

# Exploring the Knowledge and Attitudes of Mothers on Utilisation of Maternity Services in Peri urban District of Central Uganda

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## Research Article

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# Abstract

Maternal health services entail the various activities delivered by health workers for pregnant mothers during pregnancy, delivery and after delivery. In Mende sub-county, out of about 1904 pregnant women, only 316 (17%) institutional deliveries were done with 592 having had at least one Antenatal care visit and only 225 reaching the fourth Antenatal care visit in Financial Year 2019/20. We therefore sought to explore the knowledge, attitudes of women and how they influenced maternal health services utilization in a rural subcounty of Wakiso district in Uganda.

## Methods

We conducted a cross sectional study using quantitative methods. The study was conducted at Show Mercy International Health Centre in Mende sub-county - Wakiso District from March to April 2016. We Purposively selected the study participants who were women aged 18–49 years that had ever given birth. A total of 70 participants were enrolled into the study. We open ended questionnaires to collect data from the study participants, quantitative data was collected, coded and analyzed using Microsoft excel windows 16 and SPSS version 16.0.

## Results

Of the 70 mothers, majority were aged 28–37 years (57.1%) with a mean age of 33.5 years, Majority (44.3%) had attained both Secondary followed by primary level education (34.3%). Majority of the women (45.7%) had some form of employment although a good number of them (28.6%) were peasants and casual labourers. We found out that 92.9% were knowledgeable about maternal health services. Furthermore, 46.9% of mothers preferred both Antenatal care and delivery services at the health facility.

## Conclusion

Majority of the mothers were knowledgeable about health facility maternal health services and reported their willingness to use them. The motivating factors for health facility deliveries were (1) healthy baby and pregnancy, (2) getting Mama Kits and mosquito nets, (3) accessing Prevention of Mother to Child treatment services and routine supplements. We therefore recommend further sensitization for HIV/AIDS testing during pregnancy but also maintain the supply of Mama Kits and mosquito nets for improved health facility deliveries.

# Background

Maternal health services entail the various activities delivered by health workers for pregnant mothers during pregnancy, delivery and after delivery (Onah et al., 2006). A wide range of services including health promotion, treatment, early detection of complications and appropriate referral (Jardine et al., 2021). Maternal health refers to the health of women during pregnancy, childbirth and the postpartum period.

While motherhood is often a positive and fulfilling experience, for too many women it is associated with suffering, ill-health and even death (Wigley et al., 2020).

Sustainable Development Goals (SDG) 3.1 aims to reduce the global maternal mortality ratio to less than 70 per 100,000 live births by 2030 (Yaya and Ghose, 2019). However, maternal mortality is 14 times higher than in the developed regions with 94% deaths occurring in low and middle income countries (Sundari, 2020). Globally, 810 women die daily due to birth or pregnancy related complications that are preventable. Majority of these deaths can be prevented by timely intervention of skilled health workers in an enabling environment. The commonest causes of maternal deaths are excessive hemorrhage, infections, high blood pressure, unsafe abortions (Organization, 2019). In sub-Saharan Africa that registered the highest maternal mortality ratios, only 52% had the recommended four Antenatal care (ANC) visits with 65% having at least one ANC visit yet only 61% of these had skilled birth attendance (Jacobs et al., 2018). Inadequate skilled professional care during pregnancy, birth and afterwards is the main obstacle to better health for mothers (Shah et al., 2018).

Ideally, every pregnant woman should be able to access a skilled professional care during pregnancy, child birth and postpartum (Jacobs et al., 2018). Women should be able to attend at least four antenatal care visits. All women should also be able to access institutional births in the presence of well-trained personnel and adequate equipment to handle complications (Chokani, 2021). WHO also recommends post-natal care at 24 hours, day 3, between day 7–14 and at 6 weeks (Organization, 2019).

According to Uganda's Annual Health Sector Performance Report for Financial Year 2020/21, institutional deliveries rose from 62% in the previous FY to 64% while the proportion of the mothers attending up to four Antenatal care visits rose from 42–48%. Wakiso district had 1,186,168 (59%) deliveries out of the expected 2,016,805 deliveries conducted at health facilities (Natukunda et al., 2020). In Mende sub-county, out of about 1904 pregnant women, only 316 (17%) institutional deliveries were done with 592 having had at least one ANC visit and only 225 reaching the fourth ANC visit in FY 2019/20 (*Wakiso District Health Offices, 2021*). However, there were no clear reasons for this disparity. The purpose of this study was therefore to explore the knowledge, attitudes of women and how they influenced maternal health services utilization in Mende Sub county, Wakiso District.

## Methods

We conducted a cross sectional study with quantitative approach in March- April 2016 at a Show Mercy International Health centre II located in peri urban Wakiso district in central Uganda. We purposively sampled 70 women of child bearing age (18–49 years) visiting the health facility. We administered open ended questionnaires that were imbedded in the android smartphones. A group of trained research assistants helped in this data collection exercise. Verbal informed consent was obtained from the study participants before data collection. The data was downloaded into Microsoft excel, coded and cleaned first before entry into the software. Univariate and bivariate descriptive analysis was done using SPSS program version 16.0.

We conveniently visited these women in their homes/residences. The study participants were from mainly four villages (Kaliiti, Serinya, Bakka, Kitooke) and a few others. All these are located in Mende Sub county which is predominantly peri-urban, comprised of 5 parishes and 25 villages with inhabitants carrying out several economic activities including agriculture, animal farming and small-scale business. Wakiso district is administratively divided into four municipalities, eight town councils, six sub counties and seven Health Sub Districts. These include Makindye Ssabagabo, Entebbe municipality, Kyadondo North, Kyadondo East, Busiro East, Busiro North and Busiro South (Fig. 1).

## Results

### Demographic characteristics of the respondents

Majority of the respondents were aged 28-37 years (57.1%), followed by 18-27 years (27.1%) (the mean age was 33.5 years). For education level achievement, majority had attained Secondary level (44.3%) followed by primary level (34.3%). Catholics formed the larger proportion (31,4%), followed by the Protestants and Pentecostals (22.9%). For employment, majority (45.7%) had some formal employment, 28.6% were peasants and casual labourers, while 22.9% were unemployed (Table 1).

### Table 1: Demographic characteristics of the respondents

<b>Variable</b>	<b>Frequency, n</b>	<b>Percentage (%)</b>
<b>Age (years)</b>		
18-27	19	27.1
28-37	40	57.1
38-49	11	15.7
<b>Education Level</b>		
Informal	7	10.0
Primary	24	34.3
Secondary	31	44.3
Tertiary	8	11.4
<b>Religion</b>		
Catholic	22	31.4
Protestant	16	22.9
Muslim	14	20.0
Pentecostal	16	22.9
Others	2	2.9
<b>Income Levels</b>		
None	16	22.9
Paid Employee	11	15.7
Casual Labourer	2	2.9
Business	21	30.0
Peasant	18	25.7
Others	1	2.8
<b>Total</b>	<b>70</b>	<b>100.0</b>

### **Level of knowledge concerning maternity services**

In our study, we found out that 65/70 (92.9%) were knowledgeable about maternity services while only 7.1% were ignorant about them. Concerning the package of maternity services, only 4.3% understood it in its entirety (ANC, delivery and postnatal care) with majority (48.6%) defining it as ANC and delivery

services, followed by 20% who understood it as ANC only. Concerning the attitude of women to maternity services, majority (46.9%) preferred only ANC and delivery, 20.3% for either ANC or Delivery, 10.9% for the full range of services while only 1.6% preferred postnatal services alone (Table 2).

### **Motivating factors for maternity services**

The mothers' reasons for their preference for maternity services included; healthy mother and baby (40.3%), healthy baby and pregnancy (19.4%), getting Mama Kits and mosquito nets (12.9%), and treatment including PMTCT amongst routine supplements (27.4%) (Table 2).

### **Respondents' attitude towards utilising maternity services**

Of the 70 respondents, 91.2% liked to attend maternity services while 8.8% did not like attending. This is close to the 89.9% felt comfortable with using them while 10.1% felt uncomfortable. The main reasons for non-attendance of maternal health services included; Reluctance and previous successful home delivery (50 %), poverty and availability of TBAs (16.7%), fear of being diagnosed with HIV, rude midwives and laziness, poverty and rude midwives (33.3%) (Table 2).

### **Table 2: Knowledge levels and attitude towards maternity services**

Variable	Frequency, n	Percentage (%)
<b>Knowledge about maternity services</b>		
Yes	65	92.9
No	5	7.1
<b>Definition of maternity packages</b>		
ANC	14	20.0
ANC and Delivery	34	48.6
ANC, Delivery, PNC	3	4.3
Delivery	6	8.6
No Idea	3	4.3
Not answered	10	14.3
<b>Interest for Maternity services</b>		
Yes	62	88.6
No	6	8.6
TBA assisted delivery.	2	2.8
<b>Motivating factors for maternity services access</b>		
Healthy mother and baby	25	40.3
Getting Mama Kits and mosquito nets	08	12.9
Healthy baby and pregnancy	12	19.4
Treatment including PMTCT amongst routine supplements	17	27.4
<b>Factors barring access to maternity services</b>		
Reluctance and previous successful home delivery	3	50
Poverty and availability of TBAs	1	16.7
Fear of being diagnosed with HIV, rude midwives and laziness, poverty and rude midwives	2	33.3
<b>Comment on quality of maternity services</b>		
Comfortable	62	88.6
Uncomfortable	7	10.0

<b>Willingness to seek care from Traditional Birth Attendants</b>		
Yes	14	20.0
No	53	75.7
Not Sure	2	2.9

## **Discussion**

The respondents mainly were aged 28–37 years catering for 84.2% with at least secondary education (44.3%). The common religion of affiliation was catholic and majority were in business sector. Majority of the respondents had high level of awareness (92.9%) although only 4.3% knew the entire package of maternity services (ANC, deliveries and PNC). Majority of the respondents (88.6%) reported interest in maternity services although 2.8% reported to opt for TBAs. Having a healthy baby, getting mama kit were reported as key motivating factors for health facility deliveries. Notably fear of being diagnosed with HIV, rude midwives and laziness were reported as barring factors for health facilities' deliveries.

The age (28–37 years) was prevalent and it can be attributed to more active reproductive age group for women. This is in line with Uganda's population distribution which also have majority of the population below the age of 30 years (UBOS, 2018). This is in line with another study conducted in Uganda by Sserwanga et al on contraceptives use which found that the age group was 15–32 years of age (Sserwanja et al., 2021). Many had accessed at least secondary education. This could be attributed to the fact that this was a peri urban location with many women in the informal setting but with some education achievement to help them communicate and transact business. Furthermore, this age group could have benefited from government of Uganda universal primary and secondary education which could have given majority chance to go to school. Our study findings are in line with a previous study done in Uganda where maternal child health services was affected by the education level and majority had only primary and secondary education (Nankinga and Aguta, 2019). There was a fairly almost equal distribution of religion amongst the Protestants, Pentecostals and Muslims with Catholics being the most dominant of all. This also aligns with the Uganda's socio-demographic distribution by religion (UBOS, 2019). Our respondents mostly engaged in businesses and this could be explained by the nature of the area which neighbours Uganda's capital city, Kampala where business is a priority. Wakiso District is also among the most enterprising and categorized as central business districts in Uganda and this could explain this trend we observed (Okure et al., 2022). In regard to the income status, 45.7% of the respondents had some form of sustained income generating activity while the remaining majority 54.3% had none or were casual labourers. This appears to have an influence on the knowledge and utilisation of maternity services since the poor would not be able to afford maternal health services and have access to information for example via radio. One of the reasons the respondents gave for none use of the services was poverty.

The greatest portion (92.9%) of the respondents was aware about the existence of maternity services. However, the majority of them understood it as only consisting of ANC and delivery (48.6%) while 20.6% only to be ANC. Very few (4.6%) understood it in the fullness of all three activities and only 1.4% was found to know PNC, most mothers were unaware of these services or their importance. These knowledge gaps could have a contribution to why there is still low uptake of the services, this is in line with a study conducted by Beraki et al that showed that there was low level of awareness on postnatal services among women (Beraki et al., 2020). Asweto et al also found out that participants identified with lack of knowledge and awareness of the community and access to information on maternal health care issues as barriers to use maternity care (Asweto et al., 2014). The low awareness of postnatal care (4.6%) differs from the findings of who found that majority (84.39%) of the mothers knew they had to receive a post-natal care services (Asweto et al., 2014).

Our study found out that majority liked to attend maternal health services (91.2%) while 89.9% felt comfortable about using them. Some of the reasons shared by the mothers for non-utilisation of the services included; high service costs, rude health workers, reluctance by the mothers to go to Health facilities, long distance from the Health facilities, unpreparedness at time of labor, ignorance and lack of support from the spouse, previous successful home delivery and availability of TBAs. This is an agreement with the findings from (Downe et al., 2016) who found that older women who had had more pregnancies successfully delivered from home saw no need for maternity services and that mothers with healthy pregnancies were reluctant to seek these services. The reasons expressed by mothers in this study are also in agreement with (Yalem and Miguel, 2010) study in which mothers gave reasons such as; economic and transport problems, lack of awareness on the advantages of maternal health care, perceived poor skills of the health service providers, the distance to the health facility and the short onset of labour.

A noteworthy 20.3% of the respondents preferred TBA services to skilled health worker provided maternity services with some of the reasons pointed out as previously explained, but also mentioned that they were more affordable and caring. This is in agreement with (Yalem and Miguel, 2010) concerning reasons for mothers' preference for TBAs who revealed that they were more accepted by the community because of their experience and privacy of the labouring mother. (Njiku et al., 2017) revealed that 33% of mothers receiving ANC did so from untrained personnel. 90% with a favourable view and feelings towards maternity services were more likely to use the maternity services thus showing that the mothers' attitudes towards maternity services, if positive increases utilisation of these services. 95.7% were very likely to use the services when they had knowledge of their importance. This is in agreement with (Fotso, 2006) whose study showed that if the influence of women's perceived quality of care was strong in the expected direction for women with a high perception, they were more likely to deliver in an appropriate health facility compared to their counterparts with middle or low perception. However the findings of this study contradicted with that of (Asweto et al., 2014) where women's perceived quality of care had no statistical significance to the utilization of antenatal care services. (Asweto et al., 2014) study also showed that most mothers had a positive perception toward post-natal care services while, mothers in a rural area

possessed a negative perception, which was found to be true in the rural area of Wakiso under study, particularly in regard to the attitude towards PNC, as the women saw no need for it.

Our study is the first study to be conducted in Mende Sub county in Wakiso district on this important topic and we bring facts and key observations on the motivating and barring factors for maternity services in this area. We also visited women in their residences and got real life information on their level of awareness on maternity services and this represented real-life knowledge levels and attitude towards maternity services access. We also worked with women who are always involved in accessing maternity services and therefore we present real needs. Our study also had limitations; first we had a small sample size. This was an undergraduate student's research project with minimal resources and this why we did a small sample size. Secondly, we only conducted quantitative study and we could have missed out a lot of explanations on their choices. Third, we also did not use a standard pretested knowledge assessment tool and this could have limited the data variables we collected. Furthermore, we did not conduct multiple logistic regression that would help us to understand the statistically significant variables to maternity services access in this area. Lastly, this study was conducted in a small area and the findings may not be representative of a wider community.

## **Conclusion**

We found high level of knowledge on maternity services although low awareness on the maternity services packages and positive attitude towards seeking maternity services. Safety of the baby, mosquito nets and mama kits were reported as key motivating factors for maternity services utilisation. We also found out that rude health workers and being found to be HIV/AIDS positive would limit a woman from going for maternity services. There is still need to increase awareness of the full range of services offered in maternity and their importance to the mothers, children's and family's health such that there can be an upscale of utilisation when they understand the content and benefits to their lives. We recommend a robust qualitative study to unearth the sediments to utilization of maternity services in this area.

## **List Of Acronyms**

**ANC** Ante-natal care

**HIV** Human Immune-deficiency virus/Acquired Immune Deficiency syndrome

**KDHS** Kenya Demographic Health Survey

**PNC** Post-natal care

**TBA** Tradition Birth Attendant

**WHO** World Health Organization

# Declarations

## Ethical considerations

The University did not have research ethics committee by 2016 instead a department would review and approve research projects for undergraduate students. We therefore obtained approval from Islamic University in Uganda Faculty of management studies. An introductory letter was offered by the department introducing the research team to the study site (Show Mercy International health centre II). The study participants offered verbal informed consent after the purpose of the study was clearly explained to them. Participation was strictly voluntary and participants could withdraw at any time if they so wished. We maintained confidentiality of the results by using codes in data collection, analysis and interpretation of the results. Furthermore, the data we collected was kept under lock and key with only the corresponding author having access to this data. We also translated the tools in Luganda using an expert person and this helped the study participants appreciate the content of the study and questions. We also trained research assistants such that they would collect robust data.

## Consent to publish

Not applicable

## Availability of data and materials

The data materials are readily available and can be accessed by contacting the corresponding author Ms. Janet Nalutaaya; Email: [jnalutaaya@gmail.com](mailto:jnalutaaya@gmail.com)

## Competing Interests

The authors declare no competing interests

## Funding

There was no funding allocate for study. The corresponding author mobilized personal resources to execute this project to the end as it was a requirement for the award of bachelors' degree of Health Services Management of Islamic University in Uganda.

## Authors' Contributions

JN; Conceptualized the study, developed the protocol, processed administrative clearances, collected data, analysed and developed the first draft of the manuscript. AWW; Mentored JN, reviewed and improved the manuscript draft. All the authors reviewed and approved the final version of the manuscript.

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## Figures

