

Health facility-related factors associated with the use of native medicine during pregnancy among pregnant mothers at Lubaga Hospital. A cross-sectional study.

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ABSTRACT

Background: The use of native medicine among pregnant women, despite having accessible and affordable antenatal care, is alarming, yet this could compromise both maternal and fetal health outcomes. This study assessed health facility-related factors associated with the use of native medicine during pregnancy among pregnant mothers attending the antenatal clinic at Lubaga Hospital, Kampala District.

Methods: A cross-sectional study design employing a quantitative method was used to collect data among pregnant mothers attending the antenatal clinic at Lubaga Hospital. In 6 days, 45 respondents were sampled using a simple random sampling technique. Data collected using structured questionnaires was analyzed by microsoft excel (2016) program, and findings were presented in the form of tables, graphs, and pie-charts.

Results: Out of 45 respondents; 57.8% were aged 18–28 years, 42.2% were Catholics, 33.3% were Protestants, while 11.1% were Muslims. Over half, 51.1% of mothers were formally employed, 44.5% had attained secondary education, 22.2% had higher education, while 11.1% had no formal education. The majority (73.3%) of the respondents reported less than 30 minutes waiting time at the health facility, (84.4%) reported that health workers were always present, (64.4%) rated the facility as fairly clean, (57.8%) found the opening hours convenient, while (88.9%) reported that drugs were available. However, (62.2%) took 30 minutes to 1 hour to reach the nearest facility.

Conclusion: The findings suggest that while the health facility provides high-quality and reliable services, characterized by short waiting times, consistent staff presence, high drug availability, physical accessibility remains a significant challenge, as the majority of mothers still face a substantial travel time to reach the health facility.

Recommendation: Mothers should attend scheduled ANC visits consistently to monitor pregnancy progress and receive timely medical interventions. Nurses should explain how hospital medicine complements safe herbal practices, reducing potential risks to both mother and baby.

Keywords: Traditional Medicine, Antenatal clinic, Lubaga Hospital, Omugino.

BACKGROUND

Native medicine encompasses the utilization of indigenous plant-based treatments to prevent or address various ailments (Chaachouay & Zidane, 2024). These remedies, derived from roots, leaves, bark, seeds, or flowers, form an integral part of traditional healthcare systems and are widely regarded as natural alternatives to conventional medicine (Ozioma & Chinwe, 2019).

Globally, an estimated 75% of pregnant women rely on native or herbal medicine, particularly in areas where access to modern healthcare services is limited. (Fayiah et al., 2024). Many of these women resort to native remedies to manage pregnancy-related conditions such as nausea, back pain, and stress.

In Africa, pregnant women depend on native medicine for their healthcare needs, driven by factors such as



cultural beliefs, affordability, and accessibility. However, these women later experience adverse effects, including gastrointestinal distress, dizziness, and high blood pressure due to overdosing or combining multiple remedies.

In East Africa, studies indicate that 64% of pregnant women use native medicine, with the prevalence varying by country and region. (Fukunaga et al., 2020). Inconsistent use of such traditional remedies may superimpose such complications, such as maternal fluid loss or fetal distress (Mudonhi & Nunu, 2022), often resulting from various concussions, inappropriate dosing, or interactions with hospital medicine.

In Uganda's capital, Kampala, native medicine usage is even more widespread, with up to 70% of pregnant women relying on traditional remedies due to their affordability and accessibility. (Asiimwe & Nakasolo, 2024). Commonly used native remedies include aloe vera, "omusisa," and "omugino," which are often employed to manage conditions such as anemia, nausea, and fatigue. This study aimed to determine health facility-related factors associated with the use of native medicine during pregnancy among pregnant mothers attending the antenatal clinic at Lubaga Hospital, Kampala District.

METHODOLOGY

Study Design and Rationale

The study utilized a cross-sectional study design, employing quantitative methods of data collection. A cross-sectional design was appropriate as it allowed data collection at a specific point in time, providing an overview of the study population without the need for follow-up.

Study Setting

This study was conducted at Lubaga Hospital, located in Lubaga Division, Kampala District, Uganda. Lubaga Hospital is a private, not-for-profit health facility under the Uganda Catholic Medical Bureau. It is one of the oldest and busiest hospitals in Kampala and is situated about 5 kilometers from the city center. The hospital provides a wide range of services, including antenatal care, postnatal care, outpatient and inpatient services, immunization, and family planning. On average, the hospital attends to over 300 pregnant women per month in its antenatal clinic. The geographical coordinates of Lubaga Hospital are 0°18'11.0"N, 32°33'35.0"E.

Study Population and Rationale

The study targeted pregnant women attending antenatal care at Lubaga Hospital, Kampala District. This

population was selected because it is directly relevant to the study's objective.

Sample Size Determination

The sample size was calculated using the formula developed by Kish and Leslie (1965), given by: $n = \frac{z^2 pq}{d^2}$

Where;

n is the sample size required

P is the estimated proportion of the population with the characteristics of interest

p= 3%, which was equivalent to 0.03.

d=0.05 was the acceptable error of estimation at 95% confidence interval

Z was the confidence interval at 95% =1.96

Therefore

$$n = \frac{z^2 p(1-p)}{d^2} = 1.96^2 * 0.03(1-0.03) / (0.05)^2$$

$$n = 44.7126224$$

$$n = 45 \text{ respondents}$$

Therefore, 45 pregnant women participated in the study.

Sampling Procedure

A simple random sampling method was used. This method was chosen because it ensured that the sample was a representative of the study population and reduced bias among study respondents. To obtain the required study participants, 50 papers of the same size and color were prepared, and 45 of these were labelled **YES**, and the remaining 5 papers remained unlabeled. These were put in the same box and mixed up thoroughly, and after each respondent was requested to pick only one paper without putting it back in the box. Only respondents who picked papers labelled with **YES** participated in the study. This process took 6 days while sampling 8 respondents to cover a total of 45 respondents.

Inclusion Criteria

Pregnant women attending antenatal care at Lubaga Hospital were present at the time of data collection.

Exclusion Criteria

Pregnant women attending antenatal care at Lubaga Hospital, who consented to participate in the study but withdrew along the way to continue. Those who were in critical condition.

Independent Variables

Health facility-related factors.

Dependent Variable

Use of native medicine among pregnant women



Research Instruments

Structured questionnaires were used. The questionnaire consisted of four sections: demographic data, individual-related factors, health facility-related factors, and social and cultural factors contributing to the use of native medicine in pregnancy at Lubaga Hospital. The illiterate respondents were considered, as the questions were translated into the Luganda language. Each section contained closed-ended questions to objectively assess the pregnant women's perspectives.

Data Collection Procedure

Upon proposal approval, an introductory letter from the principal of St. Michael Lubaga Hospital Training Schools was obtained and used to seek permission from the administration of Lubaga Hospital, followed by direction and introduction to the person in charge of the maternity ward. The purpose of the study was explained to the in-charge and the pregnant women. Data was collected through guided interviews from eligible respondents within six days. Eight pregnant women were sampled, obtaining 45 respondents in 6 days. After a clear explanation of the study, informed consent was sought from selected respondents, who were assured of confidentiality.

Data Management and Analysis

Data Management

After each day of data collection, every questionnaire was checked for completeness and accuracy, and the collected data were coded and cleaned before analysis. Completely filled questionnaires were kept in a lockable cabinet with limited access to ensure maximum safety.

Data Analysis

Data was analyzed manually, and the findings were entered into the Microsoft Excel (2016) program. Data was then presented in the form of tables, graphs, and pie charts, and narratives using descriptive analysis.

Quality control Validity

Questions were set according to study objectives, ensuring that every question set aligned with the intentions of the study topic. This helped to measure the accuracy of the results within the study, facilitating the formulation of proper interventions.

Reliability

The data collection tool was pre-tested at Nsambya Hospital on 10 pregnant women before the data collection tools were used at the study site to ensure consistency and dependability of the research instruments, and in case any corrections were found, final editing was done from there and then before losing contact with respondents.

Ethical Considerations

After the approval of the proposal by the Chairperson of the Research Committee (IRC), an introductory letter from the principal of St. Michael Lubaga Hospital Training Schools was obtained. This was used to seek permission to carry out the study at Lubaga Hospital. The Hospital Director, in charge of the antenatal ward, gave a green light to commence the study. Respondents were briefed on the purpose of the study, after which written informed consent was obtained from each respondent. The anonymity and confidentiality of the respondents were ensured at all stages of data collection and analysis.



RESULTS

Demographic data of the respondents

Table 1: Shows demographic data of the respondents

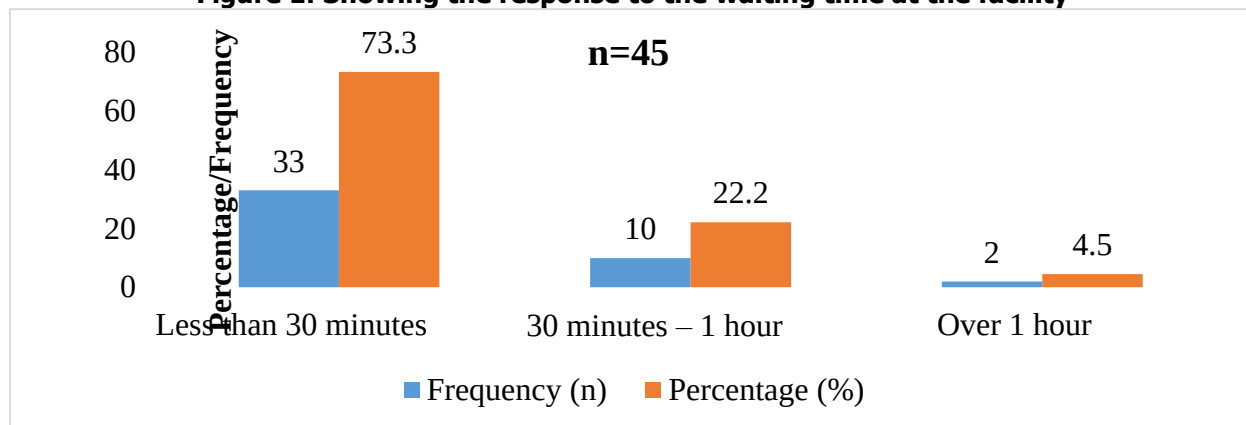
Variable	Response	Frequency (n=45)	Percentage (%)
Age group	18-28 years	26	57.8
	29-39 years	17	37.8
	40 and above	2	4.4
Religion	Catholic	19	42.2
	Protestant	15	33.3
	Muslim	5	11.1
	Others	6	13.3
Occupation	Formally employed	23	51.1
	Self-employed	18	40.0
	Unemployed	4	8.9
Highest level of education	No formal education	5	11.1
	Primary education	10	22.2
	Secondary education	20	44.5
	Higher education	10	22.2
Total		45	100

Table 1 indicates that most, 26 (57.8%) of the respondents were aged 18–28 years, 17 (37.8%) were between 29–39 years, and only 2 (4.4%) were 40 years and above. The majority, 19 (42.2%) of the respondents were Catholics, 15 (33.3%) were Protestants, 6 (13.3%) belonged to other religions, while 5 (11.1%) were Muslims. Over half 23, 51.1% of the respondents were

formally employed, 18 (40%) were self-employed, and 4 (8.9%) were unemployed. Nearly half 20 (44.5%) of the respondents had attained secondary education, 10 (22.2%) had primary education, another 10 (22.2%) had higher education, while 5 (11.1%) had no formal education.

Health facility-related factors contributing to the use of native medicine during pregnancy among pregnant mothers attending the antenatal clinic at Lubaga hospital, Kampala district.

Figure 1: Showing the response to the waiting time at the facility



From Figure 1, it is demonstrated that 33 (73.3%) of the respondents reported waiting less than 30 minutes to be attended to, 10 (22.2%) waited between 30 minutes and 1 hour, while 2 (4.5%) waited over 1 hour.

Table 2: Presence of health workers, cleanliness of the health facility, convenience of opening hours, drug stock-outs at the health facility, and the distance to the nearest health facility

Variable	Response	Frequency (n=45)	Percentage (%)
Presence of health workers during visits	Always present	38	84.4
	Sometimes absent	4	8.9
	Often absent	3	6.7
Cleanliness of the nearest health facility	Very clean	7	15.6
	Fairly clean	29	64.4
	Not clean	9	20.0
Convenience of health facility opening hours	Yes, I easily find time	26	57.8
	Sometimes convenient	13	28.9
	Not convenient	6	13.3
Experience of drug stockout at the health facility	Yes	5	11.1
	No	40	88.9
Time taken to reach the nearest health facility	Less than 30 minutes	12	26.7
	30 minutes to 1 hour	28	62.2
	Over 1 hour	5	11.1
Total		45	100

Table 2 shows that the majority, 38 (84.4%) of the respondents said health workers were always present, 4 (8.9%) said they were sometimes absent, while 3 (6.7%) noted they were often absent. Most 29 (64.4%) of the respondents rated their nearest health facility as fairly clean, 9 (20%) as not clean, and 7 (15.6%) as very clean. The majority, 26 (57.8%) of the respondents found the opening hours of health facilities convenient, 13 (28.9%) sometimes found them convenient, while 6 (13.3%) did not. Almost all 40 (88.9%) of the respondents reported that drugs were always available, while only 5 (11.1%) experienced stock-outs. Most 28 (62.2%) of the respondents took between 30 minutes and 1 hour to reach their nearest facility, 12 (26.7%) took less than 30 minutes, and 5 (11.1%) took over 1 hour.

DISCUSSION

Demographic data of the respondents

The majority of the respondents, 26 (57.8%), were aged 18–28 years. This could be because younger women are more likely to attend antenatal care and experiment with both native and hospital medicine due to increased exposure to multiple sources of advice and influence. This suggests that interventions targeting native medicine use should consider the preferences and behaviors of young pregnant women.

Most 19 (42.2%) of the respondents were Catholics. This could be because the hospital is under the Catholic Church, Lubaga Cathedral, which makes it attract more Catholics. This indicates that religious affiliation may influence health-seeking behaviors, and culturally

sensitive education programs may need to be tailored to specific faith groups.

More than half 23 (51.1%) of the respondents were formally employed. This could be because formal employment provides financial resources that enable women to access both hospital and native medicine. This implies that economic capacity may facilitate the ability to combine health care practices rather than rely solely on one source.

The largest proportion, 20 (44.5%), had secondary education. This could be because secondary education equips women with basic knowledge about pregnancy care while still being influenced by traditional practices. This suggests that education alone may not be sufficient to discourage native medicine use, highlighting the need for targeted health education. These results are contrary to a study carried out by Mekuria et al (2017) which indicated that 74% of pregnant women with no formal education preferred using traditional remedies over hospital-based care.

Health facility-related factors contributing to the use of native medicine during pregnancy among pregnant mothers attending the antenatal clinic at Lubaga hospital, Kampala district.

Findings revealed that (73.3%) of the respondents reported waiting less than 30 minutes. This could be because Lubaga Hospital has well-organized service delivery systems. This suggests that facility efficiency alone does not prevent native medicine use, indicating that personal and cultural factors may play a stronger



role. The findings are in line with a study conducted by Tusubira et al. (2020), which showed that 61% of women opted for herbal treatments due to long waiting times at health facilities.

The majority (84.4%) reported that health workers were always present. This could be because staffing levels are adequate and health workers are consistent in providing ANC services. This shows that the availability of health personnel does not guarantee exclusive hospital medicine use, highlighting the influence of individual beliefs. This was in contradiction to a study conducted by Elston et al. (2020) which demonstrated that 72% of pregnant women used traditional remedies after repeatedly finding clinics closed or unattended during working hours.

According to the findings, most (64.4%) rated the facility as fairly clean. This could be because the hospital maintains routine hygiene measures. This implies that environmental factors, while important, may not be sufficient to deter native medicine use if cultural factors remain strong. The results of the study are in contradiction with a study conducted by Arowosegbe et al. (2021) which demonstrated that 59% of pregnant women avoided hospital visits due to poor hygiene conditions and instead turned to native medicine.

The majority (57.8%) found the opening hours convenient. This could be because the hospital has flexible schedules that accommodate working mothers. This suggests that accessibility in terms of timing is not a primary reason for native medicine preference, pointing again to cultural and personal influences. This is contrary to a study done by Dassah et al. (2018) which revealed that 67% of pregnant women used herbal medicine because health centers operated during limited hours that did not accommodate their daily schedules.

Almost all (88.9%) reported that drugs were available. This could be because the hospital maintains sufficient stock levels. This implies that medicine availability is unlikely to be a barrier, reinforcing the idea that socio-cultural factors drive native medicine use.

Findings showed that (62.2%) took 30 minutes to 1 hour to reach the nearest facility. This could be because the hospital serves a large catchment area. This suggests that moderate travel time may encourage the use of native medicine as a convenient alternative. The findings of the study were in disagreement with a study done by Kifle et al. (2018), which showed that 64% of pregnant women chose herbal remedies due to the long distances they had to travel to reach health facilities.

LIMITATIONS

This study relied on self-reported information from pregnant mothers, which was affected by recall bias or the tendency to provide socially desirable answers.

The cross-sectional design limited the ability to determine causal relationships between the identified factors and the use of native medicine during pregnancy. The study was also constrained by the relatively small sample size, which may limit the generalizability of the findings to all pregnant mothers in Kampala District.

There was a withdrawal of some participants before completing the interviews, which reduced the final number of respondents and may have influenced the study results.

CONCLUSION

Most respondents demonstrated a good understanding of hospital medicine and were not afraid to use it. Short waiting times, consistent presence of health workers, and availability of medicines at the health facility indicate favorable accessibility, staffing, and facility efficiency.

RECOMMENDATION

The management of Lubaga Hospital should ensure that health workers provide consistent counseling on the safe use of hospital medicine during pregnancy, while respectfully addressing cultural beliefs.

Involve spouses and trusted family members in health discussions to ensure supportive environments for safe pregnancy care.

Strengthen campaigns to educate pregnant women and families on the benefits of hospital-based antenatal care, emphasizing the safety, efficacy, and importance of timely medical interventions.

Nursing implications

Nurses need to strengthen individualized education about the benefits and safety of hospital-based antenatal care. They can use culturally sensitive approaches to explain how hospital medicine complements safe herbal practices, reducing potential risks to both mother and baby.

Nurses should actively involve family members in health education sessions, emphasizing the importance of hospital medicine. This collaborative approach can help reduce reliance solely on native medicine and promote safer pregnancy outcomes.

Nurses can leverage positive experiences to encourage consistent ANC attendance. Prompt and respectful care can improve trust and reduce mothers' over-reliance on native medicine.

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May God richly bless them all.

List of abbreviations

ANC: Antenatal Care

CME: Continuous Medical Education

HCW: Health Care Worker

HM: Herbal Medicine

MRRH: Mbarara Regional Referral

SDG Sustainable Development Goal

UHPAB: Uganda Health Professions Assessment Board

WHO: World Health Organization

Source of funding

The study was not funded.

Conflict of interest

Author declares that there was no conflict of interest.

Author contributions

VN- Developed and investigated the study.

DK- Supervised the study.

Data availability

Data is available upon request.

Informed consent

There was full disclosure; full comprehension, and respondents voluntarily consented to participate in the study.

Author biography

Vivian Namuli is a student at St. Michael Lubaga Hospital Training Schools, pursuing a Diploma in Nursing.

Donatus Kimera is a tutor and research supervisor at St. Michael Lubaga Hospital Training Schools.

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