

# Maternal Support Systems in Buikwe District, Uganda: A Qualitative Study

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## Research

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# Abstract

**Background:** Uganda is a country struggling with reducing the neonatal mortality rate of 20/1000 live births reported in 2018 and to fully implement Ugandan clinical guidelines (UCG) on care for mothers and newborns during pregnancy, delivery and post-partum. This study aimed at describing maternal support systems including women's access to and use of maternal health care and home support systems.

**Methods:** Maternal support systems were investigated using qualitative methods including participant observations, semi-structured interviews with key-informants and focus group discussions with mothers. Malterud's Systematic text condensation (STC) was used for analysis and Nvivo software to structure the data.

**Results:** Antenatal care was valued by mothers and they relied on professional health workers and traditional birth attendants (TBAs) for basic maternal services. General discontentment with spousal and family contributions in the postnatal period, financial dependency and lack of autonomy in decision making on maternal issues prohibited women in receiving optimal help and support. Postnatal follow-ups were found unsatisfactory.

**Conclusions:** Further focus on gender equity involving women's right to own decision making in maternity issues, higher recognition of male involvement in maternity care and improved postnatal follow-ups are suggestions for improved neonatal outcomes in Buikwe district, Uganda.

## Plain English Summary

Uganda is a country struggling to reduce the number of newborn deaths. Good care and support for mothers in pregnancy, during birth and in the first six weeks after birth have proven to reduce the number of deaths.

In this study, health workers, traditional birth attendants (TBAs) and mothers were interviewed to share experiences and thoughts about maternal health care and support systems. Additional observations were done by the main researcher.

The mothers valued the effort of TBAs and professional health workers but they were less contented with community and family support. Many of the mothers interviewed complained about little help from their partners, both economically and with physical work. Postnatal check-ups were rare, except from the follow-up after six weeks.

Conclusions from the study suggest continued focus on women's right to own decision making in maternity issues, encouragement of fathers to participate more in maternity care and strategies for improved postnatal follow-ups.

## Background

Uganda is a country struggling with reducing the neonatal mortality rate of 20/1000 live births in 2018 and is not likely to reach the Sustainable Development Goal (SDG) 3.2 of a neonatal mortality rate of 12/1000 live births in 2030 if today's trend continues (1).

Demographically, the neonatal mortality rate is found to be higher in rural areas than the nation's average (2). Good quality maternal health care and professional support systems are important interventions to prevent neonatal mortality. For the mothers it is also important to have someone to trust and rely on during pregnancy, time of childbirth and the following post-partum period, and by such providing an optimal start in life for the newborns (3).

Antenatal care is important to ensure good health for pregnant women and their unborn babies. WHO/UNICEF Uganda recommends eight antenatal visits during pregnancy, whereas the Uganda clinical guidelines aim for at least 4 visits (4,5). Studies from sub-Saharan Africa have shown clear associations with attending antenatal care and reduction in neonatal mortality (6). One study showed that around 38 percent of neonatal deaths in Kenya were caused by negligence of pregnancy check-ups (6). Studies from Uganda concerning availability and quality of antenatal care provision in rural settings show lack of qualified staff and inadequate check-ups and providing of necessary information (7). Sampling of urine and receiving drugs for intestinal parasites were components most often neglected during antenatal visits. The overall quality of antenatal care was found higher in private sector facilities than in public ones (8). Timing and frequency for antenatal visits varied among regions and socio-economic status (9). Intervention programs on improving quality of care show promising results, but reveal the need for systemic improvements in infrastructure and acknowledgement among policy makers of higher investments in education of health care providers (7).

Recognition on male involvement interventions for maternal and neonatal health has gained increased attention since the introduction of WHO's *Maternal and Child Health care program* (MCH) in the mid 1990's (10). The multi-lateral global movement Every Woman Every Child includes strategies of male involvement in maternal health programmes as one of its' action areas towards achieving the Sustainable Development Goals (SDG) of 2030 (11). Male involvement in antenatal care is also implemented in the Uganda Clinical Guidelines (UCG) by recommending bringing the partner or a family member to at least one antenatal visit (5). A documented cost-effective way to increase male attendance is to give a written invitation letter to the women's spouses. This intervention has proven to rise the attendance with up to 10 % (12). In addition, the Government of Uganda launched a national strategy for *Sexual and Reproductive Health and Rights* (SRHR) in November 2014, which involves a strategy of prioritizing couples at birth facilities (13).

The term *postnatal* is defined by WHO as "*the time after birth and up to six weeks (42 days)*". The most vulnerable period for a newborn and its' mother is the first month after birth, where the first 24 hours are the most critical. Despite this fact, attention and care for the mother and newborn are often neglected after delivery (14). Postnatal encounters between health workers and mothers should include promotion and support in early and exclusive breastfeeding, hygiene and care for the newborn, and counselling

about conditions requiring referrals. Emotional wellbeing and family support is equally important and all women should be encouraged to share concerns or symptoms of postnatal depression and/or domestic abuse with the health worker (14). Postnatal check-ups are recommended in the UCG at 6 hours after birth, after 2-7 days and after six weeks and include counselling on emergency issues, hygiene and general baby care (5). The national estimate of mothers receiving postnatal care within two days is only 33 % (15). Studies from Uganda show that giving birth in health facilities is the predominant factor for receiving early postnatal care (16).

The various components of maternal care, from preparation and information in antenatal care, via safe and supportive birthing environment to postnatal follow-ups are all equally important in ensuring optimal outcome for both the mother and her infant. Family and spousal support through each of these stages are paramount for the mothers' wellbeing.

This study aimed at describing maternal support systems, including women's access to and use of maternal health care and home support systems. In acquiring to understand where further focus and policy should be directed, the study sought to explore underlying reasons for low attendance at antenatal classes, choice of birthplace and suboptimal postnatal care.

## **Methods**

### **Design**

This was a qualitative study where data was collected through focus group discussions, individual interviews with key-informants and participant observation. A qualitative approach was chosen in effort to get a deeper and elaborated understanding of the topic regarding support system for mothers in Uganda (17). The findings presented in this paper is part of a broader study named "Health care and support systems for mothers and newborns around delivery in Buikwe district, Uganda" and the methods have been described earlier (18). A summary of methods is given below:

### **Setting**

The study took place in 7 villages in the district of Buikwe in east central Uganda. The villages were selected by approaching local village leaders lingering after conclusion of a village committee meeting in the urban centre of Nyenga town. The local leaders were given information about the study and appointments were made to visit each one in their respective villages for further planning and sharing of more detailed information about the research. During the individual meetings the local leaders were asked to assist with identifying eligible participants in the villages and provision of location for the focus group discussions, which they all agreed to.

Nyenga town contains Saint Francis Hospital and Saint Francis School of Nursing and Midwifery. Kabizzi village includes a Health Centre III for the public in the area, providing both in-and out-patient services

with a two bedded maternity room (19,20).

## Population

Participants were selected purposefully through recruitment from St. Francis Hospital's maternity ward, Kabizzi Health Centre and via the local leaders in the defined villages.

## Sample

There was a total of 57 participants in the study, of whom 15 key-informants were recruited for individual- or group interviews and 42 mothers attended focus group discussions. The key informants consisted of 4 mothers, 4 TBAs, 3 VHTs and 4 health workers. One interview with key-informants was a group interview including two TBA's and two VHT's in one village. Six focus group discussions were conducted in five villages, in one village two focus group discussions were held simultaneously due to the high number of mothers gathered. With exceptions of the health workers, all participants were small-scale subsistence farmers with some having additional small businesses. The education level ranged from none to certificate level for the health workers. Participants contributing to the study with unstructured spontaneous dialogue during participant observation by the main researcher were not identified.

## Data collection procedure

Two local research assistants were trained and educated by the main researcher before initiation of the study. One male assistant was in charge of logistic organization, recruitment of key-informants together with local village leaders, and moderator in focus group discussions. One female assistant was doing translations and transcriptions of recordings in the local language Luganda and had role as moderator in focus group discussions. Both were fluent in English and Luganda with bachelor's degrees in social sciences.

Participants were purposefully selected based on their occupation status, or for mothers, if they had given birth within the past month. The time period for data collection was from January 15<sup>th</sup> to February 25<sup>th</sup>, 2019.

Students in nursing and midwifery, midwives, traditional birth attendants (TBAs) and village health team workers (VHTs) were found eligible for in-depth interviews involving questions about support systems for mothers around birth or in connection with nutrition and breastfeeding issues. Qualitative interviews using a semi-structured format were conducted in a quiet place in one of the villages or in an outdoor location by the Hospital or Health Centre (Additional files 1). The individual interviews were carried out by the main researcher in English (n=5) or by one of the research assistants in Luganda (n=6). The duration of the interviews ranged from 10 to 30 minutes.

Focus group discussions were held in outdoor locations in five of the selected villages where one of the research assistants had the role as moderator due to language barriers. The main researcher was present for observation and note taking during all focus group discussions which lasted from 40-60 minutes (additional file 2).

The main researcher, who is a nurse by profession, spent six weeks observing daily routines and interactions between staff and mothers and their families in the Hospital and Health Centre. She engaged in unstructured dialogues with mothers and staff as a tool for understanding the dynamics of family- and partner engagements, division of responsibilities within the health system and other support systems in maternal issues. Notes were written continuously.

Transcriptions from audio-recorded interviews were typed into Microsoft Word Documents within 2-4 days. If conducted in local language, the interviews were first transcribed in Luganda, then into English consecutively. Final proof readings were performed and field notes from observations were typed upon completion of the study period.

## Instruments

Semi-structured interview guides were locally pre-tested and amended before used in interviews with key-informants and focus group discussions (additional files 1 and 2).

## Data analysis

The analysis was based upon the method called Systematic Text Condensation (STC), developed by Malterud (21). Following the STC method the transcribed text documents were read in-depth several times in order to detect emerging themes from the raw data. After identifying the themes, they were given descriptive headlines and coding trees were created using the NVIVO 12 pro software program. Extractions were pulled from the transcribed document and placed under the most fitting code group. Several alterations of the coding structure were done along the process. Ultimately there were three themes created under the topic "Maternal help and support", which were identified as a) Spousal support and antenatal attendance, b) Professional support and family contribution around delivery, c) Postnatal care and challenges related to gender roles. The contents from the different code groups were further analysed by creating condensed narratives supplemented with "golden quotes" to complete the descriptions.

The main researcher (MBR) was a female nurse from Norway who had visited Uganda several times previously. She was in charge of the primary data collection, coding and analysis of the data. IMSE assisted with co-reading the raw-data and discussion of main themes with the first author. RM contributed with developing the interview guides, acquisition of data and discussion of main themes with

the first author. IN was collecting data materials, discussed findings and interpretations with the first author and helped with critical revision of the final paper.

In November the same year, the participants in the study were invited for a dissemination meeting where they were presented with the findings and encouraged to modify, comment or question the results. The participants did not know the status of the other participants as informants. Feedback from the participants included a request to the local health workers and village leaders of a strategy to include and educate partners and men in maternity issues.

## Ethical considerations

Study participation was fully voluntary. Information about the study was given both in English and Luganda when necessary. During focus group discussions each participant was given a number for recognition and was asked not to share private information gained during the sessions outside the group. Snacks and refreshments were offered to the participants before the interviews and focus group discussions. They were reimbursed for transportation costs up to 15 000 UGS (equals to 4 USD). The mothers attending focus group discussions received a piece of locally made baby clothing after the session and no extra money was given for participation.

## Results

The following section displays results under the topic of *Maternal help and support*. The key themes emerging from analysis were a) Spousal support and antenatal attendance, b) Professional support and family contribution around delivery, c) Postnatal care and challenges related to gender roles. The importance of antenatal care and expectations to fathers were given much attention both from mothers and traditional birth attendants, although not being a key focus of the topic guide. Support in delivery situations were found challenging for birth attendants, especially in cases of birth complications. Many women in the study were discontent with spousal and family contributions related to help and support in maternal issues, often related to pecuniary difficulties. Breastfeeding support and -information were found to be unsatisfactory, and gender inequity put a strain on women's decision-making and autonomy regarding reproductive health issues. Postnatal care was found close to non-existent, except for the 6-weeks check-up combined with the vaccination program. Observations by the researcher could occasionally deviate from the view of the participants and is conveyed explicitly.

### Spousal support and antenatal attendance

#### *Mothers' perspective*

Matters concerning breastfeeding and post-partum care are recommended topics during antenatal classes. Among the interviewed mothers, knowledge of the importance of antenatal care was widespread,

although many admitted non-attendance at antenatal classes for various reasons like road conditions, distance, and transport cost:

*“Sometimes a woman can request some money for transport from the husband and he tends to refuse to give out the money to the wife hence ending up not going for antenatal care. That’s why the husbands send their wives to go to these TBAs because for them they will not pay money”*. (Mother 35-45 years, village 4)

*From the TBA’s perspective*

Antenatal care was an important issue also for the traditional birth attendants interviewed, and they stressed the significance of attending antenatal classes as a way to gain information on hygiene and general baby care, referring to some mothers as *“totally green about some issues”*. (TBA, village 7)

Some of the TBA’s confirmed the statements of the mothers, that non-attendance in antenatal classes was a reflection of the total financial situation in the family, where the lack of funds prohibited transportation to facilities:

*“What makes ladies not to go for antenatal care is that the husband might not provide transport to the pregnant mother that will make her lose moral of going to the hospital because of her husband’s poverty”*. (TBA 50-80 years, village 7)

## **Professional support and family contribution around delivery**

*Mothers’ perspective*

Sometimes reaching professional help was not possible and one mother explained in detail how she admired her husband for taking responsibility in asking a neighbour for assistance with delivering their baby due to rapid labour and difficulties obtaining transport. Reliance on and support from family members in times of need and during vulnerable circumstances can contribute to better coping. A young mother had positive experiences from helping other family members around the time of childbirth:

*“I just learnt how to breastfeed from my elder sister because she raised all her children when I was the one taking care of her, so I got to learn it”*. (Mother 15-25 years, village 6).

Nevertheless, many women showed resentment and anger towards negligent husbands and fathers regarding unmet expectations of help and support as well as on economic issues:

*“A very big number of women from this village give birth from their homes just because they lack money and even the husbands do not fulfil their responsibilities, which sometimes leads to both infant and maternal mortality”*. (Mother 35-45 years, village 4)

Contradictory to the expression of despair from the mother above, the researcher also witnessed many caring and supportive partners and husbands while present for observations at the Hospital and Health

Centre. Fathers accompanying their partners could be seen anxiously waiting for hours outside the maternity ward, awaiting the birth of their baby son or daughter or travel long distances to reach the delivery.

Sometimes help and support for the mothers were provided through relations and acquaintances other than one's family or professional health workers. Examples of this were the fellowship with other mothers, neighbours with children or village health team workers and traditional birth attendants.

### *Health workers' perspective*

On several occasions the researcher witnessed very young mothers coming together with their mothers-in-law for delivering at both the hospital and clinic. Being at a health centre with marginal resources and equipment when complications occurred, was described as a huge challenge for the health workers, and they often found themselves alone on duty. When there was need for referrals, it was the family's responsibility to arrange for transport, but that was often described as difficult and unreliable. One midwife interviewed had a traumatic experience freshly in mind of how she struggled with finding transport for referral of a mother facing complications during labour, implicitly also describing her own support to the mother and her family:

*"I was alone, and the baby was at the outlet, I was seeing the head actually. I tried several bodaboda names (scooter driver's names), but their phones were off...before reaching (village 1) we got in an accident around the house near N. Then we reached the road, it was raining, totally raining, and the petrol got finished. And she was fitting (having seizures) with heavy rain. We stayed in (village 1) up to morning. They had to give magnesium, but it took long for her to give birth. She delivered when she was still fitting. They did episiotomy when she was still fitting". (Midwife 19-35 years)*

### **Postnatal care and challenges related to gender roles.**

#### *Mothers' perspective*

On the issue of nutrition and breastfeeding support, underlying feelings of being neglected and betrayed became transparent as shown in this quotation from a focus group discussion:

*"Me, sometimes after giving birth I feel like eating posho (local dish from maize), but my husband tends to run away from his responsibilities and goes and marries other women, me I even fetch water for myself". (Mother, 25-35 years, village 4)*

Observations done by the researcher revealed supportive husbands or other family members during times of delivery on several occasions. Often it could also be a brother or sister of the mother who would assist her with caring for the newborn or fetching food and water for washing, however, the negative experiences were influencing the interview data.

Some mothers described how they received support from health workers when facing complications with breastfeeding:

*“When I start breast feeding I get wounds on my breasts, then I start feeling some small stones. When I go to the hospital they have to first squeeze the breast for those small stones to move out, then I start breast feeding”.* (Mother 25-35 years, village 4)

Recurrent topics raised by women attending focus group discussions were sexual activity after birth and family planning, where the discordance between the various needs of men and women were again proclaimed, and as the following quote shows, it could prove a risky affair for the women:

*“If a woman goes for family planning on her own and the man gets to know it, it will just become a fight or even he can kill the wife. That’s why we want you and your management to organize and talk to them one day”.* (Mother 35-45 years, village 4)

From observations in the hospital the researcher witnessed a young mother who had requested for tubal ligation after having had four Caesarean sections. The procedure had been recommended and approved by the doctors for the health of the mother and her husband had signed the consent papers. On the day of the procedure the husband withdrew his approval and the mother was not allowed to go through with the surgery.

Unstructured dialogue with mothers during observations revealed that many were aware of other contraceptives like intra-uterus devices (IUDs), but intimidating stories of painful insertions and side-effects of infertility prohibited usage.

#### *Health workers’ perspective*

One midwife explained how she rarely had enough time to provide sufficient information and support involving breastfeeding. Often the midwives were alone on duty, and due to hectic work environments and sometimes attending to several mothers in labour at the same time, the information and support for breastfeeding were thus neglected:

*“...most of the times I deliver them at night, then in the morning when you’re alone, you’re moving up and down, you’re this side and the other side, so I get less time (snapping fingers). And that one (time) I cannot deceive”.* (Midwife 19-35 years)

Pre-scheduled or planned postnatal follow-up before vaccination at 6 weeks was not common or recognized among the health workers. When inquiring from the health workers about supporting mothers with breastfeeding or newborn issues, the general answer was that they told the mothers to return to the facility if they should face any challenges, but they also confirmed that this seldom occurred:

*“Here we don’t know whether their villages have health workers there, we don’t know, but we tell her (the mother) when she gets any complaint to come back here”.* (Midwife student 19-22 years)

Newborn vaccinations against Polio and BCG are normally given at the hospital and health centre before discharge. For women giving birth at home, the traditional birth attendant could offer advice to go to the hospital for vaccinations and measurements, but it was the mothers' responsibility to follow up.

### *TBAs' perspective*

Making sure that the mothers initiated breastfeeding early were important to the TBAs, and when mothers faced challenges of sore nipples they would sometimes go to extreme measures to make the mothers start breastfeeding:

*"There are some mothers when you tell her to breast feed the baby, she can hesitate that she feels nipple pain, me I even slap some of them for hesitating". (TBA 50-80 years, village 1)*

Some of the TBA's interviewed took extra measures to follow up on the mothers they had helped with deliveries:

*"Yes, I do visit them after some time from the day I discharged them to find out how they are doing, if they are in good condition both the mother and the baby". (TBA 50-80 years, village 1)*

Others explained how they recommended them to seek postnatal care and go for vaccinations at various health facilities.

## **Discussion**

The presented results show that antenatal care visits were not a well-established practice for all mothers in Buikwe district. Mothers frequently reported transport cost and distance being the biggest obstacles to antenatal care and facility-based delivery, where reliance on their husbands seemed to be the underlying factor. This was confirmed by TBAs. The study showed that mothers trusted and relied on professional health workers, traditional birth attendants and village health team members for help and support in maternal issues. Regardless, many mothers did not have safe environments around the time of childbirth, which could lead to negative birthing. The results further display that women's autonomy and decision-making were challenged in reproductive health issues and that postnatal check-ups need higher attention and structure to play its' role in preventing neonatal deaths. Mother's perceptions of maternal support systems were dominated by perceived gender disparities, neglect and poverty.

### **Spousal support and antenatal attendance**

Both mothers and traditional birth attendants referred to poverty as a significant factor as to why some women were not able to go for antenatal care. The same factor can possibly also explain low male involvement in maternity care, since the transport cost would double if two people were to travel instead of one in addition to income and working time lost. Previous studies from Uganda have also confirmed that the spouse often remains at home looking after the household and other children, which allows the woman to go for antenatal care (22). Results from the study reveal concerns from TBAs about young

women's low knowledge about issues like hygiene and how to care for newborns and give indications for closer cooperation between TBAs/VHTs and professional health workers. The mother's interviewed in this study complained about lack of financial support from their husbands, making him partly responsible for the poverty and the choices. This study did not capture fathers' views on the situation, however, other studies from Uganda describe gender disparities causing poor sexual and reproductive services.

### **Professional support and family contribution around delivery**

Village health team workers (VHT's), traditional birth attendants (TBA's) and professional health workers were considered as significant sources of trust and support in all aspects surrounding maternity and newborn health, comparable to findings in other studies (23). There seemed to be a low threshold for mothers in contacting the mentioned providers if the need for medical advice should arise, and the health workers themselves showed a genuine interest in providing the best possible care according to their knowledge and availabilities. Challenges related to logistics and economy were explained as reasons for suboptimal experiences both from the user and provider perspective. Traditional and cultural customs of men being unwelcomed in the delivery rooms could contribute to signals of men not being wanted or needed in situations around childbirth (24). Looking at the situation from another angle, the men might not always have a choice of attending to their wives based on work conditions and availability. Given time off work to tend to one's wife and child around the time of childbirth is constituted in the Employment Act of Uganda from 2006, which give fathers 4 days paid leave from work to spend with the family (25). However, many men do not have regular work conditions to effectuate that.

### **Postnatal care and challenges related to gender roles**

Feeling of security and supportive surroundings are requirements for a good bonding and early breastfeeding experience, and the lack of such may lead to post-partum depression and trouble with, or discontinuation of, exclusive breastfeeding (26). Midwives reported challenges with time restraints as factors for not providing sufficient information and support in breastfeeding issues for the mothers, whereas some mothers uttered disappointment with spousal neglect in providing them with nutritious food and support with household chores. Hence, disabling them to concentrate more on establishing a good breastfeeding routine for themselves and their newborn.

Traditionally, household chores and maternal issues are seen as women's domain. Nevertheless, some mothers showed resentment towards their spouses for not assisting them during and after birth. Stories told with anger and bitterness reflected the hopelessness and feeling of despair many women found themselves to be in. Some of the mothers mentioned sharing concerns and advice with neighbours and friends, but when it came to provision of physical help it often seemed to be one woman for herself. The women's discontent with support from their partners could be an indication of alterations of traditional gender roles in view of recent years access to internet services and influences from social media (27). Regardless of generalized cultural roles and traditions, every community and family are different, and observations and unstructured dialogues with health workers and mothers also information on many examples of good caring fathers and family members, who supported their women during times of

delivery and in other areas of life. Findings from the presented study related to women's autonomy and decision-making in reproductive health issues with reflections on gender and socio-economic topics mirror similar findings concerning maternal health and support systems in Uganda (24). Although the 1<sup>st</sup> author and primary analyst holds an etic, meaning subjective, view of the situation witnessed in Uganda during the research period, the supportive statements from local women give extra strength to these observations.

In Ugandan culture, many women are subjected to the wants and decisions of men, as described clearly in an article in *The Observer* by Kiiza and Akumu (28). Although the Uganda Children's Act deems the parents equal (29), culturally the children are seen as the property of the father, and the mother of the child cannot deny the father sexual favours (28). In addition to the feeling of lack of support and care, women also face the problem of being economically dependent on their partners, enhanced by legislative regulations that favour males (30). However, men's lack of financial support in maternal health could often be justified by the overall lack of financial resources in the home (24).

Other than the six-weeks check-up, scheduled postnatal care was not recognized among any of the participants in the study. Neither the health workers nor the mothers were familiar with the UCG recommendation of 2-7-day check-ups (5), which would give the mothers a good platform for expression of concerns around breastfeeding issues or other postnatal conditions. Some of the health workers interviewed recommended mothers to come back if they faced any trouble post-partum, but it was not routine. The routine check-up after 6 weeks was common in combination with the vaccination program. The recommended level of professional support in the postnatal period has been intermittent over the years, but recent WHO guidelines are suggesting recognition of higher attention to this vulnerable time in a mother's and her baby's life and include postnatal care on the first day, third day, between 7–14 days and six weeks (14). These recent recommendations are not yet included in the Uganda Clinical Guidelines, but higher frequency of postnatal contact between mothers and health workers would be welcomed in the combat against infant and maternal mortality in Uganda. Maternal and newborn health research could continue with gender sensitive perspectives, taking into account disparities that may arise from the presence or lack of family support in vulnerable pregnant, delivering, and for the mother and baby in the postnatal period.

### **Study strengths and limitations**

The study sought to obtain reliability by using local translators and trained interviewers of both sexes. Possible bias include that the principal investigator was a foreign person. Alternatively, sometimes being from a different country or culture can have positive effect on the interviewees as it is seen as less threatening, as someone from the same culture may be more prone to criticize local practices. A majority of the negative statements about partners' support on maternal issues were from the same focus group discussion where many women were gathered. Being many may have encouraged others who otherwise would have kept silent. The study did not include interviews with fathers or partners, which could be seen as limitations to the study. Including the voice of partners could have given a more nuanced picture of the

situation reflected in the study and a better understanding of their situation. Using local translators and trained interviewers of both sexes as well as proof readings of transcriptions added credibility to the study. Issues with electric power and technical difficulties resulted in written notes only from one focus group discussion and one in-depth interview. Dependability of the study was sought obtained through triangulation of qualitative methods, although no participant observations were done outside of the health facilities. Previous research results from rural settings in Uganda makes the study transferable to settings with similar context and clientele.

## **Conclusion**

Maternal support and care were highly sought and valued by the mothers in the study, but not always accessible due to logistics and financial problems. Resources were scarce both in the homes and within the health system. Further focus on gender equity on all policy making levels, involving women's right to own decision making in maternity issues and higher recognition of male involvement in maternity care are suggestions for improved neonatal outcomes in Buikwe district, Uganda. This study highlights a continued need for higher awareness and incentives for implementation of recent WHO recommendations on postnatal care in the combat against infant mortality.

## **Abbreviations**

IRB - Institutional Review Board

IUD – Intra uterine device

REC - Regional ethical committee

SDG – Sustainable Development Goals

STA - Systematic text analysis

TBA - Traditional birth attendant

UCG – Uganda clinical guidelines

UDHS - Uganda district and health survey

UNICEF - United Nations International Children's Emergency Fund

VHT – Village health team worker

WHO – World Health Organization

## **Declarations**

## **Ethics approval and consent to participate**

The research was approved by the Makerere University Higher Degrees Research and Ethics Committee, Uganda (HDREC/2018/6) and registered with Uganda National Council for Science and Technology (HS302ES). The Regional Committee for Medical and Health Research Ethics, Norway (2018/602/REC West) approved the study. Signed consent for internship/research was obtained from St. Francis Hospital Nyenga and Kabizzi Health Centre. Participation in the study was fully voluntary and the subjects were given the possibility to withdraw consent at any given time and without reason, and demand that any personal input be deleted. All participants were given an information sheet about the study in either English or Luganda when asked for participation, and if agreeing asked to sign or fingerprint a consent form.

## **Consent for publication**

Not applicable

## **Availability of data and materials**

Questions regarding the datasets of the current study can be discussed with the corresponding author on reasonable request.

## **Competing interests**

The authors declare that they have no competing interests

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## **Authors' contributions**

MBR did the primary data collection, coding and analysis of the data and guarantee for the following: IMSE was co-reading the raw-data and discussed the main themes with the first author. MBR and IMSE conducted the validation exercise. RM contributed with developing the interview guides, acquisition of data and discussion of main themes with the first author. IN was collecting data materials, discussed findings and interpretations with the first author and helped with critical revision of the final paper.

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## References

1. UNICEF. Levels and trends in child mortality report 2019 [Internet]. New York; 2019. Available from: [https://www.who.int/maternal\\_child\\_adolescent/documents/levels\\_trends\\_child\\_mortality\\_2019/en/](https://www.who.int/maternal_child_adolescent/documents/levels_trends_child_mortality_2019/en/)
2. Kananura RM, Tetui M, Mutebi A, et.al. The neonatal mortality and its determinants in rural communities of Eastern Uganda. *Reprod Health* [Internet]. 2016;13(1):13. Available from: <https://doi.org/10.1186/s12978-016-0119-y>
3. Shakibazadeh E, Namadian M, Bohren MA, et.al. Respectful care during childbirth in health facilities globally: a qualitative evidence synthesis. *BJOG* [Internet]. 2017/12/08. 2018;125(8):932–42. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/29117644>  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6033006/>
4. UNICEF. Key practice: Antenatal Care [Internet]. UNICEF Uganda; 2019. Available from: <https://www.unicef.org/uganda/key-practice-antenatal-care>
5. UCG 2016. Uganda Clinical Guidelines 2016. Retrieved on 21/6/2018. Minist Heal Uganda. 2016;1–1142.
6. Arunda M, Emmelin A, Asamoah BO. Effectiveness of antenatal care services in reducing neonatal mortality in Kenya: analysis of national survey data. *Glob Health Action* [Internet]. 2017;10(1):1328796. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/28621201>  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5496054/>
7. Kruk ME, Vail D, Austin-Evelyn K, et.al. Evaluation of a maternal health program in Uganda and Zambia finds mixed results on quality of care and satisfaction. *Health Aff.* 2016 Aug 2;35(3):510–9.
8. Benova L, Dennis ML, Lange IL, et.al. Two decades of antenatal and delivery care in Uganda: a cross-sectional study using Demographic and Health Surveys. *BMC Health Serv Res* [Internet]. 2018;18(1):758. Available from: <https://doi.org/10.1186/s12913-018-3546-3>
9. Bbaale E. Factors influencing timing and frequency of antenatal care in Uganda. *Australas Med J* [Internet]. 2011 [cited 2021 Mar 27];4(8):431–8. Available from: <https://pubmed.ncbi.nlm.nih.gov/23393530/>
10. WHO | Mother-Baby Package: Implementing safe motherhood in countries. WHO [Internet]. 2019 [cited 2020 Aug 31]; Available from: [http://www.who.int/maternal\\_child\\_adolescent/documents/who\\_dhe\\_msm\\_9411/en/](http://www.who.int/maternal_child_adolescent/documents/who_dhe_msm_9411/en/)
11. Every Woman Every Child. The Global Strategy For Women’s, Children’s And Adolescents’ Health (2016-2030) | Every Woman Every Child [Internet]. [cited 2021 Jan 27]. Available from: <http://globalstrategy.everywomaneverychild.org/>
12. Byamugisha R, Åstrøm AN, Ndeezi G, et.al. Male partner antenatal attendance and HIV testing in eastern Uganda: a randomized facility-based intervention trial. *J Int AIDS Soc* [Internet]. 2011 Jan 1 [cited 2021 Apr 15];14(1):43. Available from: <http://doi.wiley.com/10.1186/1758-2652-14-43>
13. UNICEF. Improving male involvement to support elimination of mother-to-child transmission of HIV in Uganda. [Internet]. 2016. Available from: <https://www.childrenandaids.org/sites/default/files/2017->

14. UNICEF. Postnatal Care for Mothers and Newborns [Internet]. 2015 [cited 2021 Feb 2]. Available from: [https://www.who.int/maternal\\_child\\_adolescent/publications/WHO-MCA-PNC-2014-Briefer\\_A4.pdf](https://www.who.int/maternal_child_adolescent/publications/WHO-MCA-PNC-2014-Briefer_A4.pdf)
15. UNICEF. Maternal and Newborn Health Disparities country profiles - UNICEF DATA [Internet]. [cited 2021 Jan 27]. Available from: <https://data.unicef.org/resources/maternal-newborn-health-disparities-country-profiles/>
16. Ndugga P, Namiyonga NK, Sebuwufu D, Ogratious. Determinants of early postnatal care attendance: analysis of the 2016 Uganda demographic and health survey. *BMC Pregnancy Childbirth* [Internet]. 2020 Mar 16 [cited 2020 Dec 13];20(1):163. Available from: <https://bmcpregnancychildbirth.biomedcentral.com/articles/10.1186/s12884-020-02866-3>
17. Grimen, H;Ingstad B. Qualitative research. In: Laake, Petter; Benestad, H.B;Olsen BR, editor. *Research Methodology in the Medical and Biological Sciences - 1st Edition*. Oxford: Academic Press; 2007. p. 281–311.
18. Roed MB, Engebretsen IMS, Mangeni R. Neonatal care practices in Buikwe District, Uganda: a qualitative study. *BMC Pregnancy Childbirth* [Internet]. 2021 Dec 1 [cited 2021 Apr 13];21(1):213. Available from: <https://bmcpregnancychildbirth.biomedcentral.com/articles/10.1186/s12884-021-03699-4>
19. Wikipedia. Nyenga Mission Hospital [Internet]. 2016. Available from: [https://en.wikipedia.org/wiki/Nyenga\\_Mission\\_Hospital](https://en.wikipedia.org/wiki/Nyenga_Mission_Hospital)
20. Nyenga. About the foundation, [Internet]. 2018. Available from: <http://www.nyenga.no/new/en/about-us/>
21. Malterud K. Systematic text condensation: A strategy for qualitative analysis. *Scand J Public Health*. 2012;40(8):795–805.
22. Kakaire O, Kaye DK, Osinde MO. Male involvement in birth preparedness and complication readiness for emergency obstetric referrals in rural Uganda. *Reprod Health* [Internet]. 2011;8(1):12. Available from: <https://doi.org/10.1186/1742-4755-8-12>
23. Chi PC, Urdal H. The evolving role of traditional birth attendants in maternal health in post-conflict Africa: A qualitative study of Burundi and northern Uganda. *SAGE open Med* [Internet]. 2018 Jan 1 [cited 2021 Apr 19];6:2050312117753631. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/29375881>
24. Morgan R, Tetui M, Muhumuza Kananura R, et.al. Gender dynamics affecting maternal health and health care access and use in Uganda. *Health Policy Plan* [Internet]. 2017 Mar;32(suppl\_5):v13–21. Available from: <https://doi.org/10.1093/heapol/czx011>
25. Development M of GL& S. The Employment Act Uganda 2006 [Internet]. [cited 2021 Apr 15]. Available from: <https://mglsd.go.ug/laws/>
26. Betran AP, Temmerman M, Kingdon C, et.al. Interventions to reduce unnecessary caesarean sections in healthy women and babies. *Lancet*. 2018/10/17. 2018;392(10155):1358–68.

27. Terry A, Gomez R. Gender and Public Access Computing: An International Perspective. Electron J Inf Syst Dev Ctries [Internet]. 2010 Sep 1 [cited 2021 Feb 19];43(1):1–17. Available from: <http://doi.wiley.com/10.1002/j.1681-4835.2010.tb00309.x>
28. AKUMU BYIKP. COVER STORY: CHILD CUSTODY. The Observer [Internet]. 2010; Available from: <https://observer.ug/component/content/article?id=8192:cover-story-child-custody>
29. Uganda legal information institute. Children Act [Internet]. Available from: <https://ulii.org/ug/legislation/consolidated-act/59>
30. Commission UHR. An Assessment of the Compatibility of Ugandan Legislation with the convention on the rights of the child. 2017.

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