

# Exploring the Knowledge and Attitudes of Mothers on Utilisation of Maternity Services in Peri urban District of Central Uganda. A Cross-sectional Study.

Janet Nalutaaya<sup>a,1</sup>, Abel Wilson Walekhwa<sup>b,c</sup>

<sup>a</sup> Faculty of Health Sciences, Uganda Martyrs University, P.O BOX 5498, Kampala (Uganda).

<sup>b</sup> School of Public Health, Makerere University, P.O BOX 7072, Kampala (Uganda).

<sup>c</sup> School of Veterinary, Animal Resources, Makerere University, P.O BOX 7062, Kampala (Uganda).

## Abstract



### Background

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, and attitudes of women and how they influenced maternal health services utilization in a rural sub-county 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. A total of 70 participants were enrolled in the study. We used open-ended questionnaires to collect data from the study participants, quantitative data were collected, coded, and analyzed using Microsoft excel windows 16, and SPSS version 16.0.

### Results

Of the 70 mothers, the 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%). The 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

The 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, and (3) accessing Prevention of Mother to Child treatment services and routine supplements.

### Recommendations:

Further sensitization for HIV/AIDS testing during pregnancy but also maintain the supply of Mama Kits and mosquito nets for improved health facility deliveries.

Email: [jnalutaaya@gmail.com](mailto:jnalutaaya@gmail.com) Date submitted: 02<sup>nd</sup> /06/2022 Date accepted: 07<sup>th</sup> /06/2022

## 1 Background

Maternal health services entail the various activities delivered by health workers for pregnant moth-

ers during pregnancy, delivery, and after delivery (Onah *et al.*, 2006). A wide range of services includes health promotion, treatment, early detec-

tion 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% of deaths occurring in low and middle-income countries (Sundari, 2020). Globally, 810 women die daily due to birth or preventable pregnancy-related complications. The majority of these deaths can be prevented by the timely intervention of skilled health workers in an enabling environment. The commonest causes of maternal deaths are excessive hemorrhage, infections, high blood pressure, and unsafe abortions (Organization, 2019). In sub-Saharan Africa which 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 afterward is the main obstacle to better health for mothers (Shah *et al.*, 2018).

Ideally, every pregnant woman should be able to access skilled professional care during pregnancy, childbirth, 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 days 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% to 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 the 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 reached 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, and attitudes of women and how they influenced maternal health services utilization in Mende Sub-county, Wakiso District.

## 2 Methods

### Study design:

We conducted a cross-sectional study with the quantitative approach in March- April 2016 at a Show Mercy International Health center II located in the peri-urban Wakiso district in central Uganda.

### Setting:

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.

### Participants:

We conveniently visited these women in their homes/residences.

### Sample size:

We purposively sampled 70 women of childbearing age (18- 49 years) visiting the health facility. We administered open-ended questionnaires that were embedded in the android smartphones.

### Data collection:

A group of trained research assistants helped in this data collection exercise. Verbal informed consent was obtained from the study participants before data collection.

### Statistical methods :

The data was downloaded into Microsoft excel, and coded and cleaned first before entering into the software. Univariate and bivariate descriptive analysis was done using SPSS program version 16.0.

### 3 Results:

#### Demographic characteristics of the respondents

The 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, the 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, the majority (45.7%) had some formal employment, 28.6% were peasants and casual labourers, and 22.9% were unemployed (Table 1).

#### 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).

#### 4 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).

#### 5 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).

### 6 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 the majority were in the business sector. The majority of the respondents had a high level of awareness (92.9%) although only 4.3% knew the entire package of maternity services (ANC, deliveries, and PNC). The majority of the respondents (88.6%) reported interest in maternity services although 2.8% reported opting for TBAs. Having a healthy baby, and getting a mama kit were reported as key motivating factors for health facility deliveries. Notably, fear of being diagnosed with HIV, rude midwives, and laziness was reported as barring factors for health facilities' deliveries.

The age (28-37 years) was prevalent and it can be attributed to the more active reproductive age group for women. This is in line with Uganda's population distribution which also has the 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 contraceptive 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 educational achievement to help them communicate and transact business. Furthermore, this age group could have benefited from the government of Uganda's universal primary and secondary education which could have given the majority chance to go to school. Our study findings are in line with a previous study done in Uganda where maternal child health services were affected by the education level and the 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 Uganda's socio-demographic distribution by religion (UBOS,

**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>

**Table 2. Knowledge levels and attitude towards maternity services**

<b>Variable</b>	<b>Frequency, n</b>	<b>Percentage (%)</b>
<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

**Table 3. Knowledge levels and attitude towards maternity services**

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

2019). Our respondents mostly engaged in business 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 a central business district in Uganda and this could explain this trend we observed (Okure *et al.*, 2022). Regarding 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 influence the knowledge and utilization 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 no use of the services was poverty.

The greatest portion (92.9%) of the respondents was aware of 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% were 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 a low level of awareness of postnatal services among women (Beraki *et al.*, 2020). Asweto *et al.*,(2014) also found out that participants identi-

fied with lack of knowledge and awareness of the community and access to information on maternal health care issues as barriers to using maternity care (Asweto *et al.*, 2014). The low awareness of postnatal care (4.6%) differs from the findings of those who found that the majority (84.39%) of the mothers knew they had to receive post-natal care services (Asweto *et al.*, 2014).

Our study found 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-utilization of the services included; high service costs, rude health workers, reluctance by the mothers to go to Health facilities, a 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 in 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's, 2010) study in which mothers gave reasons such as; economic and transport problems, lack of awareness of 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 workers who 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 utilization of these services. 95.7% were very likely to use the services when they knew 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 the 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 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) the 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 regarding 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 of maternity services and this represented real-life knowledge levels and attitudes 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 is why we did a small sample size. Secondly, we only conducted a quantitative

study and we could have missed out on a lot of explanations of their choices. Thirdly, 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 the country.

## 7 Conclusion

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

## Acknowledgements:

We would like to thank the Faculty of management studies at Islamic University in Uganda, Show Mercy International leadership, and the Medical department for all the assistance rendered to us in the compilation and completion of this report. Special thanks to our mentor (supervisor) Mr. Awogbemi Felix for his continual support, guidance, and patience in the compilation of the final report.

## A References:

- 1) ASWETO, C. O., ALUOCH, J., OBONYO, C. & OUMA, J. 2014. Maternal Autonomy, Distance to Health Care Facility and ANC Attendance Findings from Madiany Division of Siaya County, Kenya. <https://doi.org/10.12691/ajphr-2-4-5>
- 2) BERAKI, G. G., TEFAMARIAM, E. H., GEBREMICHAEL, A., YOHANNES, B., HAILE, K., TEWELDE, S. & GOITOM, S. 2020. Knowledge

on postnatal care among postpartum mothers during discharge in maternity hospitals in Asmara: a cross-sectional study. *BMC pregnancy and childbirth*, 20, 1-10. <https://doi.org/10.1186/s12884-019-2694-8> PMID:31906883 PMCid:PMC6945610

3) CHOKANI, J. 2021. Factors associated with non-institutional births in the Shiselweni region of Swaziland.

4) DOWNE, S., FINLAYSON, K., TUNÇALP, Ö. & GÜLMEZOĞLU, A. M. 2016. Factors that influence the uptake of routine antenatal services by pregnant women: a qualitative evidence synthesis. *The Cochrane Database of Systematic Reviews*, 2016. FOTSO, J.-C. 2006. Child health inequities in developing countries: differences across urban and rural areas. *International journal for equity in health*, 5, 1-10. <https://doi.org/10.1002/14651858.CD012392> PMCid:PMC6457942

5) JACOBS, C., MICHELO, C. & MOSHABELA, M. 2018. Why do rural women in the most remote and poorest areas of Zambia predominantly attend only one antenatal care visit with a skilled provider? A qualitative inquiry. *BMC health services research*, 18, 1-9. <https://doi.org/10.1186/s12913-018-3212-9> PMID:29871624 PMCid:PMC5989442

6) JARDINE, J., RELPH, S., MAGEE, L. A., VON DADELSZEN, P., MORRIS, E., ROSS-DAVIE, M., DRAYCOTT, T. & KHALIL, A. 2021. Maternity services in the UK during the coronavirus disease 2019 pandemic: a national survey of modifications to standard care. *BJOG: An International Journal of Obstetrics & Gynaecology*, 128, 880-889. <https://doi.org/10.1111/1471-0528.16547> PMID:32992408

7) NANKINGA, O. & AGUTA, D. 2019. Determinants of Anemia among women in Uganda: further analysis of the Uganda demographic and health surveys. *BMC Public Health*, 19, 1-9. <https://doi.org/10.1186/s12889-019-8114-1> PMID:31888579 PMCid:PMC6937990

8) NATUKUNDA, B., MUSOKE, D., KICONCO, A., MUGAMBE, S., ATUHAIRWE, C., TAREMWA, I. M. & NANYINGI, M. 2020. Maternal Health Care Seeking Behavior of Peri-Urban Women With Disability in Busiro South, Wakiso District, Uganda: a Community Based Study. <https://doi.org/10.21203/rs.3.rs-41854/v1>

9) NJIKU, F., WELLA, H., SARIAH, A. & PROTAS, J. 2017. Prevalence and factors associated with late antenatal care visit among pregnant women in Lushoto, Tanzania. *Tanzania Journal of Health Research*, 19. <https://doi.org/10.4314/thrb.v19i3.4>

10) OKURE, D., SSEMATIMBA, J., SSERUNJOGI, R., GRACIA, N. L., SOPPELSA, M. E. & BAINOMUGISHA, E. 2022. Characterization of Ambient Air Quality in Selected Urban Areas in Uganda Using Low-Cost Sensing and Measurement Technologies. *Environmental Science & Technology*. <https://doi.org/10.1596/1813-9450-9512>

11) ONAH, H. E., IKEAKO, L. C. & ILOABACHIE, G. C. 2006. Factors associated with the use of maternity services in Enugu, southeastern Nigeria. *Social science & medicine*, 63, 1870-1878. <https://doi.org/10.1016/j.socscimed.2006.04.019> PMID:16766107

12) ORGANIZATION, W. H. 2019. Maternal mortality: evidence brief. World Health Organization.

13) SHAH, R., REHFUESS, E. A., PAUDEL, D., MASKEY, M. K. & DELIUS, M. 2018. Barriers and facilitators to institutional delivery in rural areas of Chitwan district, Nepal: a qualitative study. *Reproductive health*, 15, 1-13. <https://doi.org/10.1186/s12978-018-0553-0> PMID:29925398 PMCid:PMC6011343

14) SSERWANJA, Q., MUSABA, M. W. & MUKUNYA, D. 2021. Prevalence and factors associated with modern contraceptives utilization among female adolescents in Uganda. *BMC women's health*, 21, 1-7. <https://doi.org/10.1186/s12905-021-01206-7> PMID:33568124 PMCid:PMC7877106

15) SUNDARI, T. 2020. The untold story: how the health care systems in developing countries contribute to maternal mortality, Routledge. <https://doi.org/10.4324/9781315231020-14>

16) UBOS. 2018. Infant Mortality and life expectancy in selected districts [Online]. UBOS website: UBOS. Available: <https://www.ubos.org/exploration/e-statistics/25/> [Accessed 22nd April 2021 2021].

17) UBOS 2019. Mapping the Spatial Distribution of Poor Households and Child Poverty Based on Data from the 2016/17 Uganda National Household Survey and the 2014 National Housing and Population Census.

18) WIGLEY, A., TEJEDOR-GARAVITO, N., ALEGANA, V., CARIOLI, A., RUKTANONCHAI, C. W., PEZZULO, C., MATTHEWS, Z., TATEM, A. & NILSEN, K. 2020. Measuring the availability and geographical accessibility of maternal health services across sub-Saharan Africa. *BMC medicine*, 18, 1-10. <https://doi.org/10.1186/s12916-020-01707-6> PMID:32895051 PMCid:PMC7487649

19) YALEM, T. & MIGUEL, S. 2010. Determinants of antenatal care, institutional delivery and skilled birth attendant utilization in Samre Saharti District,

Tigray, Ethiopia. Tigray, Ethiopia, Umea University Sweden.

20) YAYA, S. & GHOSE, B. 2019. Global inequality in maternal health care service utilization: implications for sustainable development goals. *Health Equity*, 3, 145-154. <https://doi.org/10.1089/heq.2018.0082> PMID:31289773 PMCID:PMC6608688

## **B Publisher details:**

**Publisher: Student's Journal of Health Research (SJHR)**  
**(ISSN 2709-9997) Online**  
**Category: Non-Governmental & Non-profit Organization**  
**Email: [studentsjournal2020@gmail.com](mailto:studentsjournal2020@gmail.com)**  
**WhatsApp: +256775434261**  
**Location: Wisdom Centre, P.O.BOX. 148, Uganda, East Africa.**

