ORIGINAL ARTICLE

Quality of perinatal care: Experiences of clients and providers in three district hospitals of Western Uganda – A mixed methods study

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ABSTRACT

Background: It is anticipated that closing the quality gap through provision of effective antenatal, intrapartum and postnatal care for mothers and newborns in facilities will reduce morbidity and mortality. Mothers' and health care providers' experiences play a vital role in achieving quality care during the perinatal periods.

Purpose: To assess the health care providers' (HCPs) and clients' experiences on quality of perinatal care at three district hospitals in Bunyoro region, Western Uganda.

Methods: A convergent parallel mixed methods study design was utilized to explore experiences of 1) mothers as they sought antenatal, intrapartum, and postnatal care; and 2) care providers. Consecutive sampling was used to select 872 postnatal women at discharge, while purposive sampling was employed to select 54 care providers to participate in the study using structured questionnaires and interview guides. Quantitative data was analyzed descriptively, and qualitative data analyzed using inductive thematic analysis.

Results: Most women rated their interactions with the HCPs as trustworthy (80.5%), respectful (74.5%), and devoted (77.4%). All women were examined during antenatal, and 94% examined during childbirth. Most received medications during antenatal (99.5%) and childbirth (82.6%). Medical histories and care were recorded for 94.4% of women using standardized tools (98.2%). However, only 26.4% felt fully supported in transitioning care, while 37.4% faced difficulties. Additionally, over half of the HCPs were dissatisfied with the available physical infrastructure (75.9%) and resources (61.1%). Three themes emerged: good care

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provision, receiving information about care, and provider and client satisfaction.

Conclusions: Women had a positive experience contrary to that of the health care providers, which was influenced by a lack of an enabling environment. The limited environment also impacted women's ability to transition in care. The presence of an enabling environment may enhance the quality of care provided to pregnant women.

Key Words: Antenatal care, Intrapartum care, Postnatal care, Quality of care, Postnatal women, Health care providers, Experiences

1. INTRODUCTION

Reducing maternal and neonatal mortality and morbidity remains a key challenge in achieving the third Sustainable Development Goal.[1,2] Globally, closing the quality gap through provision of effective care to women and newborns is estimated to reduce their morbidity and mortality.[3] Quality care encompasses both the provision of care and experiences of care along with other health system functions that affect care delivery.[4] Over the years, there has been a growing emphasis on the vital role played by women and maternal health care providers' experiences in improving the quality of perinatal (antenatal, intrapartum and postpartum) care.[5–7] Exploring the experiences of women and maternal health care providers helps identify the strength and gaps in the provision of perinatal care, which, when addressed, can improve service utilization and birth outcomes.[8] Studies have shown that women who are satisfied with perinatal care are more likely to return, adhere to the care recommendations, and recommend services to friends and relatives.[8] Additionally, maternal health care providers who are satisfied with the care they provide are more likely to have improved attitudes, be consistently available, and provide effective care to their clients.[9]

Studies have highlighted shortages of resources and staff, high workloads, disrespect and abuse during care, lack of privacy and dignity, and poor-quality care as some of the reasons for dissatisfaction with perinatal care in sub-Saharan Africa.[9–12] This could partly explain the low utilization of care and persistently high maternal and neonatal mortalities in the region.[13,14] Additionally, positive women provider relationships, as well as quality care, have also been reported by some studies, which may partly explain the continued utilization of maternal health services in the region.[9,11,15] To address the gaps in perinatal quality of care, a more comprehensive assessment of the women and care provider experiences across the continuum of perinatal care is needed. Current studies focus on specific time-periods of care such as antenatal, intrapartum and postnatal. This study assesses the experiences of postnatal women and health care providers regarding the quality of perinatal care received and provided at district hospitals in Bunyoro region, Western Uganda. The findings will inform the development of a context specific perinatal care model that could contribute to reducing perinatal mortalities in Uganda and similar settings.

2. METHODS

2.1 Study design and setting

A facility based convergent parallel mixed methods study was conducted between March and June 2020 in three district hospitals of Bunyoro region, Western Uganda. This mixed methods research combined quantitative and qualitative approaches to provide a more comprehensive understanding of the quality of perinatal care, allowing for the triangulation of results. We integrated numerical data (quantitative) with textual or visual data (qualitative) for a deeper understanding, providing context to the quantitative findings through qualitative insights. More so, we were able to explore research questions from multiple angles. This approach provided rigor and thoroughness in tackling this complex research question of exploring experiences of clients and providers in the three district hospitals. A cross-sectional design was used to collect quantitative data, while in-depth interviews were used to collect qualitative data. A phenomenological study design was used to elicit the actual lived experiences of postpartum women as they sought perinatal care, as well as the experiences of the health care providers in delivering that care. Details of the study setting have been previously described.[16,17] Briefly, Bunyoro region comprises eight districts: Kakumiro, Kibaale, Kagadi, Kikuube, Hoima, Masindi, Buliisa, and Kiryandongo.[18] The region has only three district hospitals (Kagadi, Kiryandongo, Masindi) that offer preventive, promotive, and both in and outpatient curative services in all areas of child and adult medicine.[19] An average of 860 antenatal attendances and 300 births are registered at these hospitals each month. The Bunyoro region was chosen due to its consistently poor maternal health indicators prior to the study. All three hospitals were included to ensure adequate study respondents and results that are representative of the region.

2.2 Data collection

2.2.1 *Study population*

The study was conducted among postpartum women at discharge, specifically those who had given birth and received care, along with health care providers at three district hospitals (Masindi, Kiryandongo and Kagadi) in Bunyoro region. A postpartum woman was eligible to join the study if she: 1) attended antenatal care in the study hospitals; 2) gave birth in the participating hospitals; 3) the birth was conducted by a skilled health professional; 4) provided a written informed consent; and 5) had a health record of care received during the antenatal, intrapartum, and postpartum periods. Health care providers were enrolled in the study if they: 1) worked on one of the perinatal units (antenatal, labor suite, postnatal) of the participating hospitals for a minimum of six months; 2) their position was nurse, midwife, clinical officer, or doctor; and 3) provided written informed consent to participate in the study.

2.2.2 *Sample and sampling*

Details of the sampling strategy for the quantitative study have been previously reported.[16, 17] All eligible health care providers working in the antenatal, labor suite, and postnatal units of the participating hospitals were enrolled in the study, totaling 54 health care providers, using purposive sampling. Sample size for women was calculated using the formulae for comparing two proportions, assumed 5% level of significance, 80% power, design effect of 2, and non-response of 10% and hypothesizing that the quality of care would be different between educated and less educated mothers. The minimum number of women required to answer the hypothesis was 755. Probability proportionate to size was used to determine mothers to be enrolled from each hospital while consecutive sampling was used to enroll the mothers in the study.

For the qualitative study, health care providers were purposively sampled to ensure representation of different cadres, duty stations, and lengths of time in practice. Postpartum women were also purposively selected to represent various age groups, parity, modes of delivery, educational levels, ethnicities, and residences. Data saturation determined the minimum number required for in-depth interviews.

2.2.3 *Data collection method*

Quantitative data was collected using structured questionnaires on the Open Data Kit (ODK) software. Interview guides were also used to collect qualitative data in person from nine HCPs and 16 mothers (25 in-depth interviews). All tools were pre-tested prior to use at Kawolo hospital, a similar district hospital in central region, among postpartum women and HCPs. The findings were then used to improve the grammar and clarity of the questions. The questionnaire for the HCPs collected data on socio-demographics, in-service training/mentorship, supervision, transition in care, coordination of care, continuity of care, and satisfaction. This paper presents the HCPs socio-demographics, transition in care, continuity of care, and satisfaction. The questionnaire for postpartum women collected data on socio-demographics, care received during the perinatal period, transition in care, patient health care provider relationships, and satisfaction. The two interview guides for HCPs and postpartum women each consisted of open-ended questions designed to elicit experiences on structures, processes, and outcomes of perinatal care.

2.3 Data analysis

Quantitative data was exported to STATA version 13 for cleaning and analysis. The study variables considered for analysis were transition in care, continuity of care, patient health care provider relationships, care received during the perinatal period, and satisfaction. Specifically, transition in care referred to presence of patient flow procedures and support, and patient referral processes. Continuity of care referred to the documentation of patient care practices (informational continuity), provision of health care provider telephone contacts on each visit (relational continuity), and use of patient records during management and follow up (management continuity). Patient health care provider relationships referred to women's perception of the communication and attitude of their health care providers. Care received during the perinatal period included preventive measures, diagnostic tests, and examinations that women received during pregnancy, childbirth, and after childbirth, as recommended by the WHO.[20–22] Finally, satisfaction referred to the health care providers or women's perceptions regarding the structures, processes, and outcome of perinatal care. The study variables, including socio-demographics were analyzed descriptively in the form of frequencies and percentages.

For qualitative data, independent research assistants transcribed the interview audio recordings verbatim. Prior to analysis, the principal investigator reviewed all the transcripts for accuracy and completeness by concurrently reading and listening to the audio recordings. Data analysis was undertaken using inductive thematic analysis techniques which involved coding thematically from the data, identifying, and describing the explicit and implicit ideas to form themes and subthemes. The quantitative data was compared with the qualitative for a comprehensive understanding and interpretation of the findings.

2.4 Ethical clearance

The study was approved by the Makerere University School of Medicine Research Ethics Committee (REC REF# 2019-137) and the National Council of Science and Technology (HS483ES). Permission to conduct the study was sought from the participating districts and health facilities. Written informed consent was obtained prior to study enrolment. The research tools for women were translated into Runyoro, the local language for the study area. The interviews were conducted in a quiet, secluded place. The respondents were informed that they were free to stop or leave at any time during the interview if they wished. Information obtained was kept confidential and securely stored.

3. RESULTS

3.1 Description of the study participants

A total of 80 health care providers were screened and 54 (67.5%) were enrolled in the study. The mean age (standard deviation, SD) of the health workers was 32.4 (8.5) years, with the majority being female (90.7%), Nurses/Midwives (94.4%), and 72.2% had ten or fewer years of experience (72.2%) (see Table 1).

Additionally, 3,320 postpartum women were screened, and 872 (26.3%) were enrolled in the study. The mean age of the women was 25 (5.9) years. Most of the women were married or in a stable relationship (89.7%) and had two or more children (70.5%). Almost all mothers (97.0%) earned less than 500,000 UGX ($140) a month (see Table 1).

3.2 Provider and client experiences on the quality of perinatal care

Three main themes with six related sub-themes emerged from the analysis of the interviews with mothers and HCPs. The main themes were: (i) good care provision, (ii) receiving information about care, and (iii) provider and client satisfaction. The themes and related sub-themes are summarized in Table 2.

3.2.1 *Patient provider relationships*

Women shared their experiences regarding the relationships with the health care providers. Many women felt that their interactions with the HCPs were trustworthy (80.5%), respectful (74.5%), and with devotion (77.4%). The majority of the women also perceived HCPs to be knowledgeable about the care they provided (71.2%). However, women at Kiryandongo hospital felt that their HCPs were less trustworthy, respectful, loyal and knowledgeable, as shown in Table 3.

Maintaining good conduct and relationship

In this study, good care was expressed by participants as the main theme of high-quality perinatal care. Many women regarded the respect shown to them by the providers as good care. The health care providers' professionalism and positive relationships made the women feel respected, valued as individuals, which, in turn increased their trust in their providers.

"The midwives were welcoming and would call me whenever I failed to come. I really appreciate that gesture. They would ask why I did not come and always encouraged me to adhere to my treatment. This made me love them very much." (Mother#2 Masindi Hospital)

"When I came in during labor, they asked me if I had just arrived, and I said yes. Immediately, they called me in, attended to me, and stayed with me whole night. From 6:00 pm to 6:00 am, I was with health workers." (Mother#3, Kagadi Hospital)

The health care providers also expected to have a good relationship with their patients.

"I welcome mothers and build a good relationship with them so that they feel comfortable coming back next time. Sometimes, we give them our phone numbers so that they can call us if they encountered any problems. When they call, we let them know if we are at the facility and when they should come to the Hospital. This way, they arrive knowing whom to find and talk to." (HCP#1, Kagadi Hospital).

Despite many women describing a good relationship with their HCPs, some reported disrespectful encounters. In their view, the way they were treated or addressed by HCPs affected their dignity. Women wanted to feel cared for; one woman said:

"The health workers I encountered were good, with exception of one who was harsh."

She lamented:

"After I delivered, the midwife told me to take the baby to theater (operating room) while she attended to another delivery. The unapproachable midwife said, I see that baby is already dead!"

She further explained the poor conduct of the provider, who was unapproachable:

"..... We went to call her when another mother was in pain, but she just stayed asleep. I even thought about taking my lifeless baby to her that night, hoping it would come back to life, but I was scared. She's not easy to approach, even though I don't know her name." (Mother#1, Masindi Hospital)

Table 1. Characteristics of the study population

Characteristic	Kagadi *n* (%)	Kiryandongo *n* (%)	Masindi *n* (%)	Total *n* (%)
Health care providers	**N=22**	**N=15**	**N=17**	**N=54**
Gender				
Male	1 (4.5)	1 (6.7)	3 (17.6)	5 (9.3)
Female	21 (95.5)	14 (93.3)	14 (82.4)	49 (90.7)
Age				
20-30	15 (68.2)	9 (60.0)	7 (41.2)	31 (57.4)
31-40	5 (22.7)	1 (6.7)	6 (35.3)	12 (22.2)
>40	2 (9.1)	5 (33.3)	4 (23.5)	11 (20.4)
Marital status				
Married/Stable relationship	13 (59.1)	13 (86.7)	12 (70.6)	38 (70.4)
Single/divorced/separated	9 (40.9)	2 (13.3)	5 (29.4)	16 (29.6)
Professional qualification				
Doctor	0 (0)	0 (0)	2 (11.8)	2 (3.7)
Registered Nurse/Midwife	4 (18.2)	5 (33.3)	7 (41.2)	16 (29.6)
Enrolled Nurse/Midwife	17 (77.3)	10 (66.7)	8 (47.0)	35 (64.8)
Clinical officer	1 (4.5)	0 (0)	0 (0)	1 (1.9)
Work experience				
<5 years	8 (36.4)	5 (33.3)	3 (17.6)	16 (29.6)
5-10 years	10 (45.4)	5 (33.3)	8 (47.1)	23 (42.6)
>10 years	4 (18.2)	5 (33.3)	6 (35.3)	15 (27.8)
Postpartum Women	**N=329**	**N=207**	**N=336**	**N=872**
Age of the women				
< 20	60 (18.2)	46 (22.2)	59 (17.6)	165 (18.9)
20-35	252 (76.6)	148 (71.5)	248 (73.8)	648 (74.3)
>35	17 (5.2)	13 (6.3)	29 (8.6)	59 (6.8)
Education level				
None/Primary	187 (56.8)	137 (66.2)	129 (38.4)	453 (52.0)
Secondary	93 (28.3)	65 (31.4)	168 (50.0)	326 (37.4)
Tertiary	49 (14.9)	5 (2.4)	39 (11.6)	93 (10.6)
Marital status				
Married/Stable relationship	290 (88.2)	194 (93.7)	298 (88.7)	782 (89.7)
Single/divorced/separated	39 (11.8)	13 (6.3)	38 (11.3)	90 (10.3)
Occupation				
None	16 (4.9)	73 (35.3)	209 (60.2)	298 (34.2)
Informal employment	280 (85.1)	125 (60.4)	89 (26.5)	494 (56.6)
Formal employment	33 (10.3)	9 (4.3)	38 (11.3)	80 (9.2)
Income				
<100,000/=	75 (22.8)	105 (50.7)	240 (71.4)	420 (48.2)
100,000-500,000/=	237 (72.0)	101 (48.8)	88 (26.2)	426 (48.8)
>500,000/=	17 (5.2)	1 (0.5)	8 (2.4)	26 (3.0)
Parity				
Primigravida (1)	93 (28.3)	61 (29.5)	103 (30.7)	257 (29.5)
Low parity (2-3)	133 (40.4)	76 (36.7)	124 (36.9)	333 (38.2)
Multipara (>3)	103 (31.3)	70 (33.8)	109 (32.4)	282 (32.3)

Table 2. Theme, subtheme and categories from the experiences of providers' and women experiences of quality care

Theme 1	**Good Care Provision**			
Subthemes	Respectful care provision		Maintaining women's privacy and confidentiality	
Categories	Maintaining good conduct and relationship	Provision of medicine and mosquito nets	Treated with privacy	Keeping client information and records confidential
Theme 2	**Receiving Information about Care**			
Subthemes	Expectations for Positive communication with providers		Safe childbirth care provision	
Categories	Advised on health living.	Integrating follow up in aspects of care	Explanation about health condition/s and response to danger signs	Influence of providers' support for women in different ways
Theme 3	**Provider and Client Satisfaction**			
Sub themes	Satisfactory care		Inadequate care	
Categories	Providers' attitude	Timely provision of care	Many patients, few staff	Barriers of physical environment to effective care

Table 3. Women's experiences on their relationships with the health care providers

Characteristic	**Kagadi N=329 *n* (%)**	**Kiryandongo N=207 *n* (%)**	**Masindi N=336 *n* (%)**	**Total N=872 *n* (%)**
Trust				
Agree	307 (93.3)	77 (37.2)	318 (94.6)	702 (80.5)
Neither agree nor disagree	22 (6.7)	120 (58.0)	15 (4.5)	157 (18.0)
Disagree	0 (0)	10 (4.8)	3 (0.9)	13 (1.5)
Regard				
Agree	298 (90.6)	30 (14.5)	322 (95.8)	650 (74.5)
Neither agree nor disagree	30 (9.1)	131 (63.3)	9 (2.7)	170 (19.5)
Disagree	1 (0.3)	46 (22.2)	5 (1.5)	52 (6.0)
Loyalty				
Agree	300 (91.2)	55 (26.6)	320 (95.2)	675 (77.4)
Neither agree nor disagree	27 (8.2)	135 (65.2)	13 (3.9)	175 (20.1)
Disagree	2 (0.6)	17 (8.2)	3 (0.9)	22 (2.5)
Knowledge				
Agree	278 (84.5)	36 (17.4)	307 (91.4)	621 (71.2)
Neither agree nor disagree	47 (14.3)	135 (65.2)	26 (7.7)	208 (23.9)
Disagree	4 (1.2)	36 (17.4)	3 (0.9)	43 (4.9)

3.2.2 *Care received during the perinatal period*

All women were examined during the antenatal period while the majority received health education (87.7%), had investigations done (97.5%), were given medications (99.5%), and received tetanus toxoid vaccinations (96.6%). Similarly, the majority of women were examined and provided with medications during childbirth (94% and 82.6% respectively). A lower proportion of women were examined (55.9%) and provided with medications (70%) in the postpartum period (see Table 4).

In contrast, even though the majority of the women agreed that they had received medications throughout the perinatal period and were examined during pregnancy and childbirth, some providers mentioned the challenges they faced in caring for mothers, such as a lack of medicines and equipment. One health care provider stated:

"We face challenges such as drug stock-outs, as well as faulty weighing machines and blood pressure machines…" (HCP#1, Masindi Hospital)

Timely provision of care

In this study, the timely and appropriate provision of care

Table 4. Care received by women during the perinatal period

Characteristic	Kagadi N=329 *n* (%)	Kiryandongo N=207 *n* (%)	Masindi N=336 *n* (%)	Total N=872 *n* (%)
Antenatal				
Health education				
No	15 (4.6)	3 (1.4)	89 (26.5)	107 (12.3)
Yes	314 (95.4)	204 (98.6)	247 (73.5)	765 (87.7)
Examinations				
No	0 (0)	0 (0)	0 (0)	0 (0)
Yes	329 (100)	207 (100)	336 (100)	872 (100)
Laboratory investigations				
No	2 (0.6)	16 (7.7)	4 (1.2)	22 (2.5)
Yes	327 (99.4)	191 (92.3)	332 (98.8)	850 (97.5)
Medications				
No	0 (0)	4 (1.9)	0 (0)	4 (0.5)
Yes	329 (100)	203 (98.1)	336 (100)	868 (99.5)
Tetanus toxoid Vaccination				
No	4 (1.2)	2 (1.0)	24 (7.1)	30 (3.4)
Yes	325 (98.8)	205 (99.0)	312 (92.9)	842 (96.6)
Counseling				
No	281 (85.4)	36 (17.4)	240 (71.4)	557 (63.9)
Yes	48 (14.6)	171 (82.6)	96 (28.6)	315 (36.1)
Labor and delivery				
Health education				
No	280 (85.1)	51 (24.6)	234 (69.6)	565 (64.8)
Yes	49 (14.9)	156 (75.4)	102 (30.4)	307 (35.2)
Examinations				
No	4 (1.2)	2 (1.0)	46 (13.7)	52 (6.0)
Yes	325 (98.8)	205 (99.0)	290 (86.3)	820 (94.0)
Laboratory investigations				
No	320 (97.3)	85 (41.1)	305 (90.8)	710 (81.4)
Yes	9 (2.7)	122 (58.9)	31 (9.2)	162 (18.6)
Medications				
No	12 (3.6)	9 (4.3)	131 (39.0)	152 (17.4)
Yes	317 (96.4)	198 (95.7)	205 (61.0)	720 (82.6)
Postpartum				
Health education				
No	271 (82.4)	60 (29.0)	258 (76.8)	589 (67.6)
Yes	58 (17.6)	147 (71.0)	78 (23.2)	283 (32.4)
Examinations				
No	200 (60.8)	14 (6.8)	171 (50.9)	385 (44.1)
Yes	129 (39.2)	193 (93.2)	165 (49.1)	487 (55.9)
Medications				
No	231 (70.2)	4 (1.9)	27 (8.0)	262 (30.0)
Yes	98 (29.8)	203 (98.1)	309 (92.0)	610 (70.0)
Counseling				
No	309 (93.9)	74 (35.8)	330 (98.2)	713 (81.8)
Yes	20 (6.1)	133 (64.2)	6 (1.8)	150 (18.2)

was a key factor in the good care that women received. Providing care was considered as a demonstration of respect for life, and even more so, respect for individual patients. One of the women related good care to the medical treatment she received:

"I received good care, and for whatever complaint I had, I was attended to . . . . . "

And finally, she said:

". . . . . Arriving in poor condition I received treatment and received care that I never expected because I was very sick. . . . . What impressed me was the excellent care I received; otherwise, I might have lost my pregnancy if I hadn't been treated well. I realized this hospital is doing a great job, and I feel very happy about it." (Mother#5, Masindi Hospital)

Advise of healthy living

Mothers emphasized that providers had the responsibility of providing health education to them. Most mothers recalled receiving advise on maintaining health living and involving family members in aspects of physical care. Mothers noted that their experience was also influenced by their health literacy levels.

"They always advised me about hygiene, to getting enough sleep, staying in a clean environment and eating nutritious foods. I was also encouraged to take ferrous folate and the other tablets regularly. I really stayed healthy. You see, even after cesarean section, I was able to sit by myself after just 30 minutes." (Mother#2, Masindi Hospital)

The health care providers also affirmed their commitment to providing holistic care to women from their first antenatal visit.

"When a mother comes, we provide her holistic care starting from her first visit for antenatal care. . . . . We offer health education on various topics, such as hygiene, danger signs in pregnancy, HIV—how it is transmitted and prevented—and what to do if someone tests positive, as well as information on EMTCT (Elimination of Mother-to-Child Transmission)." (HCP#3, Kiryandongo Hospital)

3.2.3 *Continuity of care*

Most of the women (n = 823, 94.4%) reported having a medical record that documented their medical histories and the care they received. These records were kept by the women themselves (n = 811, 98.5%) and health care providers often referred to them whenever the women returned to the hospitals for care (n = 816, 99.2%) (see Supplementary Table 1). In agreement with the women, the majority of HCPs indicated that they used standard record tools (n = 53, 98.2%) primarily to document the women's present history (n = 44, 81.5%) and the care provided (n = 41, 75.9%). Many HCPs emphasized the importance of these tools for continued care. However, a few expressed dismay about the inadequate tools available to them as follows:

". . . . . Some information is recorded on the antenatal cards for those who have them and in exercise books for those without. Mothers take their antenatal cards or exercise books home. In case a referral is needed, we provide a referral note when necessary."

Then continued:

"We ask that they provide us with antenatal cards because it's easier to document information on them than in an exercise book, where we may overlook important details. We often forget what to record when using exercise books." (HCP#1 Masindi Hospital)

Integrating follow up in aspects of care

Integrating follow up into aspects of care was identified by most postpartum women as an expectation for continued management by providers. Mothers reported that follow up dates were provided to them at every visit, which they viewed as a sign of the providers' interest in their wellbeing.

"During my antenatal care, I kept with my antenatal clinic card. They recorded the dates for my upcoming clinic visits on it. Before discharge, they check everything and provide me with a return date to come in for a check-up for both my baby and myself." (Mother#4, Kiryandongo Hospital)

3.2.4 *Transition in care*

Most of the women (n = 829, 95.1%) received all their perinatal care services from the study facilities, although at different service points (n = 38, 70.4%), as indicated by the health care providers, with some support from the facilities (n = 542, 62.2%). It took women (n = 710, 81.4%) less than 30 minutes to receive services at a particular point once they moved from another service point. However, despite the ease of transition, 37.4% (326) of the women experienced difficulties. The difficulties were due to the need to purchase medications and hospital supplies, long waiting time at some points, congestion in certain units, and the poor attitude of some HCPs. A mother of four with a previous history of normal deliveries appreciated the support she received during the care transition. She said:

"I had normal deliveries for my first, second, third, and fourth pregnancies. During my fourth pregnancy, I delivered at 30 weeks. I experienced bleeding and was referred to Hoima Regional Referral Hospital. I was provided with an ambulance at no cost. This is my fifth baby, and I had a successful

cesarean section. I was given intravenous fluids and administered medication." (Mother#2, Masindi Hospital)

She, however, expressed frustration with the lack of drugs during her care:

"I bought my medications; I never received any free drugs." (Mother#2, Masindi Hospital)

3.2.5 *Satisfaction with the quality of perinatal care*

Many of the HCPs (n = 41, 75.9%) were not happy with the physical infrastructure they used to provide perinatal services to women, and more than half (n = 33, 61.1%) were unhappy with the resources available for use during care provision.

"The space we are working in is not very conducive because it's inadequate." (HCP#1 Kiryandongo Hospital)

The HCPs explained that the quality of care was compromised due to staff shortages. Maternity staffing levels were often limited to a maximum of two midwives, and at times, only one was on duty. Regardless of the numbers, staff were still expected to transport and receive mothers from the theatre while also monitoring those in the labor ward. In this regard, a provider said:

"The staffing is thin; we're understaffed. You often find yourself alone on duty in the labor suite while the place is busy. In that situation, you can't provide quality care because if two or four mothers are pushing at the same time, you don't know which one to start with or who to attend to next. This happens frequently here. Sometimes, we wear double gloves and rush to deliver one mother after another and remove the placenta. We do this to save lives and prevent the baby from falling. So, understaffing is really a significant problem." (HCP#3, Kiryandongo Hospital)

Similarly, HCPs worked in two units at the same time. Midwives who conducted deliveries in the labor suites also provided care in the postnatal unit. As a result, they would only administer treatment when they had time or when there were no mothers in the labor suite. One health care provider asserted that:

"When you're alone on duty, you're still expected to take and receive mothers from the operating room while also monitoring those in labor and the postnatal wards. You would start with emergencies and rush them to the operating room, leaving behind a mother who is pushing. After that, you would bring a postoperative mother back to the postnatal area. As a result, in some cases, you might find that a mother's condition has changed and she has passed away." (HCP#2, Kiryandongo Hospital)

The mothers also experienced staff shortages, which led to delays in receiving care and resulted in adverse outcomes.

"When I arrived yesterday, the midwife was very busy attending to other mothers, and she was the only one on duty." (Mother#1, Masindi Hospital).

This was echoed by a mother who, upon arriving at the facility at 9:00 am, was examined, returned for another assessment at 3:00 pm, and delivered at midnight with an episiotomy. Sadly, she lost her baby the next day at 7:00 am.

"When the midwife who delivered my baby finished assisting another mother, she took my baby to the operating room. The baby was brought back to us, kept nearby, and was able to cry, but then the baby passed away." (Mother#1, Masindi Hospital)

Furthermore, some HCPs were dissatisfied with the outcomes of the care they provided to the mothers. This affected their attitudes toward service delivery.

"Sometimes I'm not satisfied because some mothers lose their babies." (HCP#2 Kagadi Hospital).

HCP satisfaction was mainly derived from the roles or tasks assigned to them and their relationships with patients, with more than half indicating this (n = 30, 55.6% for roles/tasks assigned and n = 31, 57.4% for patient provider relationships) as detailed in Supplement Table 2. In contrast, more than half of the women (n = 584, 67.0%) felt happy with the physical infrastructure where they received perinatal care. The majority (n = 698, 80.0%) were satisfied with the confidentiality of their information as maintained by the HCPs).

"..... I think they keep it private. They write it down and keep it confidential." (Mother#3, Kiryandongo Hospital)

Women's confidence in the confidentiality of their personal information was confirmed by the HCPs, who indicated that women's information is kept in the department and not shared with anyone outside it. Mothers were given their health records in the form of antenatal books and referral notes for safekeeping.

"..... Registers are kept here in the hospital. Each department has its own registers and is responsible for them. Everyone in the department knows where the registers are located. The mothers bring their antenatal cards, which they present each time they come to the hospital." (HCP#1, Kagadi Hospital)

However, despite the women's satisfaction, there were expressions of unhappiness regarding privacy, as it did not meet their comfort needs and dignity.

".....The curtains are not enough. You'll find like three mothers using the same curtain, when ideally it should be one mother per curtain." (Mother#7, Kagadi Hospital)

4. DISCUSSION

The study explored the experiences of postpartum women and health care providers regarding the quality of perinatal care received and provided in three hospitals of Bunyoro region, Western Uganda. The results show that most women had a positive relationship with their care providers, whom they described as trustworthy, respectful, committed, and knowledgeable. Women felt that the care they received was adequate, despite the challenges faced by health care providers, such as stock outs, lack of equipment, staffing shortages, and heavy workloads. Some women experienced difficulties transitioning through care, particularly when they had to buy missing hospital supplies or medications, faced long wait times at certain service points, encountered uncooperative HCPs, or dealt with overcrowding in the units they were sent to. Even when challenged, HCPs were able to continue care through documentation and by providing return dates. Overall, women were more satisfied with the care they received compared to the satisfaction of the HCPs who delivered it. Dissatisfaction for both groups resulted from a poor enabling environment.

The study shows that women had a positive relationship with their care providers and felt that the care they received was adequate. Similar findings have been reported by other studies,[9,11,15] although these were refuted by women in Tanzania.[23] The positive relationships likely enhance women's experiences and increase their antenatal attendance, and access to skilled birth care, which are known to influence perinatal deaths because women feel safe. Similar to the situation in Tanzania, women in Kiryandongo felt that their HCPs were less respectful, loyal, trustworthy, and knowledgeable. This perception could have resulted from the long wait times and unfavorable attitudes of HCPs, particularly noted by adolescent mothers, who make up a significant percentage of pregnant women seeking services at this hospital.[24,25] The perception of adequate care, however, contradicts our initial study findings, which indicated that women received inappropriate care.[16] This variation may result from the positive relationships with HCPs[9] and the possibility that women were unaware of the expected standard care.[26,27] When women are unaware of what they should receive, they are less likely to demand it, allowing poor quality care to continue.

Despite the positive relationships with their care providers and the adequate care received, the study also reveals that some women experienced difficulties transitioning through care due to stock outs, overcrowding, long wait times, and poor attitudes from HCPs. Similar findings have been reported in other sub-Saharan African countries including Uganda.[11,12] This may help explain the inappropriate care received by women in our initial study.[16] When these transitional challenges are not addressed, they can lead to incomplete care cycles, exposing mothers and their babies to poor birth outcomes. The study shows that HCPs faced challenges such as stock outs, lack of equipment, staffing shortages, and heavy workloads, which is consistent with findings from a study in Kenya.[10] These challenges may justify HCPs' inability to provide quality care to women, as noted in our earlier paper.[16] The persistence of these challenges may undermine HCPs ability to provide quality care, their presence in the facilities, and their continued positive attitudes towards work,[9,28–32] eventually leading to poor perinatal outcomes.[33,34] Finally, the study shows that HCPs and women were dissatisfied with the perinatal care environment, particularly due to limited physical infrastructure, resources, and a lack of privacy. This dissatisfaction may result from the fact that an enabling environment is considered essential for providing quality perinatal care and enhancing women's positive experiences.[35,36] Adequate physical infrastructure, resources, and privacy are critical components of such an enabling environment.[36]

4.1 Study strengths and limitations

The strength of the study lies in its mixed methods of data collection, which provided a deeper understanding of the quality of perinatal care provided to women in the Bunyoro region. Despite this strength, the study had some limitations. It relied on self-reported data which may have been influenced by the ability to recall, their willingness to share personal and potentially sensitive information, and their desire to respond in a manner that would not tarnish the image of the facilities. This data could have been validated with observational data. Notably, the women's personal birth experiences may have influenced their perception of the HCPs and care received. Women with negative birth outcomes are likely to hold critical views of the HCPs and the care they received. Further research could explore the relationship between birth outcomes and quality of care experiences. Nevertheless, the study provides valuable insights into the quality of perinatal care in resource-constrained settings, laying the basis for further research and the development of respectful maternity care in such settings.

4.2 Implications for practice and policy

The positive experiences identified could be upheld, while negative experiences should be addressed to deliver a satisfactory quality of care in these hospitals or similar settings. This study offers a deep exploration of the perspectives of both providers and clients, illuminating the concerns surrounding service delivery. As such, responding to these findings could have a direct effect on service delivery.

5. Conclusion

The study shows that women had a positive experience regarding the quality of care provided to them during the perinatal period, characterized by good client provider relationships and adequate care. In contrast, health care providers reported negative experiences due to barriers such as inadequate space, resources, staffing shortages, and heavy workloads. These barriers also hindered women's transitions in care. There was a discrepancy between women's experiences and the findings from our earlier paper, which indicated that the majority of the women received inappropriate care; however, the perceived barriers could have been the reasons for this inappropriate care. The findings demonstrate that providing adequate physical infrastructure, resources, and staffing could enhance the quality of perinatal care and improve women's experiences during antenatal, childbirth, and postpartum care. Health care providers need to educate women about the expected standards of care to enhance their understanding of quality perinatal care. Further research could also explore the variation between documented care and women experiences, as well as the influence of birth outcomes on quality-of-care experiences.

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Authors contributions

This work was a team effort that brought together various skills and perspectives. MM, JIN, DKK, GN, JN, GOO, JCN, WM, ENE, RB, JNK, and GE all contributed to designing the study and writing the study protocol. MM, EO, and RB conducted the analysis and interpretation of the data. All authors contributed to drafting and revising the manuscript and approved the final version.

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