is aimed at finding the factors that impact the use of maternal healthcare services at landing sites in Buikwe district.

1.3 Objectives of the study

1.3.1 General study objective

To examine the factors influencing the utilization of maternal healthcare services at landing sites in Buikwe district.

1.3.2 Specific objectives

To;

i. Evaluate the impact of predisposing factors on utilization of maternal healthcare services at Ssenyi, Nkombwe, and Kiyindi fishing landing sites in Buikwe district.
ii. Assess the influence of enabling factors on utilization of maternal healthcare services at Ssenyi, Nkombwe, and Kiyindi landing sites in Buikwe district.

iii. Analyze the impact of need factors on utilization of maternal healthcare services at Ssenyi, Nkombwe, and Kiyindi landing sites in Buikwe district.

1.4 Research hypothesis

Ho_1: There is no significant effect of predisposing factors on utilization of maternal healthcare services at Ssenyi, Nkombwe, and Kiyindi landing sites in Buikwe district.

Ho_2: There is no significant effect of enabling factors on utilization of maternal healthcare services at Ssenyi, Nkombwe, and Kiyindi landing sites in Buikwe district.

Ho_3: There is no significant effect of need factors on utilization of maternal healthcare services at Ssenyi, Nkombwe, and Kiyindi landing sites in Buikwe district.

1.5 Scope of the study

1.5.1 Geographical scope

The study was carried out in Buikwe district. In mainly three selected fishing landing sites out of the over 50 landing sites of Ssenyi, Nkombwe, and Kiyindi.

1.5.2 Content scope

The study aimed at assessing the predisposing, enabling and needs factors that influence the utilization of maternal healthcare services at the fish landing sites.

1.5.3 Time scope

The duration of the entire investigation was 4 weeks from February 2023 to March 2023. The chosen time frame allowed the researcher to collect necessary data and after write the report.

1.6 Conceptual framework

The behavioral model of healthcare usage developed by Andersen provided a conceptual framework for the study of the use and access to maternal healthcare services at landing sites. According to El Shiekh & Kwaak (2015) and Hua *et al.,* (2019), this model, established by Andersen in 1995, is the most popular theoretical framework for analysing and forecasting the use of healthcare services from a socio-demographic viewpoint. This paradigm explains the fundamental human and societal/structural characteristics that either promote or obstruct access to healthcare (Barnes *et al.,* 2020; Asenake *et al.,* 2021) (Barnes, Atuoye et al. 2020, Asenake, Yohannes et al. 2021). These variables, which may be divided into predisposing, enabling, and need variables, interact in many ways to affect the utilisation of healthcare services (Barnes *et al.,* 2020) (Figure 1.1). Predisposing variables, which include sociocultural traits present before a health issue (such as level of education, social networks, cultural and religious beliefs, attitudes towards health, and demographics), are the first group of factors. Second, there are logistical factors that facilitate access to healthcare, especially maternal healthcare, for individuals. Wealth, social connections, facility accessibility, the presence of medical specialists, the duration of wait periods at locations of care, and the general backdrop of health policy are some of these

factors. Third, need considerations include health services assessed and perceived components (Atuoye *et al.,* 2020) (Atuoye, Barnes et al. 2020). They indicate a person's evaluation of the quality and accessibility of vital services needed to address a health issue and how people perceive their own overall health and functional status, how they feel when they are unwell, in pain, or concerned about their health, as well as whether or not they believe their issues are serious enough to seek professional help (Andersen 1995; Chakraborty *et al.*, 2003).

Independent variables

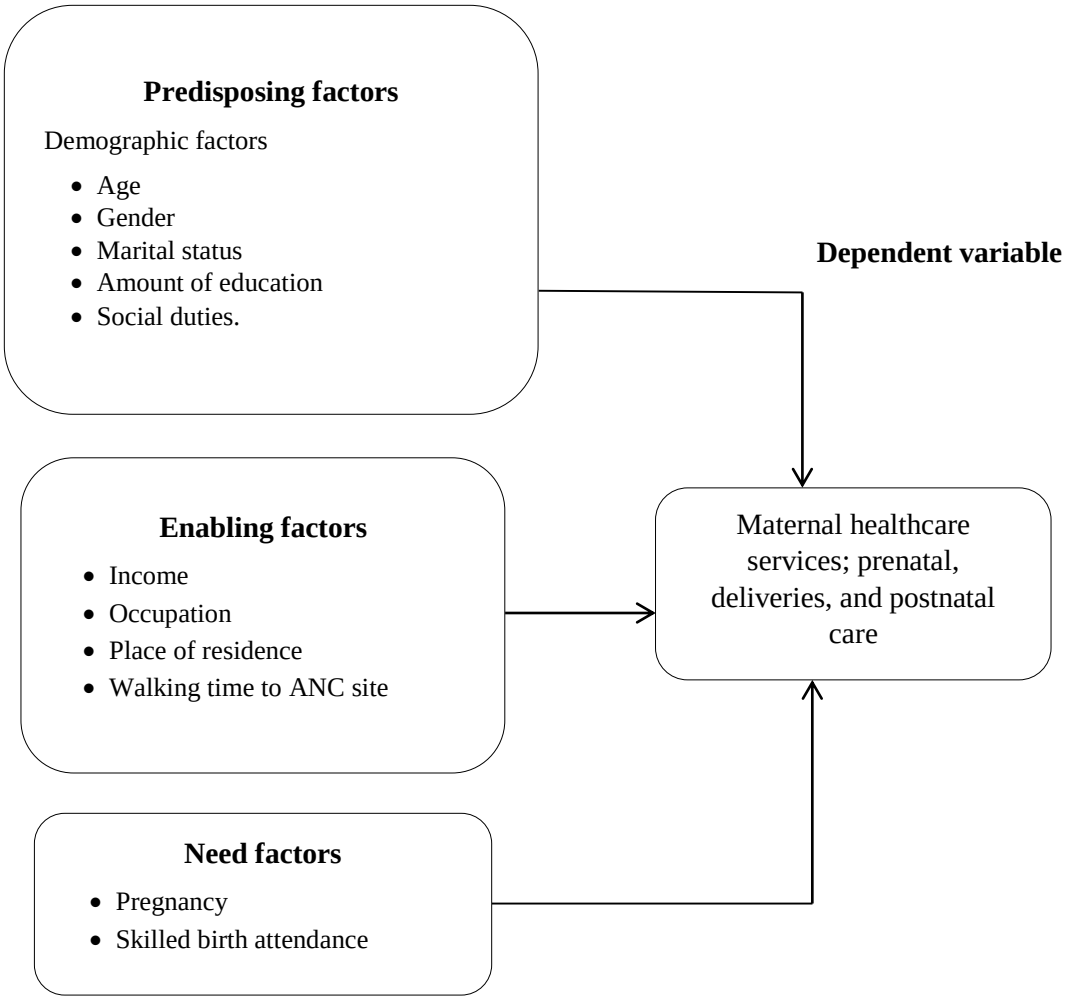

Figure 1.1: Health-service use behavior conceptual framework adapted from Andersen's behavioral model

1.7 Justification of the study

One of the aims of the Sustainable Development Goals (SDGs) that must be accomplished by 2030 is a reduction in maternal mortality. This can be accomplished by identifying obstacles to women's health seeking behaviour and by promoting equal access to maternal healthcare. In Uganda, a number of researches have been carried out to determine the variables affecting women's use of maternal healthcare services (Wilunda *et al.,* 2015; Roed *et al.,* 2021; Sserwanja *et al.,* 2022; Atuoye *et al.,* 2020; Degomme *et al.,* 2020). However, rather than focusing on the landing places, the majority of these studies had a narrower geographical reach. This study was carried out in order to determine how predisposing, enabling factors, and need variables affect the use of MHC services at fishing landing areas. It was planned to provide clear information so that decision-makers may take action to increase the rate of healthcare service use at different landing locations and across the nation.

1.8 Significance of the study

Identifying the utilization issues to maternal healthcare services in fishing communities will assist decision-makers in taking the necessary steps to provide adequate and equitable healthcare in different geographical locations in the district, which will help reduce maternal mortality rates at landing sites.

The study will help to broaden the scope of knowledge in public health with concerns to maternal healthcare utilisation thus increased literature.

CHAPTER TWO

LITERATURE REVIEW

2.1 Definition of Maternal health.

Maternal health is the condition of a woman's body during pregnancy, childbirth, and the postpartum period (Kigongo & Ssenteza, 2015). The initial cause of maternal illness and death is directly linked to bleeding, infection, hypertension, unsafe abortions, and labor obstruction (Kigongo & Ssenteza, 2015). For the prevention of maternal morbidity and death, appropriate treatment is needed (Saugat *et al.*, 2020). Despite international efforts, there were 295,000 pregnancy- and delivery-related fatalities by 2017 (Saugat *et al.*, 2020). This might be the result of fewer people using Maternal Healthcare Services (MHS) (Saugat, Amgain et al. 2020).

As a result of the unavailability of formal healthcare, many births in the villages of Uganda are attended to by Traditional Birth Attendants (TBAs) (Atuoye *et al.*, 2020). For instance, the use of aided delivery services is significantly impacted by the 50–60% staffing gap in remote areas like Karamoja and the West Nile Region (Atuoye *et al.*, 2020). The Ugandan government enacted numerous programs to increase access to healthcare after the Millennium Development Goals (MDGs) were established (Atuoye *et al.*, 2020). Despite this, there is scant data regarding the frequency with which women use maternal healthcare facilities, particularly in isolated, difficult-to-reach places.

2.1.1 Maternal healthcare service delivery

Despite the fact that becoming a mother is frequently a happy and gratifying event, too many women encounter agony, illness, and even death during childbirth, especially in underdeveloped countries (WHO, 2013). By 2030, the worldwide average Maternal Mortality Rate (MMR) of less than 70 per 100,000 live births is anticipated since all nations would cut their MMR by at least two-thirds. Regarding national goals, no nation is permitted by the World Health Organisation (WHO) to have a maternal death rate that is higher than 140 per 100,000 live births (WHO, 2015). Although 58% of pregnant women worldwide make at least four prenatal care appointments, experts advise making at least eight in order to improve women's experiences with care and reduce perinatal mortality (Agaba *et al.,* 2021). Over 80% of expectant women worldwide acquire ANC from a qualified healthcare professional at least once, though. In less developed countries where maternal mortality rates are high (between 42% and 49%), fewer women acquire at least four ANC visits (UNICEF, 2017).

Maternal health has significantly improved over the world. Seventy-two percent of deliveries take place in the presence of skilled medical personnel globally, and between 2000 and 2013, the MMR reduced from 380 to 210 per 100,000 live births (WHO, 2015).

Maternal healthcare is practically universal, it is important to focus issues that arise quickly, the importance of having high-quality Antenatal Care (ANC) early in pregnancy and Post-Natal Care (PNC), as well as educating women and

decision-makers on these issues. Campaigns to increase awareness may also be used to find solutions for problems (Vidler *et al.,* 2016).

2.1.2 Effect of maternal healthcare services on maternal health.

The public service that provides medical treatment to mothers is what the Oxford Dictionary of 2016 identifies as a maternal healthcare service. The term "maternal healthcare services" in this research refers to all government programmes offering Antenatal Care (ANC), Delivery Care (DC), and Postnatal Care (PNC) in Buikwe district.

It is a known truth that females who give birth on their own have a higher chance of experiencing problems or even dying during the delivery process (Varghese *et al.,* 2016). According to Doctors Without Borders (MSF) (2015), the bulk of these deaths which account for 90% of all deaths worldwide, can be avoided with the right care. It is imperative to ensure that everyone has access to sexual and reproductive healthcare and reproductive rights, according to the Beijing Platform for Action, as well as the meeting minutes from their review sessions (UN 2015).

The majority of maternal fatalities are avoidable. To enable timely treatments to be made if difficulties develop, access to healthcare during pregnancy and delivery is crucial (MSF, 2015). Maternal morbidity, death, and disability are more likely due to inadequate utilisation of maternal healthcare services, which exposes women to elevated risks that have adverse outcomes (El Shiekh *et al.,* 2015). The key determinants of disparities in maternal healthcare use and health outcomes for children under the age of five are wealth and parental educational

attainment, which reflect socioeconomic status. From 32% in 2005 to 47% in 2011, primary healthcare facilities greatly improved their role as a point of care for the place of delivery (Memirie et al., 2016).

2.1.3 Impact of Antenatal Care (ANC) services on maternal health.

The prenatal care includes services including immunisations, screenings, counselling, and treatment for minor ailments. Prenatal care gives a woman her first opportunity to engage with formal healthcare services and links pregnant women who are having problems to a referral system (Tadesse, 2020). The following are the required medical services provided at all or any of the four visits: background in sociodemographic, medical history, and obstetrics. Vital signs, measures of height and weight, uterine height, among others. Analyses of the urine, syphilis tests, blood types, haemoglobin tests, Human Immune Virus (HIV) tests and many more. Receiving of counselling sessions, insecticide-treated mosquito netting for malaria, tetanus shots, and iron supplements.

2.1.4 Impact of Delivery Care (DC) services on maternal health.

It has been discovered that prior delivery experiences affect women's understanding about health care facilities, delivery methods, and childbearing. The promotion of vaginal birth programmes and policies may be strengthened by understanding women's perspectives of delivery methods in different cultures (Zakerihamidi *et al.*, 2015). A survey done in India, the vast majority (69%) of women favoured vaginal birth because they thought it enhanced the bond between the mother and the child (Varghese *et al.*, 2016). Most women (89%) consider vaginal birth to be the most natural method of childbirth, and that it is also the

approach with the quickest and lowest risk of health recovery (Varghese *et al.*, 2016). This was emphasised that vaginal birth after a prior caesarean section was likewise a safe procedure as long as candidates were carefully chosen and met success-rate-optimized requirements. Before advising moms, doctors should be aware of aspects that produce positive results in order to lower the failure rate (Birara & Gebrehiwot, 2013).

2.1.5 Impact of postnatal care (PNC) services on maternal health.

The WHO defines postnatal care as the treatment given to a pregnant woman and her unborn child immediately following placenta delivery and throughout the first six weeks following birth. The majority of mother and infant fatalities take place during pregnancy, birth, and after birth period. Improving postpartum care services and maternal and new-born health on a bigger scale is the most effective way to lower maternal and neonatal mortality (Wudineh *et al.*, 2018). Understanding PNC has turned into a must for gaining access to and efficiently using PNC services Aregay *et al.*, (2014). A crucial moment in the lives of women and new born children is the postnatal period. During this time, significant changes take place that affect both the mothers' and the new-borns' health. Lack of treatment during this time might cause serious illness and even death because this is the era when excellent services are least likely to be provided (WHO, 2013b).

The first 48 hours following birth are when most maternal and new-born fatalities take place. In order to treat any delivery-related issues and give the mother vital knowledge on how to care for both the mother and the child, immediate PNC is

necessary (CSA, 2016). First postnatal contact for home births should occur as soon as possible, ideally within 24 hours of birth, and further check-ups for home births between 24 and 48 hours is preferable when necessary, according to research studies (WHO 2013b). It is advised that interventions adhere to the WHO guidelines, which call for "treating maternal anaemia, detecting and managing postpartum sepsis, initiating breastfeeding early (within the first hour), six months of exclusive breastfeeding, as well as clean cord and skin care" (Belemsaga *et al.,* 2015). According to the Ethiopian demographic health surveys (EDHS) research from 2016, Ethiopia's PNC coverage was predicted to be 24% in 2016. Addis-Abeba had the highest and Oromia Region had the lowest rate of women who received a after birth check-up in two days following delivery (EDHS 2016).

2.2 Empirical studies on utilization of maternal healthcare services.

The use of Maternal Healthcare (MHC) services has been specifically examined in this research to determine the effects of peoples' varying socioeconomic and demographic backgrounds. To achieve such, the bulk of scientific findings performs a quantitative study to determine the strength of the correlation between MHC usage and significant background variables (Charles, *et al.,* 2011). However, few qualitative researches have assessed women's perceptions and obstacles

to seeking out MHC services (Yousuf *et al.,* 2011). The socio-demographic and economic factors parity (birth order), wealth index, women's employment status, place of residence, previous child(ren)'s survival status, religion, and women's

decision-making skills are those that are most frequently found in theoretical frameworks. Consequently, the following elements are looked at and discussed:

A study in fishing settlements along Lake Victoria on barriers of family planning use showed that understanding on family planning, religion, marital status and number of partners were the barriers to family planning use (Navubya *et al.*, 2020).

Seven themes were identified by Bakibinga *et al.*, (2020) in their qualitative study on the factors influencing vaccine acquisition in Ugandan fishing settlements. The opportunity cost of getting immunised compared to earning a living, the cost and distance to the medical facility, the accessibility of service providers, attitudes towards immunisations, decision-making regarding the use of immunisations, awareness about the services' accessibility, and the perspectives of service providers to influence vaccine uptake were some of these themes.

A study on the difficulties women have while obtaining maternal healthcare in low-income African nations revealed that, in addition to a lack of family support and subpar care, transportation issues and cultural beliefs are the biggest obstacles to maternal health (Dahab and Sakellariou, 2020). A research study, prenatal care is used in peri-urban Ghana in a number of methods by ladies who are third trimester pregnant (Akowuah & Agyei-Baffour, 2018). The most important socioeconomic factors influencing respondents' usage of prenatal care were found to be age, family size, and job status, while accessibility to ANC, service quality, and cost were found to be the most significant system factors. Kim & Munjae

(2016) analysed influencers related to the use of maternal healthcare services in Korea between 2010 and 2012 using behavioural model by Andersen, and they discovered that predisposing and need factors influenced health services utilisation more strongly than enabling factors. The characteristics that had a substantial impact on the experience of using health services were those that were particularly evaluated in the outpatients, including sex, age, marital status, and predisposing factors like sex as well as need factors like chronic disease. Several studies have been conducted about fishing communities, for example, Ssetaala *et al.*, (2020) carried out two studies, namely "Components of prenatal care provided to Lake Victoria fishing community women and "Antenatal care practises among hard-to-reach fishing settlements on Lake Victoria," and all of these studies demonstrate delivery.

Even if the direction of the influence is sometimes unpredictable, most studies agreed that a woman's age at childbirth has a big impact on whether or not she uses MHC services. Sometimes the ladies' age may be used as a proxy for experience and knowledge of the advantages of healthcare, which then positively affects the use of these services (Charles *et al.*, 2011). The majority of these explanations in the research shown that older women may employ MHC services more frequently than younger women because they are more self-assured and have more influence over home decisions.

However, some studies indicate that owing to continued training opportunities that might assist the younger generation to obtain greater understanding about accessing maternal healthcare, younger ladies are more likely than older ones to

utilise MHC services (Ofra, 2004; Mekonnen *et al.,* 2019). Such outcomes are expected in many developing nations, such as Uganda, where a large percentage of young women are continuing to steadily increase their educational attainment. It has also been shown that younger moms, in general, may not have more experience about giving birth, therefore their propensity to need maternal healthcare may be higher than that of older mothers owing to perceived dangers (Mekonnen *et al.,* 2019). The usage of maternal healthcare did not, however, appear to be significantly correlated with the mother's age at birth, according to many researches (Addai, 2000). Addai (2000) only discovered that women aged 15 – 24 were 25% less likely than women aged 35 to 49 to use professional help during birth. However, no significant variations in the utilisation of ANC and PNC services from various age groups were observed.

In developing nations where a large percentage of women do not use healthcare services, the way a woman utilises MHC services is known to be significantly influenced by her level of education (Charles *et al.,* 2011; Ononokpono *et al.,* 2014). These studies showed a substantial positive correlation between the covariate and the utilisation of healthcare services. For instance, a study that used data from the EDHS from 2000, found that mothers with elementary and higher education had a high likelihood to use prenatal, assisted delivery, and postnatal care than mothers without education (Mekonnen *et al.,* 2019). It is true that women who have higher education are more conscious of health issues, better equipped to utilise such healthcare inputs to maintain good health status and more aware of the availability of the essential healthcare services. Another study,

however, cast doubt on the association between MHC usage and women's success in the classroom. They argued that other variables, such location of home, family income, etc., interact and lessen the strength of this significant advantageous effect, particularly when it comes to obtaining effective service delivery and PNC (Gauge et al., 2006; Ononokpono et al., 2014). In particular, it showed that neighbourhood characteristics moderated the connection between women's educational attainment and ANC attendance based on 2008 Nigeria DHS data (Ononokpono *et al.*, 2014).

Similar to how women are educated, research has shown that birth order (parity) has an erratic impact on how women seek healthcare, particularly how often they use MHC services. Numerous researches revealed that a larger percentage of women were inclined to utilise MHC during their first pregnancy and childbirth than they were at higher birth orders due to perceived dangers (Mekonen *et al.*, 2019; Nigussie *et al.,* 2004). Additionally, they concluded that having several children typically results in resource limitations, such as time and other belongings, which have a detrimental impact on healthcare use. A negative correlation between parity and maternal healthcare utilisation was found by meta-analysis based on 89 research carried out in poor nations between 1990 and 2006 (Simkhada *et al.,* 2008). The husband's educational background is a significant predictor that has been connected to the use of maternal healthcare services (Kemal, 2009; Simkhada *et al.,* 2008). The bulk of the studies suggest a favourable relationship between women's health-seeking behaviours and their husbands' educational levels (Simkhada *et al.,* 2008). Because a more educated

spouse could be more knowledgeable about maternal healthcare services and he's most likely to use them.

The financial security of the home has a significant impact on how women behave in terms of seeking healthcare, as has been well-documented. The world's least developed regions have the lowest coverage of healthcare services for low-income women (Gwatkin *et al.,* 2007). Transportation, prescription, user fees, and other supply expenses are largely responsible for the demand for and accessibility to professional healthcare. As a result, women with limited financial means may find it difficult to pay off these expenses quickly and may be deterred from using healthcare services (Simkhada *et al.,* 2008). According to research done in more than 50 nations, on average, more than 80% of babies from the wealthiest women receive medical assistance, compared to only 34% from low-income mothers (Gill *et al.,* 2007)

A study in Nigeria justified that women in the quintile of wealthiest families had higher likelihood to use MHC than those in the quintile of poorest households (Ononokpono *et al.,* 2014). According to a comparative study based on 435 selected women and conducted in rural Burkina Faso, family wealth is inversely correlated with prenatal care usage but not significantly with the use of assisted birth (Allegri *et al.,* 2011). In general, all of these researches found that the costs of services and accompanying expenses have a negative effect on the use of MHC services. This indicates that women with higher socioeconomic position are more likely than their counterparts to use the services. The availability of healthcare professionals, medications, medical equipment, among others might vary

significantly depending on where someone lives, especially in underdeveloped countries (Gwatkin *et al.,* 2007; UNCIF, 2011). This indicates that health services are not evenly spread across rural and urban areas in this region. Numerous researches confirmed that a woman's location has an impact on how often she uses services as a result of these concurrent circumstances (Babalola *et al.,* 2009; Ononokpono *et al.,* 2014). This is frequently believed that the poor quality of services, high costs, a lack of mobility, and other reasons contribute to the underuse of MHC services in villages. Furthermore, urban women are probably more informed and knowledgeable about the importance of utilising maternal healthcare services.

In contrast, a research based on Ghana DHS data from 2003 that used probability regression revealed that a higher percentage of women living in villages than in urban areas used ANC, professional assistance delivery, and PNC (Charles *et al.,* 2011). Due to this estimate, women who lived in rural regions could be likely to utilise these healthcare services than those who lived in urban areas. The capacity for decision-making in women is another important element that has been the subject of much research (Fotso *et al.,* 2009; Gebremariam, *et al.,* 2009). Majority of these researches arrived to the following conclusion that making a credible contribution to the allocation of home finances encourages the development of self-esteem and independence, which increases the possibility that mothers would use healthcare facilities. In Ethiopia, the majority of males control household finances and make decisions on when and where women should get healthcare (Yousuf *et al.,* 2004).

Utilising data from the 2005 EDHS, on multi-level regression found out that autonomy of women was a major factor affecting healthcare seeking behaviour (Gebremariam, *et al.,* 2009). This finding specifically shown a 46% increase in the likelihood of seeking medical attention when women's autonomy increased by one. Their justification explains how patriarchy and societal norms restrict Ethiopian women's ability to exercise their autonomy and how this affects how they seek healthcare. According to a research, women's decision-making ability (autonomy) is positively correlated with where they give birth from, ranging from the wealthiest to the poorest (Fotso *et al.,* 2009). This mediator element, in particular, showed a substantial positive correlation with getting expert help delivery from the poorest women. However, based on the 2005 EDHS and logistic regression, discovered that decision-making in the home, for women's behaviours in seeking healthcare, autonomy was a minor covariate (Ethiopian Societies of Population Studies, 2008).

Religion has a significant impact on how often people seek medical treatment for mothers by influencing people's beliefs, norms, and values (Amooti-Kaguna *et al.*, 2000). The presence of a relationship between religious membership and the use of maternal healthcare was also confirmed by many empirical literatures (Charles *et al.,* 2011; Ononokpono *et al.,* 2013). However, the level of its impact is more attributed to the research population's varied culture and social beliefs. According to a research conducted in Ethiopia, Muslim ladies were 30% more likely than orthodox/Catholic women to seek prenatal care, while women who practise traditional religions were 50% less likely (Mekonen *et al.,* 2019).

However, in this study, no appreciable differences in the use of experts' support during delivery and PNC depending on different religious backgrounds were found. According to a research done in Bangladesh, non-Muslim ladies were more likely than Muslim ladies to have trained birth attendants (Kamal, 2009). Additionally, study did not discover a significant connection between religious background and prenatal care utilisation.

The working position of women is a significant factor that influences the usage of maternal healthcare. High percentages of women in Ethiopia are unemployed and spend more time at home caring for their children, cooking, cleaning, and performing other household duties than they do going outside to work at other occupations that are professional or not (Ethiopian Societies of Population Studies, 2008). It is noted that talking about the advantages of employing MHC services is best done after spending time with plenty of people outside the house. According to a research based on information from the Ethiopian DHS of 2000, women who were working had a roughly 140% higher likelihood of receiving at least four prenatal visits than those who weren't (Mekonen *et al.*, 2019). Women's occupation position was not observed to have a significant impact on the use of skilled delivery and PNC services in this study. In conclusion, the majority of research, including a meta-analysis, found a negative link between sociodemographic and economic characteristics including age, parity, the survival index of a previous kid, and religion, and the usage of healthcare facilities in poor nations (Simkhada *et al.*, 2008). While ANC, assisted delivery, and postpartum care were each positively connected with women's level of education, husbands'

education level, family wealth, occupation, place of home, and sex of head of household.

The degree to which each maternal healthcare service component's use is correlated with certain background factors, however, reportedly vary on the research population and time periods. For instance, the impact of a woman's birth year on MHC use showed contradictory results. Some studies indicated a positive link to be present (Charles *et al.,* 2011; Babalola *et al.,* 2009), while others showed a negative relationship to be present (Ofra, 2004; Mekonnen *et al.,* 2019), while yet others showed no relationship to be present (Addai, 2000). Therefore, this study will use recent data to determine the direction and magnitude of impacts of each socioeconomic and demographic feature. Additionally, in the Ugandan context, efforts will be made to identify both distinctive and common factors impacting the use of prenatal care, skilful delivery, and postnatal care.

2.3 Knowledge gap

Most of the studies in the literature review have hinted on specific items of maternal healthcare services for example the ANC, DC, and PNC and how they are being utilised by women. However, there are few studies about the utilisation of maternal healthcare services in hard to reach areas and specifically fishing landing sites.

CHAPTER THREE

MATERIALS AND METHODS

3.1 Location of study area

The study was carried out at three landing sites in Buikwe District, namely, Kiyindi landing site in Najja subcounty, Ssenyi landing site in Ssi-Bukunja Sub County and Nkombwe landing site in Ngogwe subcounty. All of these landing sites are located on the shores of Lake Victoria.

Buikwe District shares borders with Jinja District to the east, Kayunga District to the north along the Sezibwa River to the northwest, Mukono District to the west, and Buikwe District to the southwest. It is located in the Central area of Uganda at 0.3144° N and 32.9888° E. The following Local Governments and Administrative Units are included in it: One county, eight sub counties, and four town councils. The counties are: Kawolo, Najjembe, Nyenga, Wakisi, Buikwe, Najja, Ngogwe, and Ssi-Bukunja. There are 464 Villages and 64 Parishes (LC 1). Between the boundary with Mukono District and Owen-Falls Dam, there are 52 fishing settlements, or one for every three km of shoreline. The landing sites were chosen because of their being the most busy, populated and high rate of maternal and child deaths of the over 50 landing sites.

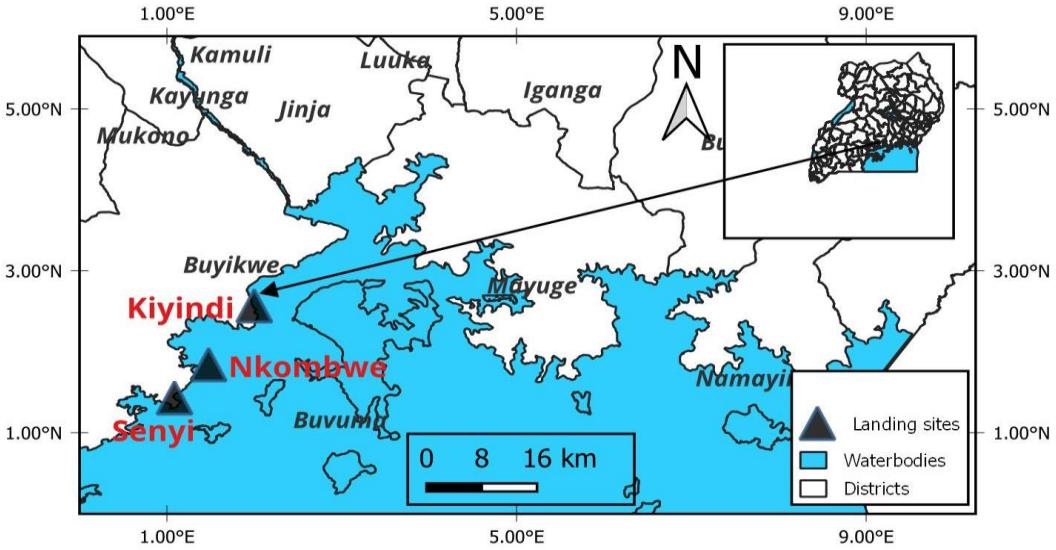

Figure 3.1: Map showing the location of the landing sites

3.2 Research design

Since data was only gathered once for this study, a cross sectional research strategy was used because it offers useful insights into a population's traits, attitudes, and behaviors at a particular point in time (Kothari 2004). At landing locations in Buikwe, mothers were recruited with the intention of determining the determinants behind the utilisation of maternal healthcare services. It was a quantitative investigation. A quantitative technique was used to address the study objectives and establish generalised facts, while the qualitative strategy was used to get in-depth insights on the factors and supplement the findings from the quantitative data at a broader perspective.

3.3 Study population

The study involved mothers in reproductive age (MIRA) 20-49 years at the selected landing sites in Buikwe District rather than the Uganda reproductive age of 15 – 49 years because the researcher was interested in using the consent rather than the ascent form of acceptance from the participants. Women who were pregnant from six months were included since they were expected to have started their ANC visits. The women who had just given birth were also included in the study since it was thought that they would be able to recall their experiences with obtaining maternal healthcare services during their pregnancies, deliveries, and postpartum periods. The views on the study helped answer the central question posed above.

3.3.1 Eligibility criteria

Inclusion

The participants that were included in the study were MIRA 20-49 years (pregnant mothers, those who had just given birth and those who had children up to 1 year and had stayed at the landing site for at least two years and sought for antenatal care services). These had experience about maternal healthcare services utilization at landing sites and respondents who consented to participate in the study.

Exclusion

Mothers who were in the reproductive age but had stayed for less than 2years in the area and those who had just visited the area were not included because they

didn't have enough experience about antenatal care practices in the respective areas.

Women who were not receiving the maternal healthcare services on the health facilities days of appointment.

3.4 Methods

3.4.1 Determination of the sample size

Cochran (1963) formula of determining sample size proportions was employed.

It states that; **n** $= \frac{\mathbf{Z^2 pq}}{\mathbf{e^2}}$ Where, **n =** is the sample size

Z= is the normal curve's abscissa, which terminates at the 95% confidence interval (CI) which is 1.96 obtained from statistical tables.

P = 0.92%. According to a research conducted by Cumber et al. 2016 at the Buea Regional Hospital in Cameroon, only 0.92 percent of pregnant women were aware of the value of prenatal care services.

$q = 1 - p \rightarrow q = 1 - 0.92 \rightarrow q = 0.08$

e = is a desired level of precision at 0.05. Therefore, sample size

$n = \frac{1.96^2 x\ 0.92 x 0.08}{0.05^2} \rightarrow n = \frac{3.8416\ x\ 0.0736}{0.0025} \rightarrow n = \frac{0.28274176}{0.0025} \rightarrow n = 113.097 \rightarrow$

$n = 114\ respondents$

n = 114 respondents were sampled from the three landing sites.

The respondents were allocated as in the table below;

Table 3.1: Distribution of sample size among the landing sites

Landing site	**Respondents**
Nkombwe	38
Ssenyi	38
Kiyindi	38
Total	**114**

The study sample size was 114 participants with each site having 38 participants for the quantitative study. A sample of 5 participants from each of the sites were selected voluntarily to take part in the interview which was later used to supplement the findings of the quantitative study from the questionnaires.

3.4.2 Sampling techniques

The multistage sampling was used to sample the participants. First the study areas were placed in strata through stratified sampling the secondly simple random technique was employed in each of the strata to select the participants that constituted representative sample which yielded results. It was used with the aim to provide each eligible participants chance to take part in the study without selection bias.

3.4.3 Data collection methods

The study used both qualitative and quantitative methodologies since they are complimentary and produce deep and broad insights when combined. The data collection method employed was survey method since it can be used in both

qualitative and quantitative studies to secure information concerning a phenomena under study (Kothari 2004).

In-depth questioning using both open and close ended questions was employed to create a deeper understanding of how participant experiences were connected to use of maternal healthcare services in order to fulfill the study's aims.

3.4.4 Data collection instruments

Questionnaires were employed to elicit views from respondents to obtain data required for objectives 1, 2, and 3 of the study. In this study, the questionnaires were also drafted with relevant questions aiming at collecting views in regards to this proposed study topic. Other instruments were; audio recorders, pens, and papers to enter data.

3.4.5 Procedure of data collection

Letters were presented to the health centers and other respondents, upon the approval of the proposed study. Mothers were called upon by their leaders to gather and take part in the study while maintaining social distance and other COVID-19 SOPs. Utilising questionnaires that were developed in English and translated to Luganda, data was gathered. The filling of the questionnaire took approximately 10 minutes per participant. All willing and qualified participants gave their informed consent in writing for the study prior to the commencement of information collection. For those that voluntarily took part in the interview every conversation was audio recorded, and field notes were also collected.

3.5 Data analyses

3.5.1 Predisposing factors affecting maternal healthcare services utilisation.

The data was entered into Microsoft Excel software version 19 and then transferred to IBM SPSS statistical software version 20 where statistical coding and analysis of the data were done using descriptive statistics.

The predisposing factors were presented in tabular form using descriptive statistics then reported as frequencies and percentages by cross tabulation. The bivariate and multivariate regression were used to find the relationship between variables of the predisposing factors at a significance level of <5%.

3.5.2 Enabling factors affecting maternal healthcare services utilisation.

The enabling factors were presented in tabular form using descriptive statistics and reported as frequencies, percentages, mean, mean percentages and standard deviation by cross tabulation. The bivariate and multivariate regression was used to find the relationship between variables of the enabling factors. All statistical tests a 95% confidence interval (95% CI) were considered and decision was significant if the P – value was < 0.05

3.5.3 Need factors affecting maternal healthcare services utilisation.

The need factors were presented in tabular form using descriptive statistics and reported as frequencies, percentages, mean, mean percentage and standard deviation by cross tabulation. It was determined that the requirements variables were connected to the availability of maternal healthcare using bivariate and

multivariate regression. If the P value was 0.05, then all statistical conclusions were considered significant.

For the interview participants, their data was coded and themes were created using thematic analysis after which the findings were incorporated to support the quantitative findings from the statistical analysis.

3.6 Validity and reliability

The questionnaires were cross-checked first to find out whether they would generate data required by the study and then pre-tested in Lugo village in Wakiso district.

3.7 Ethical issues

Permission to perform the research under an ethical review was obtained from The Aids Support Organisation (TASO) Uganda Ltd (Reference: TASO – 2022 – 177). A letter of acceptance was obtained from Buikwe District Health Office to carry out the study at these landing sites. Before participating in the study, all individuals had to complete informed consent forms. The goals, relevance, and nature of the research project, with a focus on the importance of voluntary participation and the freedom to leave the study at any time without incurring penalties were informed to all participants. The researcher gave participants the reassurance that any information they provided would be treated with the strictest confidentially and used only for the objectives of the research. The researcher also gave the potential participants the assurance that their names would be kept secret and that, if they desired, they may view the final study report in person at the

Buikwe District Health Office. All of this was done in part to gain the respondents' confidence and trust and to guarantee the protection of their rights.

CHAPTER FOUR

RESULTS

4.0 Introduction

The study results on the need, enabling, and predisposing factors that affect the usage of maternal healthcare services at landing sites in the Buikwe district are presented in this chapter.

4.1 Demographic characteristics of participants.

A total of 111 in-depth interviews were carried out at the three landing sites giving an interview feedback rate of (97.4%). Of the participants, majority were in the age group of 20 – 24, married and unemployed (37.3%), (78.7%), (36.9%) respectively. Majority of the respondents (47.3%) had acquired primary level education, more than half (55.4%) had between 1 and 3 children and over a half of the participants (56.6%) had a poor economic status at the landing site (Appendix 1).

4.2 Predisposing factors that affected the use of maternal healthcare services.

4.2.1 Demographic aspects

Generally, there is a significant association between the predisposing factors and utilisation of maternal healthcare services (F = 0.540, P = 0.048). Individually, Marital status was further found to be the predisposing factor that significantly influenced the utilisation of maternal services (P = 0.045, OR = 0.582; CI = 0.163 - 2.082) while age (P = 0.508), education level (P = 0.977) and number of

children (P = 0.612) were not significant in utilisation of maternal healthcare services (Table 4.1).

Table 4.1: Predisposing factors influencing utilization of maternal healthcare services.

	Anova		Bivariate analysis					
							95% C.I. for OR	
Predisposing factors	**F**	**Sig.**	**B**	**S.E.**	**Sig.**	**OR**	**Lower**	**Upper**
	0.540	0.048						
Age			0.190	0.286	0.508	1.209	0.690	2.119
Marital status			-0.542	0.651	0.045*	**0.582**	**0.163**	**2.082**
Education level			-0.011 0.204	0.393	0.977	0.989	0.458	2.135
Number of children				0.402	0.612	1.226	0.558	2.696

***= P< 0.05**

Furthermore, the study found out that being single was significant with utilisation of maternal healthcare services (aOR, $2.273E^{-9}$; 95%CI: $5.878E^{-10}$ - $8.788E^{-9}$, P < 0.05), whereby single mothers were 2.273e-9 times more likely to utilise maternal healthcare services than those that were divorced (Table 4.2).

Table 4.2: Multivariate analysis for predisposing factors influencing utilization of maternal healthcare services.

					Reference category is; Ever used MHC services		
Variable	**Categories**	**N**	**%**	**df**	**Sig.**	**OR**	**95% CI**
Marital status	Single	19	22.6	1	0.000	**$2.273e^{-9}$***	**($5.878e^{-10}$ - $8.788e^{-9}$)**
	Married	64	76.2	1	0.079	$2.651e^{-9}$	($2.651e^{-9}$ - $2.651e^{-9}$)
	Divorced	1	1.2	*ref.*	*ref.*	*ref.*	*ref.*

= P< 0.05;** ***ref **= point of comparison**

During the collection of data and interaction with mothers at the landing sites in Buikwe district, they provided other qualitative factors like social roles as a predisposing factor impacting their utilisation of maternal healthcare services;

4.2.2 Effect of social roles as a predisposing factor on utilisation of maternal healthcare services.

Maternal healthcare services are good for the both the mother and the child's health, therefore when the mothers at the various landing sites were asked whether they had used any of the antenatal care services, majority 76.5% (n = 78) of the respondents agreed to using any of the maternal healthcare services with an evenly distributed percentage across all the landing sites. When the mothers were asked why they didn't go to use the maternal healthcare services they said they were mostly affected by the social roles they have. Most of the mothers noted that;

"My mother-in-law doesn't assist me at all since I have a lot of work at home. I believe this is because she was comfortable with me doing the same thing because I have missed getting prenatal care because she used to do all the job alone while she was pregnant." (Pregnant woman, Kiyindi landing site)

"During my pregnancy, I didn't go to the hospital just because I wished to; instead, my mother-in-law assured me that I was healthy and advised that I delivered at home with a traditional birth attendant when the time came. My mother-in-law said that she had no issues when giving birth to all eight of her children at home. She thus did not want me to visit a hospital because of her experience." (Lactating Mother, Ssenyi landing site).

"No…No, I never. Although I wished to go, I was not ill, so my husband said I could not leave the garden work and go for prenatal care." (Lactating Mother, Nkombwe landing site).

"Because my children are still small and I am my husband's sole wife, all of the household chores fall on my shoulders. As a result, I am unable to travel to the hospital." (Mother, Ssenyi landing site).

"I wish to……. but I cannot go even for my past pregnancies, because I am powerless. I am expected to be submissive to my husband to make decisions for me and the entire family. I must thus obey my husband if he decides that I should not give delivery at the hospital. This is significant because, as a Muslim woman, I am required by both the Koran and the Hadith to be obedient and submissive to my husband." (Pregnant Woman, Kiyindi landing site).

"I don't have a job…….. am a stay home mother waiting for 'sente za kameza' therefore I depend on my husband for financial support, therefore he is the one to decide whether to accept me to go for antenatal or not. So I have never gone to the health facility to get maternal services" (Lactating Mother, Kiyindi landing site).

"No…… I didn't go. When I was pregnant, I wanted to give birth at a hospital, but my husband disallowed me saying that none of his other two wives had given birth and none had received antenatal care in a health facility before. I thus had no choice but to obey him as a result of this" (Lactating Mother, Ssenyi landing site).

One of the mothers who said she acquired maternal healthcare services at the traditional birth attendants said that;

"My husband just purchases what he wants after being issued the prescription, which is why I don't return to the health clinic for pregnancy care services. For instance, he only purchases two of the three items that are recommended. So why should I bother going there in the first place? He will just inquire about my income if I visit the medical institution on a regular basis to purchase so many prescriptions for me."

4.3 Effect of enabling factors on use of maternal healthcare services at landing sites in Buikwe district.

4.3.1 Enabling factors influencing utilisation.

There was a significant relationship between the enabling factors and utilisation of maternal healthcare services (F = 1.464, P = 0.036). Fathers' occupation was found as the individual enabling factor that significantly influenced the utilisation of maternal healthcare services (P = 0.017, OR = 1.335; CI = 0.059 – 8.348) while mothers' occupation (P = 0.382), economic status (P = 0.998), hearing of services (P = 0.547), distance to facility (P = 0.810) and level of facility (P = 0.998) were not statistically significant with use of maternal healthcare services (Table 4.3).

Table 4.3: Enabling factors influencing utilization of maternal healthcare services.

	Anova		Bivariate analysis					
							95% C.I. for OR	
Enabling factors	**F**	**Sig.**	**B**	**S.E.**	**Sig.**	**OR**	**Lower**	**Upper**
	1.464	0.036						
Fathers occupation			0.884	1.260	0.017*	**1.335**	**0.059**	**8.348**
Mothers occupation			9.275	4.502	0.382	2.907	0.153	16.054
Economic status			18.851	9.605	0.998	1.538	0.118	2.312
Hearing services			1.099	1.826	0.547	3.000	0.084	107.447
Distance to facility			0.018	0.073	0.810	1.018	0.882	1.175
Level of facility			6.225	3.207	0.998	50.428	0.740	63.808

***= P< 0.05**

Furthermore, the study found out that the husband being a farmer was significant with utilisation of services in the variable of occupation (aOR, 15.913; 95%CI: 2.652 - 95.494, P < 0.05), this shows that women whose husbands were farmers were sixteen times more likely to utilise the maternal healthcare services than women that had unemployed husbands (Table 4.4).

Table 4.4: Multivariate analysis for enabling factors influencing utilization of maternal healthcare services.

				Reference category is; Ever used MHC services			
Variable	**Categories**	**N**	**%**	**df**	***P* – value**	**OR**	**95% CI**
Father's	Boda boda	7	6.9	1	0.781	1.421	(0.120 - 16.866)
occupation	Business	13	12.7	1	0.230	2.750	(0.528 - 14.321)
	Farmer	17	16.7	1	0.002	**15.913***	**(2.652 - 95.494)**
	Fisherman	26	25.5	1	0.391	1.918	(0.433 - 8.508)
	Market vender	3	2.9	1	0.268	5.941	(0.254 - 138.996)
	Nurse	2	2.0	1	0.998	2.966e-8	(0.000)
	Teacher	1	1.0	1	.	2.048	(2.048 - 2.048)
	Unemployed	33	32.4	*ref*	*ref.*	*ref.*	*ref.*

***= P< 0.05;** ***ref* = point of comparison**

During the collection of data and interaction with mothers at the landing sites, they provided qualitatively the effect of enabling factors on their use of maternal healthcare services;

4.3.2 Effect of sensitisation of mothers as an enabling factor on utilisation of maternal healthcare services.

Almost all of the participants (99.1%) reported they had ever heard about maternal healthcare services (n = 81), majority of those that agreed hearing about maternal healthcare services emphasized that they heard it from the health centre or hospital when they had gone to acquire antenatal care services or had gone to acquire any other kind of treatment (27.0%), one of the mothers attested that;

"when I was going to take my child to get treatment for pneumonia, as I was waiting for the health workers, I went and read on the notice board about safe delivery at the health centre and family planning practices, and I said let me also try this and it helped me so much……" (Mother of 3, Ssenyi landing site)

Over (14.4%) of the mothers attested that they heard about maternal healthcare services through mass sensitisation while using a public address system in their communities. This was justified by one of the mothers who echoed that;

"I was going to the market to sell my fish, and here came the loud speakers on the car and they were announcing about family planning services and HIV testing and counselling which is free of charge, from here, I came to know about the services and I am sure that other mothers also know because these people were very loud……." (Pregnant mother, Ssenyi landing site)

About seven percent (7.2%) of the mothers attested that they were sensitised on maternal healthcare services utilisation by the VHTs in their communities. This was noted by one of the mothers who said;

"After I had given birth to my second born the Village Health Team came to my home to register me…. I first resisted but they later explained to me the benefits of monitoring the health of the child and mothers, and that's when I knew about antenatal care and the child care services because actually truth be told I didn't give birth to my two children from the health centre." (Lactating mother, Nkombwe landing site)

Only few (5.4%) and (1.8%) heard about maternal healthcare services from the family members and school respectively. One of the responding mothers at the landing site said.

"My mother and mother-in-law pushed me to visit the clinic for prenatal treatment when I was expecting my first child, when I did that I delivered safely and have a healthy baby……" (Lactating mother, Ssenyi landing site)

4.3.3 Effect of attitude and behaviour of health workers as an enabling factor on utilisation of maternal healthcare services.

Over (40.5%) of participants who acquired maternal healthcare services at the traditional birth attendants, could have been influenced by the attitude and behaviour of health workers at the health facilities. One of the mothers at Ssenyi landing site noted the disrespect and abuse of health care workers: by not caring for patients, she further said.

"The medical staff at a prenatal hospital doesn't care about the patients; for instance, if you go in the morning, they will question you if you sleep at home. They will inquire if you take lunch at work when you visit during the lunch hour.

Furthermore, they will inform you that they are closed when you arrive in the evening."

"I had moved a long distance on foot without even transport money and on reaching the health facility I waited for a long period of time to be attended to by the health workers approximately 8 hours, and by the time I was closer to be handled, it was late and the health workers were leaving. So it's better I get antenatal care services from the traditional birth attendants who are available any time." (Lactating mother, Nkombwe landing site)

One of the mothers from Nkombwe landing site when asked further about her using of the health centre for antenatal care stated that;

"I always go to the health facility because I'm afraid of being turned away when I need services, so I simply go there to get and fill out the card because if there is a problem during delivery, they won't accept you if you don't have a card. Otherwise, I could just use the traditional birth attendants because they are closer and more readily available." (Pregnant mother, Nkombwe landing site)

4.3.4 Effect of accessibility and availability of health facilities as an enabling factor on utilisation of maternal healthcare services.

4.3.4.1 Accessibility to health facilities on utilisation of maternal healthcare services.

Majority (68.2%) of the participants complained of the long distance to the health facilities. They further noted that;

"I was unable to obtain prenatal care when I was pregnant because I lacked the necessary transportation funds. As you can see, I live far away from the health facility as we don't have an antenatal care centre at our landing site yet taxis and boda bodas are very expensive modes of transport here. I thus made the decision to use my grandmother's traditional herbs." (Interviewed Lactating mother, Nkombwe landing site)

4.3.5 Impact of limited resources at health facilities as an enabling factor on utilisation of maternal healthcare services.

Twelve respondents (80.0%) noted that there are limited medicines at the health facilities when they go for antenatal care and the child care. One of the respondents said that;

"I went to the health facility to get medicine but all in vain well maybe it could have been the effect of COVID – 19 where transport was minimal, but also during my first pregnancy before the COVID - 19, I visited the health facility but also drugs were missing, so this made me skip medication timing and it affected me……."

Only 2 respondents (13.3%) attested that they received services at hospitals. The respondent from Kiyindi landing site stated that she had to move up to Mulago referral hospital to acquire the services. When asked why she moved all that far to acquire services she said that;

"I prefer acquiring antenatal care at the hospital though at a long distance because the health centres at the sites don't have enough medical equipment and have few staff to handle the large number of mothers."

4.4 Impact of need factors on utilization of maternal healthcare services at landing sites in Buikwe district.

Generally, there was a no significant relationship between the need factors and utilisation of maternal healthcare services (F = 0.327, P = 0.193). Individually, Tetanus vaccination was found as the need factor that significantly influenced the utilisation of maternal healthcare services (P = 0.017, OR = 13.676; CI = 0.326 – 574.250) while other need factors were not significant with utilisation of maternal healthcare services (Table 4.5).

Table 4.5: Need factors influencing utilization of maternal healthcare services.

	Anova		Bivariate analysis					
							95% C.I. for OR	
Need factors	**F**	**Sig.**	**B**	**S.E.**	**Sig.**	**OR**	**Lower**	**Upper**
	0.327	0.193						
Diagnosis			2.258	2.187	0.302	9.562	0.131	695.609
Tetanus vaccination			2.616	1.907	0.017*	**13.676**	**0.326**	**574.250**
Antenatal check-ups			-1.754	3.007	1.000	0.173	0.073	0.517
Antimalarial drugs			-20.659	1.040	0.998	0.000	0.003	0.056
Skilled birth			-1.468	2.602	0.573	0.230	0.001	37.781
HIV testing			18.697	8.812	0.998	1.317	0.518	3.119
Tablets for blood			1.211	3.397	1.000	3.358	1.377	8.001
Mosquito nets			-0.467	2.124	0.826	0.627	0.010	40.271
Fe supplements			-17.936	2.191	1.000	0.000	0.074	0.191
Blood check ups			16.896	2.191	1.000	2.177	1.055	6.428
Mama kit			-33.688	2.191	1.000	0.000	0.026	0.133
Health education			-17.940	4.264	1.000	0.000	0.045	0.102
General treatment			0.502	3.046	1.000	1.652	0.632	11.581
Sensitization			0.888	1.781	0.618	2.431	0.074	79.703
Nutrition			2.291	2.001	0.252	9.880	0.196	498.464

Child health	-18.932	9.736	0.998	0.000	0.012	0.154
Family planning	0.524	2.082	0.801	1.689	0.088	2.305
Immunization	-1.110	5.684	1.000	0.330	0.029	99.903

***= P< 0.05**

Furthermore, the study found out that participants who had not got tetanus vaccination were 6.799 times more likely to utilise maternal healthcare services than those who got the tetanus vaccination at a 95%CI (1.269 – 34.435) (Table 4.6).

Table 4.6: Multivariate analysis for need factors influencing utilization of maternal healthcare services.

				Reference category is; Ever used MHC services			
Variable	**Categories**	**N**	**%**	**df**	***P* – value**	**OR**	**95% CI**
Tetanus	No	28	29.8	1	0.025	**6.799***	**(1.269 - 36.435)**
vaccination	Yes	66	70.2	*ref*	*ref.*	*ref.*	*ref.*

= P< 0.05;** ***ref **= point of comparison**

However, during the collection of data and interaction with mothers, they provided other qualitative impacts of their need to utilise maternal healthcare services, one of the participants said that;

"Every pregnant woman should, in my opinion, visit the hospital to have her pregnancy confirmed. I too think that giving birth in a hospital is ideal. It has the power to save both the mother and the baby's lives." (Lactating Mother, Ssenyi landing site).

Other mothers responded negatively to their need for health facilities. When asked why health facilities were not needed the participants noted that;

"I don't need health facilities mostly those that provide maternal healthcare services because I have stopped giving birth, so I will not use them" (Mother of 3 children, Kiyindi landing site).

"I delivered well my first born, and second born at home therefore I don't see it as necessary to go for attending prenatal appointments." (Pregnant woman, Nkombwe landing site)

"I had no issues while I was pregnant. I wasn't nauseous or weak. There was no need for me to visit the hospital because I could carry on with my normal activities." (Mother of 3, Nkombwe landing site)

CHAPTER FIVE

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

Predisposing, enabling, and need factors that affect the use of maternal healthcare services at landing sites in the Buikwe district are among the findings discussed in this chapter.

5.1 Discussion

In Uganda, a sizable fraction of women doesn't seek appropriate antenatal care (ANC) and post-natal care (PNC) services, although several international and national efforts to encourage the use of maternal healthcare services. However, during the last 20 years, a tremendous improvement in institutional delivery has been seen. Uganda is required to enhance maternal healthcare in all three service utilisation areas (ANC, delivery care, and PNC), since these are directly associated to maternal mortality, in order to meet the Sustainable Development Goal (SDG) for maternal death, which is MMR < 70 per 100,000 live births by 2030.

The connection between risk, enabling, and need factors and the utilisation of three maternal healthcare services, skilled attendance at delivery, after birth care, and women usage of prenatal care at fish landing locations—was examined in this study. Predisposing, enabling, and need variables are significant determinants linked to the usage of maternal services in Uganda's Buikwe landing sites,

according to the multivariate analysis. The conceptual framework identified key individual factors influencing the usage of maternal services.

5.1.1 Predisposing factors influencing utilisation of maternal healthcare services at fish landing sites of Buikwe district.

Variables of predisposing many components are intricately interwoven and interdependent. Maternal health concerns and challenges can be evident as early as childhood in fishing villages. In fish landing areas, teen pregnancy and early marriage are widespread practises. For the predisposing factors some of the variables of age, education level and number of children were found to be insignificant in bivariate model with utilisation of maternal healthcare services while marital status of the mothers was significant with utilisation in the bivariate model (OR, 0.582; 95%CI: 0.163 – 2.082, $P < 0.05$) showing an association between marital status of women with utilisation of services. Results from a study by Ziblim et al. (2018) confirm that the use of maternal healthcare services and marital status are strongly correlated. This finding was not consistent with other similar studies of (Tolera *et al.,* 2020; Ndugga *et al.,* 2020; Somefun & Ibisomi, 2016) who found in their studies that statistically age, maternal occupation, level of education, number of children were influencing factors for the mother's use of maternal healthcare services. The difference in the factors for utilisation of maternal healthcare services could be attributed to different study area, different population and difference in the methodologies used in the studies. Marital status further became significant when adjusted for other variables in the multivariate analysis.

A multivariate analysis in the study found that, single women used maternal healthcare services at a higher rate than those who were married and divorced. This result agrees with research done in Malawi (Stewart and Hall, 2022). The results, however, did not agree with a research conducted in Rwanda (Rurangirwa *et al.,* 2017), which revealed that ladies who are single, divorced, widowed, or separated have a higher likelihood of underutilizing maternal healthcare than married women. Single women have more power over health-related decisions, which has an increasing impact on the use of maternal healthcare (Oh *et al.,* 2020; Joshi *et al.,* 2014; Rahman *et al.,* 2012; Birmeta *et al.,* 2013). It is assumed that the association between intimate partner violence and autonomy explains why women who divorce are more likely to have suffered abuse and violence in their relationships. According to research by Musa *et al.,* (2019) and Stewart and Hall (2022), abused women frequently lack autonomy, travel flexibility, and economic independence, all of which are associated with lower maternal healthcare usage. Studies show that women who had experienced abuse in the past were less likely to seek out services related to maternity healthcare (Dhar *et al.*, 2018, Meiksin *et al.,* 2015, Sipsma *et al.,* 2014). The outcomes corroborate these conclusions even more.

The research results also suggested that women's social standing in society had an impact on their choice to seek medical attention for pregnancy and delivery in rural regions (Omer et al., 2021). In Uganda, women have limited autonomy (decision-making authority over their own health, purchasing household goods, staying with relatives, and access to cash), which has an impact on how often they

use maternal health care (Mistry *et al.,* 2009). Because of their low social position, early marriage, several, closely spaced births, and domestic violence are just a few of the negative societal and cultural standards that women are especially susceptible to (Dennis *et al.,* 2012). In a similar vein, this research emphasised the role that spouses play in the choice to seek treatment. The interplay of the aforementioned gendered power dynamics has an impact on making decisions on ladies' access to and utilisation of maternal healthcare services. Women's ability to access services and make decisions on maternal health and healthcare, for example are constrained by men's responsibilities as providers (Elmusharaf *et al.,* 2015). A woman's autonomy is limited, her ability to bargain with her spouse is constrained, fertility rates are increased, and the likelihood of an undesired pregnancy is increased, all of which have a detrimental effect on maternal health and healthcare (Elmusharaf *et al.,* 2015).

The study also showed that women are prevented from deciding about their own health and wellness because of their long-standing dependence on males. Due to their lack of education, dependence on males, and limited autonomy, women are dependent on the family of their husband before or after pregnancy (Fawole & Adeoye, 2015). The survey also discovered that because of their husbands' financial difficulties, pregnant women were not given the appropriate diet and medicines. This implies that one of the primary variables may be impacting women's health is poverty or a lack of resources. One of the most crucial elements in ensuring a woman's health is a good, balanced diet both during pregnancy and

after giving birth. Maternal difficulties and negative impacts on a mother's health might result from inadequate and unbalanced nutrition (Martin *et al.,* 2015).

5.1.2 Enabling factors influencing utilisation of maternal healthcare services at fishing landing sites of Buikwe district.

The variables of mother's occupation, economic status, sensitisation about services, distance to facility and level of facility were found to be insignificant in bivariate model with utilisation of maternal healthcare services.

Father's occupation was significant with utilisation in the bivariate model (OR, 1.335; 95%CI: 0.059 – 8.348, $P < 0.05$) showing an association between father's occupation with utilisation of services by the women. In some places, maternal healthcare services are being linked to a partner's profession (Tsegay *et al.,* 2013). This finding was not consistent with a study in Ethiopia (Tolera *et al.,* 2022) who found women's occupation, walking time to facility and household income to have influence on their utilisation of maternal healthcare services.

The difference in the factors for utilisation of maternal healthcare services could be attributed to different study area, different population and difference in the methodologies used in the studies. Father's occupation further became significant when controlled for other variables in the multivariate analysis.

According to this study's multivariate analysis, women whose husbands were farmers had a higher likelihood of using maternal healthcare services than women whose husbands worked other jobs or were jobless. Because farmers often enjoy a higher standard of living than jobless spouses, they are better able to bear the cost

of using the service. Also, those whose husbands were fishermen, claim their men are not always available when needed since they always go for faraway island fishing and even spend months there minus providing any support to their families.

Movement of women may have an impact on skilled birth attendance, maternal illness, and death due to remote, difficult-to-access areas with minimal resources. Women often travel for work-related purposes, but some also do so frequently in circular routes between the fishing settlements and the mainland for maternal health-related reasons (Kwena *et al.,* 2020). Distance to the health facility was demonstrated to have one of the most significant relationships with the use of maternal healthcare following the qualitative contact with women at the landing site; women residing distant from the health facility had decreased likelihood of using maternal health. This finding is in line with published research; distance has long been acknowledged as a significant factor in determining the use of maternal healthcare services (Oh *et al.,* 2020; Sialubanje *et al.,* 2014; Lerberg *et al.,* 2014). In Kalangala district a fishing community, most public health facilities were far to reach by the service users whereby they had to travel up to the mainland to acquire services thus hindering their utilisation of services (Kwiringira et al., 2021). Long travel times between home and the medical facility were associated with lower use of maternity healthcare, trouble keeping ANC visits, and insufficient ANC, according to a theory-guided systematic analysis (Grand-Guillaume-Perrenoud *et al.,* 2021). Over 74.45% of the population of Uganda resides in rural regions, where getting around is challenging due to the majority of

the roads being dirt ones (World Bank, 2021). According to earlier studies, this aspect is further harmed by a lack of transportation and the associated expenditures (Tsawe *et al.,* 2015; Sialubanje *et al.,* 2014; Lerberg *et al.,* 2014).

One of the explanations given by the women for not utilising maternal health care both during and after their pregnancies was nurse attitudes. The majority of respondents never obtained maternal health treatment because: one respondent claimed "they behave badly"; another remarked "poor health workers' attitudes". Given the environment of our research regions, these responses were anticipated. According to a comparable study in Ghana, failing to treat patients with respect has a significant impact on how many people use maternal health care (Nachinab et al., 2019). Another study by Yadufashije & Samuel (2017) found that unprofessional behaviour on the part of health professionals may lead to a decline in the use of maternal health care. Even though most of the women in this study didn't use maternal healthcare services. Some made assumptions based on prior interactions with nurses, while others turned to data they got from people who had used maternal health care.

Utilisation of services is influenced by aspects of the health system such as personnel and service responsiveness, cost, and cost of services. The study revealed that the mothers are charged highly for the services thus denying them access to the maternal health services due to poor economic status of the mothers. Maternal health use in fishing communities is critically impacted by the limited access to medical facilities in rural regions, particularly the absence of emergency obstetric and neonatal care facilities. The study further found out that Ssenyi

landing site has only 1 government health facility at the level of HC II while Kiyindi landing site has 3 privately owned clinics and drug shops, yet Nkombwe doesn't have any health facility. This critical shortage of trained, skilled midwives and health facilities urges ladies to keep utilising Traditional Birth Attendants (TBA) services.

The choice of maternal healthcare is also influenced by cultural beliefs and customs. For instance, cultural beliefs and practises are a major determinant of birthplace choice among the Baganda of central Uganda. The majority of women choose to give birth at home, and just approximately 25% do so in a hospital (Kwagala, 2013). Ugandan women follow highly traditional birthing procedures and consider pregnancy to be an endurance test, and that maternal death is just a sad but common occurrence. According to a research done in the Ugandan district of Kiboga, women still exert a significant amount of authority and prestige during pregnancy and delivery, which they often exploit to elevate their position within the family and society (Rutaremwa *et al.*, 2015). Because of this, in certain Ugandan communities, women are viewed as strong and independent if they can give birth on their own. Even in this study, this cultural belief discourages women from obtaining professional maternal healthcare, as seen by the majority of women at the landing sites.

5.1.3 Need factors influencing utilisation of maternal healthcare services at fishing landing sites of Buikwe district

For the need factors some of the variables of after birth care and post-natal care were found to be insignificant in bivariate model with utilisation of maternal

healthcare services while seeking for tetanus vaccination was significant with utilisation in the bivariate model (OR, 13.676; 95%CI: 0.326 – 574.250, P < 0.05) showing an association between seeking for tetanus vaccination with utilisation of services by the women. This result did not match studies that discovered significant headache (Aregay *et al.*, 2014; Bitew *et al.*, 2016; Mugo *et al.*, 2015; Qureshi *et al.*, 2016), virginal bleeding (Tolera *et al.*, 2020) and high fever (Abosse & Woldie, 2010; Tolera *et al.*, 2020) to have influence on their use of maternal healthcare services. The difference in the factors for utilisation of maternal healthcare services could be attributed to different study area, different population and difference in the methodologies used in the studies. Seeking for tetanus vaccination further became significant when controlled for other variables in the multivariate analysis.

Multivariate analysis in the study found that, women who did not obtain the tetanus shot were more likely to seek maternal healthcare services compared to those who did. Mothers with a history of complications may be more likely to seek preventive maternal healthcare like Fe supplements, obstetric care, Human Immuno Virus (HIV) testing, and counselling among other services because they are more aware of the life-threatening condition. This may explain why women who don't have the tetanus vaccine don't seem motivated to use maternal healthcare services.

Like other population groups elsewhere, the health-seeking activity of women at the landing sites is influenced by personal beliefs, values, and attitudes towards health requirements. The use of unofficial health services is connected to views

and beliefs as well as the absence of health facilities. One participant, for instance, said, "Pregnancy is not a disease." With this philosophy, the participants did not understand why they should go to ANC since they were aware that they were not ill and that being pregnant did not need them to visit a medical institution. According to (Finlayson and Downe, 2013), participants evaluated pregnancy as a physically good state and saw minimal need to see a doctor when there was no perceived threat to their health (Heaman *et al.,* 2008).

ANC is crucial for preventing pregnancy-related health issues through education, research, assessment, and therapy, among other methods. Early pregnancy-related issue identification and prevention will not assist pregnant women who feel healthy since they are only likely to go to the hospital if they are ill.

5.2 Conclusions

The study looked at the factors that lead to, facilitate, and require the use of maternal healthcare services at landing sites in the district of Buikwe. The study's central hypothesis was that factors like marital status have an impact on how often women use maternal healthcare facilities, the father's line of work, and getting a tetanus shot. Although the free maternal health policy has recognised the use of maternal healthcare services, the level of utilisation is still insufficient because a variety of socio-demographic, health system, and individual issues continue to make it difficult for certain women to access the services at landing locations.

5.3 Recommendations

In addition to the policy, upstream strategies like social support for maternal health care utilisation should be offered to the less fortunate women in landing sites in Uganda to ensure appropriate use of maternal health services.

To the advantage of the expecting woman, the procedure and logistics that are used in healthcare institutions should be simplified and maintained. Maternal services that are not covered by the policy should be evaluated in order to reduce the cost burden of receiving maternal health services for expectant mothers.

Adequate carers should also be made available in facilities to support the ministry of health's implementation of focused maternal healthcare services. Since women would spend less time accessing maternal healthcare services and may free up space, this will help enhance the utilisation rate.

There should also be a plan in place to encourage women to finish at least their secondary education. In order to meet the minimum antenatal care visit requirement, set by the WHO of four visits as well as the Sustainable Development Goals 3 and 5, it is important to educate women, especially those who are younger, about the need of using maternal healthcare services, including ANC and prenatal care. This may be done in ANC meetings as well as through the different media outlets.

To prevent difficulties and fatalities, mothers who typically use TBA services should be urged to use the maternal healthcare services.

Healthcare workers should be advised to improve on their attitudes towards the women when they come to seek care.

5.4 Recommendations for further research

There is need for purely a qualitative study on the utilisation of maternal healthcare service at landing sites.

To assess the individual indicators of the need factors for maternal healthcare service utilisation.

5.5 Study limitations

The geographical location of the area was hard to reach with a rocky land scape and poor road network. Therefore, some the questionnaires were not easily followed up thus reduced response rate.

Because there was no monitoring of women's use, the questionnaires' subjective self-evaluations were the only source of information used. As a result, it's possible that the responses were merely knowledge-based and did not fully represent how mothers actually use healthcare services.

The use of self-reporting data caused response bias, which potentially affected the accuracy of the findings.

The study determined the self-reported utilisation, but how women are utilising the services at the health facilities needs further investigation.

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APPENDICES

Appendix 1

		Ssenyi	Kiyindi	Nkombwe
		n (%)	**n (%)**	**n (%)**
Age	20 - 24	14 (37.8)	10 (30.3)	17 (42.5)
	25 - 29	6 (16.2)	11 (33.3)	5 (12.5)
	30 - 34	10 (27.0)	6 (18.2)	4 (10.0)
	35 and above	7 (18.9)	6 (18.2)	14 (35.0)
Marital status	Single	7 (18.9)	10 (32.3)	5 (12.5)
	Married	30 (81.1)	20 (64.5)	35 (87.5)
	Other	0 (0.0)	1 (3.2)	0 (0.0)
Education level	None	14 (37.8)	3 (9.1)	2 (5.0)
	Primary	14 (37.8)	14 (42.4)	24 (60.0)
	Secondary	9 (24.3)	15 (45.5)	13 (32.5)
	Tertiary	0 (0.0)	1 (3.0)	1 (2.5)

QUESTIONNAIRE GUIDE FOR MOTHERS

Factors that affect access and utilization of maternal healthcare services at landing sites in Buikwe District.

Hello, my name is Namukasa Rashidah a student of Masters of Public Health Kyambogo University. I am interested in finding out the factors that affect access and utilization of maternal healthcare services at landing sites in Buikwe district.

SECTION A

Socio-demographic characteristics of mothers

Landing site ……

1. Age: 20-24Yrs ☐ 25-29 ☐ 30-34 ☐ 35 and above ☐
2. Marital status: Singl☐ ☐Married Others specify…….
3. a) Occupation

   Mother …….

   Husband……..

   b) Economic status.

   Good ☐ Average ☐ Poor ☐
4. Education level

   Primary ☐ Secondary ☐ Tertiary ☐ Non ☐
5. Number of children……

SECTION B: MATERNAL HEALTHCARE SERVICES AT LANDING SITES

1. Have you ever heard about maternal healthcare services?

Yes ☐ No ☐

2. How did you hear about these services?

……

Where do you seek for maternal health care services? And the distance?

……

Describe your opinion about health facilities?

Are they needed? Yes ☐ No ☐

Pros ……. Cons ……...

……. ……

……. ……

3. What kinds of maternal health services that are offered to mothers?

a. Pregnancy related;

Diagnosis ☐ Tetanus vaccination ☐ Routine antenatal check-ups ☐

Antimalarial drugs ☐ Skilled birth attendance ☐

Others specify……

b. Postnatal services;

Information about nutrition and breastfeeding ☐ Child health services ☐

Family planning services ☐ Others specify……

4. Have you ever used any of these services?

Yes ☐ No ☐

a. If yes, what was your motivation?

……

……

b. How did you benefit from them?

……

……

c. If no, why?

……

When are you planning to start using them?

……

5. Do you think that most women at this landing site know about these services? ☐

Yes ☐ No

Reasons;

……

……

6. Who do you think is the best service provider when it comes to deliveries and why?

Doctor ☐ Nurse/midwives ☐ Traditional birth attendants ☐

……

SECTION C: FACTORS AFFECTING UTLILISATION

1. Do you have health facilities at the landing site that offer maternal healthcare services? ☐

   Yes ☐ No

   a. Private ☐ Government ☐ or both private and government ☐

   How many……..…….

   b. And at what level? 2 ☐ 3 ☐ 4 ☐ others

      specify…….

2. Where did you give birth to your last child? And why?

   ……

   ……

3. What means of transport do you use for going to the health Centre?

   ……

   Would you use health facilities if they were closer? Yes ☐ No ☐

   Why? ……

4. Do you have any other concerns about maternal health services and how do u manage?

   ……

   ……