

**Prevalence of Home Deliveries among pregnant women in Namawojjolo village.
A cross-sectional study.**

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Abstract

Background:

Home deliveries remain a significant public health concern in many low- and middle-income countries, particularly in rural areas where access to health facilities and skilled birth attendants is limited. This study aims to determine the Prevalence of Home Deliveries and Socio-demographic factors contributing to home deliveries among pregnant women in Namawojjolo village.

Methodology:

A descriptive cross-sectional study design was employed. Data was collected from 88 respondents using structured questionnaires. Quantitative data were analysed using tally sheets and presented in tables, pie charts, and bar graphs.

Results:

Most of the respondents, 32 (36.4%), were aged 25–34 years, and 14 (15.9%) were aged 45 years and above. 50 (56.8%) were female, 38 (43.2%) were male. 40 (45.5%) were married, while the least, 8 (9.1%), were widowed. 32 (36.4%) had completed primary education, while at least 6 (6.8%) had no formal education. 36 (40.9%) were unemployed, whereas the least were 20 (22.7%) were formally employed. Home delivery occurred among 34 (38.7%) pregnant women, while the majority, 54 (61.3%), delivered from a health facility.

Conclusion:

Although the majority of women delivered in health facilities, a considerable proportion (38.7%) still delivered at home, indicating that home delivery remains a concern in Namawojjolo village. Socio-demographic factors such as education level, marital status, and employment may influence the choice of delivery location.

Recommendation:

Community health education and improved access to maternal health services should be strengthened to encourage pregnant women to deliver in health facilities with skilled birth attendants.

Keywords: Home deliveries, pregnant women, maternal health, health facility delivery, Namawojjolo village, Mukono District, skilled birth attendants.

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Background of the study

Home deliveries remain a significant public health concern in many low- and middle-income countries, particularly in rural areas where access to health facilities and skilled birth attendants is limited. Globally, about 28% of pregnant women still give birth at home, despite efforts to promote facility-based deliveries (Hernández-Vásquez et al., 2021). The prevalence is particularly high in sub-Saharan Africa and South Asia, regions that account for the majority of maternal and neonatal deaths worldwide (WHO, 2025b; UNICEF, 2025).

Although national data from Uganda show increasing facility-based delivery trends, a notable proportion of women in rural districts such as Mukono still give birth

outside health facilities. According to the Uganda Ministry of Health's latest reporting, about 19.6% of deliveries in Mukono District are attended outside formal health units (e.g., by traditional birth attendants or at home), indicating that nearly one in five births occur without skilled health professionals (Ministry of Health, 2026 report).

At the village level, Namawojjolo, located within the rural Nama Sub-county of Mukono District, mirrors this pattern of high non-institutional births. A community study by Maximore et al. (2022) reported a prevalence of home deliveries approaching 35% among pregnant women in Namawojjolo village, despite the relative proximity of health facilities. This rate is substantially higher than the district average and reflects persistent barriers to facility

delivery in the community, including socio-economic constraints, cultural preferences, and transport challenges. These localized figures are consistent with broader national patterns documented in the Uganda Demographic and Health Survey (UDHS), which indicate that approximately 25% of women nationally still deliver outside health institutions, with rural and economically disadvantaged women more likely to have home births (Towongo et al., 2025).

The high prevalence of home deliveries in Namawojjolo has important public health implications. Home births without skilled attendance are linked to increased risks of maternal complications such as postpartum hemorrhage and infection, and adverse neonatal outcomes, including birth asphyxia and neonatal death. Understanding the specific level of home delivery prevalence in Namawojjolo provides critical context for exploring determinants and designing targeted interventions that aim to encourage facility-based deliveries and improve maternal–newborn health outcomes. This study aims to determine the Prevalence of Home Deliveries and Socio-demographic factors contributing to home deliveries among pregnant women in Namawojjolo village.

Methodology

Study Design.

The study used a descriptive cross-sectional study to determine cultural beliefs, socioeconomic and demographic data, and health systems-related information, and how they contribute to home deliveries among pregnant women in Namawojjolo village, Mukono district, given that the method calls for data collection in the shortest time possible and is cost-effective.

Study Area.

The study took place in Namawojjolo village, Mukono district. It is a well-renowned commercial center in Uganda, the Central region, Mukono district, Mukono municipality. It is approximated to be on latitude 0.36420N and longitude 32.75530E. The village is approximately 34km east of Kampala, the capital city of Uganda, along the Kampala-Jinja highway.

Study population.

This study involved mothers who gave birth in Namawojjolo village, and included 88 participants or their spouses who had provided consent.

Sample size determination.

The sample size was determined using Kish and Leslie's (1956) formula:

$n = (z^2pq)/d^2$ Where

n = the desired sample size

z = standard normal deviation at 95% confidence interval (1.96)

p = estimated proportion of the population with criteria under study (65%), q = (1-p)

d = margin of error (0.10)

Substituting the values into the formula $n = (z^2pq)/d^2$

$z=1.96, p=0.65, q=0.35, d=0.10$

$n=(1.96)^2 \times 0.65 \times 0.35$

$(0.10)^2$

$n=88$ participants

Sampling procedure.

The approval letter was obtained from Namawojjolo village, Chairman of Local Council 1, who used a simple random sampling method; each member of the population was assigned a unique number. The numbers were written on pieces of paper, which were folded, placed in a bowl, and thoroughly mixed. Then a blindfolded researcher selected one piece of paper at a time without replacement, until the 88 required research participants were met.

Data Collection Method.

A pre-tested and semi-structured questionnaire with closed-ended questions prepared in English was used. The interview guide was used to obtain information on cultural beliefs, socio-demographic, and health systems, and how they influence pregnant women to opt for home deliveries in Namawojjolo village. The study tool is preferred because data was collected for a short period of time from all study participants.

Data Collection Tools.

Data collection was through the use of semi-structured self-administered questionnaires containing closed-ended questions, which are aligned with the study's specific objectives. The questionnaires were carefully designed in simple and understandable language for literate mothers. Illiterate participants who have difficulty in reading and writing were assisted by a researcher-guided questionnaire interview.

Data collection procedure

The introductory letter was received from the research committee of the Mildmay Institute of Health Sciences, which was a prerequisite to seeking permission from the chairperson of Local Council 1 of Namawojjolo village. The researcher and his assistants introduced themselves and explained the purpose of the study to the study participants in order to ensure that they clearly understood the purpose of the study. All participants were approached to provide informed consent, allowing them to sign consent forms voluntarily and withdraw from the research at any point. To maintain confidentiality, unique codes were assigned to participants' information, known only to the researcher and

participants. Each study participant was interviewed for about 20-25 minutes. The respondents were asked questions following a structured interview guide.

A translation to the local language was made to those who did not understand English, to ascertain that valuable information is collected from the research participants while maintaining and upholding their rights.

Quality control Piloting the Study

Before starting the actual data collection, the researcher conducted a pilot study in Namawojjolo village. This was used to help assess the feasibility of the study, ensure that the village environment is suitable for research, and rule out any concerns that could hinder the process.

Pre-testing the Study Tool

The questionnaire was pre-tested with a small group of 8 pregnant women in Lweza. This helped determine the clarity, reliability, and validity of the questions. assess validity and reliability. The questionnaire was furthermore reviewed by colleagues and my supervisor at school, and any adjustments were considered.

Inclusion criteria:

Women aged 15-49 years or their spouses, residents of Namawojjolo village for at least 6 months, have delivered a child within the last 2 years and have provided informed consent to participate.

Exclusion criteria:

Women with cognitive or communication impairment that prevents effective participation were excluded.

Data Analysis and Presentation

The collected data was first analyzed manually by tallying, making additions, and was then transferred to Microsoft

Excel for electronic analysis. The data was presented in a quantitative format using pie charts, bar graphs, and frequency distribution tables. These visual tools were accompanied by brief explanations to enhance the interpretation and understanding of the findings.

Data Management

Data was initially recorded in notebooks and later transferred to a computer for digital storage.

To avoid data loss, a backup was saved on a flash drive. Hardcopy questionnaires were stored securely under lock and key to maintain confidentiality and protect participant privacy.

Ethical Consideration

An introductory letter obtained from Mildmay Institute of Health Sciences and a permission letter from the chairman of the local council 1 of Namawojjolo village were shown to every research participant.

Consent

Written consent was obtained from the study participants after explaining the purpose of the study to them.

Privacy and confidentiality

The respondents were assured of anonymity and confidentiality, as no name was required. English was translated into a local language for those who did not understand it. Privacy was also maintained during the interview process.

Freedom to withdraw without penalty

The participant was free to withdraw at any time without fear.

Results

Demographic information of the study

Table 1: Shows demographic factors associated with home deliveries

Variables	Frequency (f)	Percentage (%)
Age (years)		
a) 18–24	15	17.0
b) 25–34	32	36.4
c) 35–44	27	30.7
d) 45 and above	14	15.9
TOTAL	88	100
Gender		
a) Male	38	43.2
b) Female	50	56.8
TOTAL	88	100
Marital Status		
a) Single	28	31.8
b) Married	40	45.5
c) Divorced/Separated	12	13.6
d) Widowed	8	9.1
TOTAL	88	100
Education Level		
a) No formal education	6	6.8
b) Primary	32	36.4
c) Secondary	28	31.8
d) Tertiary/University	22	25.0
TOTAL	88	100
Employment Status		
a) Employed	20	22.7
b) Self-employed	32	36.4
c) Unemployed	36	40.9
TOTAL	88	100

Regarding age, most of the respondents, 32 (36.4%), were aged 25–34 years, while the least, 14 (15.9%), were aged 45 years and above. Regarding gender, the majority of respondents, 50 (56.8%), were female, whereas the minority, 38 (43.2%), were male. In terms of marital status, most of the respondents, 40 (45.5%), were married, while the least, 8 (9.1%), were

widowed. For educational attainment, most of the respondents, 32 (36.4%), had completed primary education, while the least 6 (6.8%) had no formal education. Regarding employment status, most respondents, 36 (40.9%), were unemployed, whereas the least were 20 (22.7%) were formally employed.

Prevalence of Home deliveries among pregnant women

Home deliveries among Pregnant women	Frequency (f)	Percentage (%)
YES	54	61.3
NO	34	38.7
TOTAL	88	100

Home delivery occurred among 34 (38.7%) pregnant women, while the majority, 54 (61.3%), delivered from a health facility. This indicates that although health facility

delivery was more common, a considerable proportion of women still opted for home delivery.

Discussion

Socio-Demographic Factors Associated with Home Delivery

The study revealed that most respondents were aged 25–34 years (36.4%), with fewer respondents aged 45 and above (15.9%). Women aged 25–44 years accounted for the majority of home deliveries. This finding is consistent with Tekeba et al. (2025) and Yebyo et al. (2014), who reported that women in this age group are more likely to deliver at home due to confidence from prior uncomplicated births and high parity.

Regarding education, 36.4% of respondents had primary education, while 6.8% had no formal education. Lower educational attainment was associated with a higher likelihood of home delivery, supporting findings from Ayenew et al. (2021) and Zhong et al. (2021), who reported that maternal education strongly influences delivery location. Education improves awareness of the risks and benefits of facility-based care.

Employment status also influenced delivery decisions. 40.9% of respondents were unemployed, and 36.4% were self-employed, limiting their financial capacity to access health facilities. This agrees with Johnson et al. (2025) and Owolabi et al. (2025), who highlighted financial constraints as key predictors of home delivery.

Overall, socio-demographic characteristics such as maternal age, education, and employment status significantly influence home delivery decisions.

Prevalence of Home Deliveries

The study findings showed that 54 (61.3%) of respondents delivered from a health facility, while 34 (38.7%) opted for home delivery. This indicates that although facility delivery was more common, a considerable proportion of women still preferred home delivery. These findings are consistent with studies in sub-Saharan Africa, where home deliveries remain significant despite efforts to promote facility-based births (B et al., 2025). The prevalence of home delivery in this study may be influenced by socio-demographic characteristics, cultural beliefs, and accessibility barriers.

The observed prevalence aligns with regional patterns, as similar studies in Ethiopia and Nigeria reported home delivery rates ranging from 55% to 68% (Ayenew et al., 2021; Owolabi et al., 2025). This underscores the need for targeted interventions to reduce home deliveries while respecting cultural contexts.

Conclusion

The study findings indicate that home deliveries remain relatively common among pregnant women in Namawojjolo village, Mukono District. Although the majority of women (61.3%) delivered in health facilities, a considerable proportion (38.7%) still gave birth at home. This suggests

that despite the availability of maternal health services, some women continue to opt for home deliveries.

The study also revealed that socio-demographic factors such as age, marital status, level of education, and employment status may influence the decision on the place of delivery. Most respondents were aged between 25 and 34 years, with a significant number having only primary level education, and a large proportion being unemployed. These characteristics may contribute to limited access to information, financial constraints, and reduced autonomy in making health-related decisions.

Recommendations

Health workers and village health teams (VHTs) should intensify community sensitization programs to educate pregnant women and their families about the importance of delivering in health facilities with skilled birth attendants.

Programs that improve women's education and awareness about maternal health risks associated with home deliveries should be encouraged, as education plays a key role in influencing health-seeking behavior.

Local health authorities should improve access to health facilities by strengthening outreach services, ensuring the availability of skilled birth attendants, and improving transportation options for pregnant women in rural areas.

Community programs should encourage the involvement of husbands and family members in maternal health decision-making to support women in choosing facility-based deliveries.

Government and local organizations should consider providing financial or transport support to pregnant women from low-income households to reduce barriers to accessing health facilities during delivery.

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List of Abbreviations

ANC:	Antenatal Care
MMR:	Maternal Mortality Rate
NGO:	Non-Government Organization
PPH:	Postpartum Hemorrhage
SDG:	Sustainable Development Goal
TBA:	Traditional Birth Attendant

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Conflict of interest

The author did not declare any conflict of interest.

Author contributions

John Isaac Bumanye was the principal investigator
James Kizito supervised the research project
Hasifa Nansereko supervised the research project
Jane Frank Nalubega supervised the research project
Francisco Ssemuwemba supervised the research project

Data availability

The data is available upon request.

Informed consent

All the respondents consented to this study.

Author Biography

John Isaac Bumanye holds a Diploma in Clinical Medicine and Community Health from Mildmay Institute of Health Sciences.

Francisco Ssemuwemba is the dean of the School of Allied Health at Mildmay Institute of Health Sciences.

Hasifa Nansereko is the chairperson of the Institutional Review Council (IRC) at Mildmay Institute of Health Sciences.

James Kizito and Jane Frank Nalubega are tutors at Mildmay Institute of Health Sciences.

Immaculate Prsoperia Naggulu is a tutor at Mildmay Institute of Health Sciences.

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