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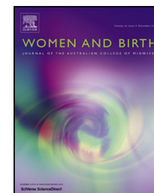
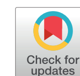


Providing postpartum care with limited resources: Experiences of nurse-midwives and obstetricians in urban Tanzania



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ABSTRACT

Background: Tanzania has high maternal and neonatal mortality rates. Comprehensive guidelines for postpartum care have been developed by the government as a means to improve health outcomes during the perinatal period. Despite the creation of these guidelines and the government's commitment to universal perinatal care for women and neonates, there is concern that the delivery of postpartum services may not be meeting the needs of mothers and neonates.
Aim: The purpose of this feminist poststructuralist study was to explore nurse-midwives' and obstetricians' experiences of providing postpartum care in Tanzania.
Methods: This qualitative study used feminist poststructuralism to explore the personal, social, and institutional discourses of postpartum care. We individually interviewed ten nurse-midwives and three obstetricians in Dar es Salaam, Tanzania. Feminist poststructuralist discourse analysis was used to analyze the transcribed interviews after their translation from Kiswahili to English.
Findings: Four main themes were identified. In this paper, we present the main theme of availability of resources, and its four corresponding subthemes; (1) space, (2) equipment, (3) staffing, and (4) government responsibility.
Discussion: The findings from our study illustrate the need for health workforce planning to be addressed in a comprehensive manner that accounts for context, required resources and systemic challenges. These findings are consistent with findings from other studies.
Conclusion: Understanding the resource challenges that nurse-midwives and obstetricians are facing in one low-and-middle-income-country will assist researchers, decision makers, and politicians as they address issues of mortality, morbidity, and disrespectful maternity care.
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Statement of significance

Problem or issue

Limited research about postpartum care has been conducted in Tanzania. With high rates of maternal and neonatal mortality, and low rates of women accessing postpartum care within 24 h of birth, it is important to understand how postpartum care is provided.

What is already known

Access to adequate and consistent resources are important to ensure that commitments to universal perinatal health care are implemented.

What this paper adds

The availability of resources such as; space, equipment, and staffing influence how postpartum services are delivered. The experiences of health care providers must be included in health systems planning and evaluations.

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1. Introduction

According to the World Health Organization (WHO), 45% of neonatal deaths happened within 24 h of childbirth on the African continent.[1] Following the birth of a neonate, 75% of neonatal deaths occurred during the subsequent week in African countries.[1] Globally, approximately 25% of maternal deaths occur during the time of birth up to and including the first 24 h after birth, while 30% of maternal deaths occur between 24 h to 42 days following birth.[2,3]

In Tanzania, the period following childbirth can be a perilous time for women and their neonates and not all women are accessing health care services during this time. For example, only 34% of women who give birth in Tanzania access health care within 48 h after birth.[4] In recognition that efforts to save lives must be accelerated, in 2015 the government launched the National Roadmap Strategic Plan to Improve Reproductive, Maternal, Newborn Child and Adolescent Health in Tanzania 2016–2020.[5] In addition, the Ministry of Health, Community Development, Gender, Elderly and Children (formally the Ministry of Health and Social Welfare) developed comprehensive guidelines about the management of postpartum care for different health providers to improve the care of women and their neonates during the postpartum period.[6] Despite available guidelines, there is still concern amongst health care providers and the public that current access to and delivery of services may not be sufficient to meet the needs of postpartum women and neonates countrywide.

In Tanzania nurse-midwives and obstetricians are the main health care providers, who are involved in the care of women and neonates throughout the perinatal period. Exploring the experiences of providing postpartum care from the perspectives of these two professional groups is essential for identifying gaps in postpartum care and developing a more comprehensive understanding of how postpartum care is accessed and delivered in Tanzania. In this paper, we discuss the challenges of health human and nonhuman resources in the provision of postpartum care at three sites in Dar es Salaam, Tanzania within the context of dominant social and institutional discourses.

1.1. Background

Dar es Salaam is a city in Tanzania, East Africa with a population of 5.1 million in 2015.[7] In 2016 the estimated national population of Tanzania was 50 million people.[4] Publicly funded health care is arranged and provided at the district level, with Dar es Salaam divided into three districts, Ilala, Temeke and Kinondoni.

Like other countries in the global south, Tanzania has high maternal and infant mortality rates. Between 2005 and 2015, the maternal mortality rate (MMR) in Tanzania was 556 per 100,000 and the infant mortality rate (IMR) was 43 per 1000 live births.[4] Meanwhile births attended by skilled health providers in Tanzania increased from 51% in 2010 to 64% in 2015.[4] Although this increase in the percentage of births attended by skilled health providers is encouraging, these figures continue to illustrate alarming trends in maternal-newborn health care outcomes and service delivery in Tanzania.

To date, few qualitative research studies have been conducted about postpartum care in Tanzania. With such high maternal and infant mortality rates, exploring how perinatal care was provided to women and neonates in the postpartum period was imperative. The World Health Organization defines the postpartum period as the six weeks following childbirth.[8] Previous research found that gender and cultural beliefs, including the involvement of family supports, influenced postpartum care of mothers in Tanzania. For example, researchers have shown that the inclusion of men (partners) in maternal-child health is an important strategy to improve maternal-child health outcomes in Tanzania.[9,10]

Understanding how nurse-midwives and obstetricians, deliver care to women and neonates is essential for the development of strategies to improve MMR and IMR. This research aligns with findings from other studies conducted in Tanzania[11–14] as well as international guidelines for postpartum care from the WHO,[8] which recognized that adequate postpartum services and information have direct implications for improving maternal and infant mortality and morbidity rates. Our research also sought to understand how the current delivery of postpartum care aligned with the health needs of women and families.

In Tanzania, there is a social expectation that perinatal care is free for Tanzanian women and neonates. This expectation has been informed by the Tanzanian government's promise of free access to perinatal care for all Tanzanian women.[5] This means that women and their family members who arrive at the hospital to give birth expect that the equipment, medications, and supplies required for the birth will be provided to them at no additional cost.

1.2. Research purpose

The purpose of this study was to explore the experiences of nurse-midwives and obstetricians in the provision of postpartum care in Tanzania. We aimed to better understand how maternity health care services address the health needs, and influence the health outcomes, of mothers, neonates, their families, and their communities.

1.3. Research questions

We had two research questions for this study; (1) What are the experiences of nurse-midwives and obstetricians in the provision of postpartum care? (2) How do maternity health care services in Tanzania address the health needs and influence the health outcomes of mothers, neonates, their families, and their communities (personal, social, institutional discourses)?

2. Participants, ethics and methods

In this qualitative study, we used feminist poststructuralism (FPS)[15–21] to guide our research. FPS provided a means to explore the personal, social, and institutional discourses of postpartum care. Specifically, FPS enabled an examination of the clinical practices of nurse-midwives and obstetricians during the postpartum period in order to understand the influences of institutional, social and personal discourses on clinical practices and vice versa.

The feminist aspect of FPS provided a focus on gendered power relations in order to question, examine, and challenge these types of power relations.[21] Poststructuralism provided a fluid understanding of power, such that power is not to be viewed from a binary perspective of 'good' or 'bad', but rather as a fluid dynamic that is present everywhere.[21,22] For Foucault, knowledge and power come together in the discourses that we perpetuate or resist.[23] In this study, we examined the beliefs, values, and clinical practices of nurse-midwives and obstetricians in the presence of institutional, social, and personal discourses.

Our research team was composed of both Tanzanian and Canadian members, with a variety of levels of research experience. The team included graduate students and all members, with the exception of one, were registered nurses in their home country. Team members were included throughout all aspects of the research project. Canadian researchers relied on the expertise and experiences of the Tanzanian researchers relating to; the context in which the research was conducted, recruitment, and data

collection. Canadian researchers led and supported the analysis of data.

2.1. Recruitment & sampling

We purposively recruited 10 nurse-midwives and 3 obstetricians from three regional hospitals and their affiliated health centres in Dar es Salaam, Tanzania (Temeke Regional Hospital in Temeke District, Mwananyamala Regional Hospital in Kinondoni District, Amana Regional Hospital in Ilala District).

We sent letters of invitation to Regional Medical Officers at each of the three sites requesting permission to recruit participants. We asked the site managers to identify and provide contact information for nurse-midwives and obstetricians who may be potential participants. We privately contacted each potential participant and invited them to learn more about the study.

We guaranteed confidentiality to all participants, removing all identifying information from correspondence and transcripts. Anonymity was not guaranteed because managers provided contact information. Inclusion criteria included: (a) participants needed to be a nurse-midwife or obstetrician who provided postpartum care to women in one of the regional hospitals or affiliated health centres, identified for this study, within the Dar es Salaam region: (b) participants had to have worked as a nurse-midwife or obstetrician for at least one year; and (c) participants needed to speak, read, and understand Kiswahili.

Ethical approval was received from research ethics boards at Dalhousie University, Muhimbili University of Health and Allied Science (MUHAS), Tanzania Commission for Science and Technology (COSTECH), and the National Institute for Medical Research (NIMR) prior to the recruitment of participants.

2.2. Data collection

Kiswahili speaking Tanzanian team members conducted the interviews, and obtained verbal and written consent to participate in the study from all participants prior to the interviews. Recognizing possible power relations between interviewers and participants, participants were informed of their rights to withdraw from the study or not answer questions of their choosing. Participants were also assured that confidentiality would be maintained and they were encouraged participants to speak freely during the interviews. Semi-structured interviews were conducted in Kiswahili, in private locations at the places of employment, and were 60–90 min in duration. During the interviews, participants were asked about; how they provide care to women and neonates in the postpartum period, what postpartum issues are important to them, the availability of resources for the postpartum needs of women and neonates, the alignment of maternity health services with the postpartum needs of women and neonates, the accessibility of postpartum health services, and what does and does not work well. The face-to-face, in-depth interviews with the nurse-midwives and obstetricians were audio-recorded. The audio recordings were transcribed verbatim and then translated into English. English transcripts were checked by Kiswahili-speaking team members for accuracy.

2.3. Data analysis

We used FPS discourse analysis[15] to guide our analysis. In this approach, we focused on how the values, beliefs, and practices of nurse-midwives and obstetricians influenced the ways they delivered postpartum services to mothers and neonates. Once issues and their corresponding values, beliefs, and practices were identified, we considered how each issue was influenced by social and institutional discourses. We explored the power relations in each issue within the context of social and institutional discourses and how each participant used their agency to respond to the power relations through the use of their agency. Each member of the research team analysed several transcripts independently and then collaboratively identified themes. Finally, we compared themes within and between the interview transcripts.

3. Findings

Several themes were identified during the analysis and the other themes have been published elsewhere.[24–26] This paper focuses on the theme of how the availability of resources affected the postpartum care provided by nurse-midwives and obstetricians in urban Tanzania. Participants described the delivery of postpartum care as challenging due to an inconsistent and inadequate availability of resources. The four sub themes were; *space, equipment, staffing,* and *government responsibility*. All of the subthemes were interconnected and created complex challenges for nurse-midwives, obstetricians, women, neonates, and their families.

3.1. Space

Almost all participants considered limited physical space as problematic and interfering with their ability to provide effective care. The main concern was a lack of beds for women and their neonates.

> That is difficult even to the provider, if you attend the patient and space is small it may be difficult to provide service in that bad environment. We would like each patient to have her own bed. (NM transcript 8)
>
> This is why I said that we have challenges, because sometimes we have overcrowding. A mother ending up laying down on the floor. Not having enough beds and space. Few experts, so all sections should be improved we cannot meet the need of mothers. We are few doctors and few nurses. (OB 4)

Space also impacted how families were able to participate in childbirth and postpartum care. For example, although the participants indicated that it would be appropriate for husbands to stay with their wives, their inclusion during labour and the birth of a neonate was currently not possible due to the physical hospital layout. This created a conflict for the participants as their beliefs about having men accompany their wives during labour and birth could not be supported. They were very frustrated about this.

> Also we would like to involve men in these cases of labor, but most of our hospitals they are built in a way that you cannot . . . .But if they (hospitals) could be built in conducive environment, men could be allowed to come in the labour ward. A husband could feel the difficulty of delivery . . . (NM 7)

Inconsistent access to space affected the ability of participants to follow guidelines and standards of care, such as discharging women and neonates at the recommended 24 h after birth. The majority of women were discharged between 6–12 h after birth due to overcrowding.

> For these who have come from labour they have to stay here for up to 24 hours. But because of overcrowding, we assess the mother for six hours then we let her go. But legally she has to stay up to 24 hours and if you let them (stay) for 24 hours until tomorrow, it will be disastrous. They will be four people, up to five, in a single bed. (NM 7)

All of the participants were aware of national guideline recommendations for postpartum care but were rarely able to follow these guidelines. They recognized the importance of having women stay 24 h postpartum because this practice was both

evidence-informed[6,8] and subsequently part of the personal and institutional discourses that valued hospital stays of 24 h for women and neonates following birth. The participants told us that it was stressful and ethically disconcerting to have to work against their beliefs, and the guidelines of the institution, discharging women and neonates earlier than expected due to the lack of space. In an attempt to ensure that women were safe within a less than ideal environment, participants told us that they had to focus their energy on fast and efficient assessments and teaching with women and neonates. Women and neonates were constantly assessed and triaged in order to ensure that those with actual or potential complications remained in hospital, while those with no complications were sent home early.

Competing discourses about space created tensions and conflict. The nurse-midwives, obstetricians, women, and families shared the value of supportive and timely perinatal care. However, due to the lack of space in hospitals provided by the government, the shared values of supportive and timely perinatal care were challenged and often unmet. Understanding how participants negotiated the way limited space was used is a good place to start when trying to understand the best way to facilitate change.

3.2. Equipment

Participants expressed frustration with the availability and acceptability of equipment. Consistent access to equipment was problematic for most nurse-midwives and obstetricians. One nurse-midwife shared that while they may have access to some equipment, it might be damaged.

> Yah, always in hospital equipment are not enough. When you bring BP machine today, tomorrow one can take it and use it badly and being destructed, always in hospital equipment are not enough. (NM 1)

One obstetrician told us that they could not count on a consistent supply of vaccinations which compromised the care that they gave to women and neonates. While the government and hospital could argue that immunizations were 'available', the inconsistency of access to vaccines created situations where some neonates did not receive their vaccinations. Participants were left to hope that women would bring their neonates back to receive vaccines at a later date. However, only a minority of women returned to the clinic, and the participants did not elaborate on the reasons for this.

> The child is supposed to be given all the important routine vaccines as needed after giving birth. All the required (vaccines) the child receives but if it happens on that day, probably we do not have (the vaccines) then we tell the mother to come in the following day (to give) the required vaccine. (OB 6)

Only one nurse-midwife described having ready access to some equipment and supplies required to provide postpartum care.

> Working tools exist. We have gauze. Cotton we have. We have a kidney-dish. We have Gal-pot. I have Savlon for swabbing the vulva of the mothers. We have eye ointments for children. We have a tape measure for measuring. We have a (blood pressure) machine, though few, but they satisfy our need, maybe because we do not receive many patients. And thermometers are enough too. And one bed for examinations. It is sufficient for the child and the mother.(NM 3)

This nurse-midwife was grateful that she did have some equipment such as one bed for examinations, a few blood pressure machines, and thermometers. As long as there was only one woman and neonate at a time, she could cope with her work. However, the majority of participants spoke about a lack of access to equipment including; beds, sphygmomanometers, and vaccines. These examples highlight concerns about the inconsistencies in accessibility to equipment and supplies across health care facilities. From one day to the next, providers were unsure if they would have enough equipment for women and neonates.

During prenatal visits, women were advised to bring "their own equipment" such as medications or supplies for birth and the immediate postpartum, because access to the necessary resources could not be guaranteed.

> . . . There are times when we have nothing so we inform them (patients) to come with their equipment. (OB 4).
>
> . . . Many people do not believe such equipment are not available in hospital. They think maybe they are denied. (NM2)

A lack of equipment could also create unsafe situations. An obstetrician described how life-saving services may be delayed, "sometimes problem of equipment might cause delay of the service such as resuscitation" (OB 4)

Inconsistent availability and access to equipment included challenges in providing medications or the supplies necessary to attend a birth. This resulted in women and families complaining about their unmet expectations that the institution where they gave birth would provide the supplies they needed to give birth.

> . . . we have some complaints because some of them (women) depend on those supplies. We tell her (the women) the truth, that we do not have enough supplies so we request that they go and buy them. We write the prescription and they go and buy. (NM 8)

Nurse-midwives and obstetricians spoke about how they were placed in awkward positions of having to negotiate and explain why there was a lack of resources. Women and families were concerned about the lack of resources, and nurse-midwives and obstetricians felt the families blamed them for the situation. Families believed that the government would provide free and adequate space, staffing, and equipment. Unfortunately, for many this was not the case.

Experiences shared by the participants highlight moments of conflict as they dealt with their own frustrations and the frustrations of women and family members. Participants negotiated messaging from the government/hospitals with women and families within the context of having inconsistent access to necessary equipment. Access to equipment appeared to be controlled by the government/hospitals; however, the relations of power were negotiated on a daily basis between nurse-midwives, obstetricians, women, and families as they worked to ensure all women and neonates had access to necessary equipment.

3.3. Staffing

All of the participants spoke about being short staffed and overworked, and described how this impacted their personal wellbeing. Participants also described their skill of conducting comprehensive physical assessments under challenging, stressful conditions. Both nurse-midwives and obstetricians conveyed their pride in the work that they accomplished. Participants were grateful to collaborate with other educated health care professionals; yet recognized that there were not enough educated health care professionals providing care. The number and composition of staff, with the right skills and knowledge, was not sufficient for the number and health needs of women and neonates who required care. Staffing,

> in fact . . . it is a challenge right now. But we are grateful, (even though) health professionals are not sufficient. You will find that sometimes you work until tired (because) there are not sufficient (providers). You can come here and see so many (providers) but we are not really many in connection with number of patients. Few nurses, doctors not enough. That's the truth. (OB 6)

The room is not enough and the (number of) staff needs to be increased. (NM 2)

Many participants referred to the large number of women and neonates they had to assess before discharging them home. While all nurse-midwives spoke about the excellent care they provided to women and neonates, they also spoke about the stress and hardship this caused them and how the inadequate number of nurse-midwives reduced the time they had to spend with each woman and neonate dyad. The nurse-midwives also encouraged women to return to the clinic for scheduled visits, as well as emergency visits if needed. “But before we let her (the mother) go we give them health education about the danger signs, we tell them if you get anything abnormal please return for checkup”. (NM 7)

There was an incongruence between the number of staffing required to provide care to women and neonates and the realities of available staffing. The social beliefs and values about how maternity care is provided had been influenced by institutional promises made by the government and the hospitals. However, the practices did not always coincide. Participants were left to negotiate the situation, and felt unable to effectively deliver services promised by the institutions (government and hospitals).

> . . . we need to have enough trained health workers to be able to monitor, as well as follow up. And ensure women receive (care) and if there are problems we notice it quickly and we can send (women) to the relevant place quickly. (OB 4)

The staffing shortages were challenging for the care providers who shared their feelings of failure in meeting the care expectations of the public due to the inconsistent or limited availability of perinatal staffing. The nurse-midwives and obstetricians recognized that the delivery of perinatal care would improve with an increase of appropriately trained health care workers.

The impact of emotional exhaustion for the participants, as a result of being understaffed, was a major concern. They found it difficult to cope with ongoing challenges of being understaffed, while feeling responsible to offer the best care they could at all times. Some days the participants felt they could not keep up with the pressures placed upon them. One nurse-midwife stated that although she was tired, it was the urgent needs of the women and neonates that kept her going.

> And they really challenge us even if you feel that today I just do not (want to) go to teach the mothers, but if you come, you find yourself just beginning to bring them in and you teach. And today I don’t check mother, for example you left from home tired, but you find as the time goes, you find it, uncomfortable and start assessing them. Then you think what if it could be you or your relatives, what you would have done? (NM3)

The participants demonstrated their commitment to providing care to women during the postpartum period in their descriptions about how they worked with inadequate staffing. The participants negotiated their challenging staffing situations by working as efficiently as they could in spite of excessive workloads. Participants described their struggles to care for and educate women and families before they were discharged home. The opportunity to negotiate their practice with the government, within the context of inadequate staffing, did not appear to be available as the participants did not discuss how or to whom they would address the situation of understaffing.

3.4. Tensions between government responsibility and delivery of services

All participants voiced their frustrations about ‘the government’. They believed the government, which set national policies for maternal-child health care, was disorganized. Participants wanted the government to be more involved in helping them find solutions to the challenges they faced in terms of limited and inconsistent access to necessary resources for the delivery of safe, effective postpartum services.

> In terms of the services, maybe if our government would actually be organized I guess there could be a possibility (of adequate services and resources). The Government would help us so that everyone gets those services and not (only) mothers in the media or in parliament where they say everything is free while it is not. Yet a care (recipient) might be prescribed medication. I may go around looking for drugs, and find none so I have to go and buy. So the government should stop politics and help us with these issues and be available. Because when we talk about medicines, others say I don’t have money I will check tomorrow or the day after tomorrow. There are possibilities of not getting the drug because some have low economic status. So if all these thing could be readily available there could be no problems. (NM7)

The nurse-midwives and obstetricians were very aware of the role of the government within the health care system and the confusion and miscommunications that transpired. Participants recognized the incongruence between the governmental messaging of access to resources required for childbirth and the realities of providing and receiving care. Participants spoke about the need for partnership and collaboration in order to find a way to implement the government’s promise of free, universal, perinatal care for women and neonates in Tanzania.

Many participants spoke about the confusion around obtaining and purchasing medications. The reality was that many families had to purchase medications when emergency supplies at the hospital or clinic ran out. Nurse-midwives were often put in difficult situations where they had to make decisions about who should receive medications from their limited supply on the wards and negotiate replacement of medications with families to ensure that a supply of emergency medications could be maintained.

> You must tell the reality that, there is no material therefore, what is required to write a prescription to go and buy. And if it happened you have used materials because of an emergency, you tell relative to replace. You prescribe and they replace. We have no option this is our government. (NM 7)

The nurse-midwives were caught between the institutional (government) discourse of free perinatal care for women and neonates, and the reality of inadequate resources. They recognized the government as the source of this conundrum and empathized with the families, who they relied on to ensure there was a supply of medications for emergencies. They were also grateful for the women and families who provided their own medication or supplies for childbirth.

> And we are grateful mothers also tend to contribute. For (example) when we say the woman has undergone an operation and needs drugs they tend to buy drugs. Therefore, they help us to contribute a certain amount. Because we cannot say absolutely that they can afford to finance caesarian section. And for the normal delivery they bring their delivery pack. That means they can be helped by anyone if it happened that they were to deliver before she gets to the hospital. And when she comes to us with a delivery pack, we know where to start. Just if you pick her bag you can find the pack, put on gloves and start to help in conducive environment. (NM 8)

Having access to these supplies was “conducive” to the nurse-midwife’s ability to focus on the care provided to each woman and neonate. Nurse-midwives regularly used their agency to negotiate the purchase of needed supplies with families. The burden of not having adequate supplies to provide perinatal care was transferred to the families of the women and neonates who needed care. The

nurse-midwives and obstetricians did not speak about alternative ways to advocate for the availability of these resources.

The contradictions between the government's promise of universally free perinatal health care and the lack of resources to achieve this promise was a source of confusion for women and families who arrived at health care facilities. An obstetrician described the confusion that the community experienced,

> The community is confused because the Government is saying that the care of mother and child, especially the mother is free. That is how it is announced in Parliament and in the media. But if you come here, it is not so. Mothers are told to buy some of the things. At that point the community is confused and if they are told to buy (supplies) might say this is corrupt. And it is really true, so that politics now has been included in our profession. (OB 6)

For this obstetrician, the community's confusion was related to the reality that families were required to provide needed supplies for perinatal care despite the institutional (government) discourse of free perinatal care. The public expected to have access to free perinatal care because the institutional discourse of free perinatal care became a social discourse, through media and announcements in Parliament. When confronted with the reality that the resources required for perinatal care were not available, and that families would have to purchase these supplies, the public reacted by suggesting that corruption may be the cause of the lack of resources. The suggestion of corruption as the cause of a lack of resources for perinatal care exemplified the public's agency to challenge practices and question constructed institutional and social discourses related to the unmet expectations of free perinatal care.

Participants identified the need for increased funding for health care as well as government evaluation of health care resource needs, in order to sustain the availability of resources,

> My opinion is that the stakeholders of health or both involved with health, or really speaking to the Ministry of Health and the Government generally, should look again at services of the mothers and children. Especially in terms of the budget, so that medical devices are made available and medicines exist. Because now medical devices are few, medicines are few. With a work force. And also even workforce they should look at the proportion of patients and the workforce. (OB 6)

Participants expected to negotiate unmet expectations of universal and accessible perinatal health care, in particular a lack of resources. The tensions were a result of the power relations between an institutional discourse which reflects a governmental commitment to universal and accessible perinatal care for all women and neonates, and the health care providers who must provide this care despite not having the necessary space, equipment, or staffing to maintain that commitment. The participants knew that they could not provide "free" services. They were positioned within the institution to be gatekeepers and make decisions about who would pay for medications and supplies that were not consistently available.

The participants viewed health care from a systems perspective. They recognized the need to re-evaluate the services and resources available to women and neonates in order to align a budget to address the health needs of the population. This reflected a belief in the value of an organized and accountable approach to maternal-newborn health. The global understanding of the need to improve maternal-newborn and child health has been a dominant personal, social, and institutional discourse in global health, particularly since the development of the Millennium Development Goals and the Sustainable Development Goals. The participants' awareness for the need to build organized and accountable systems of care for perinatal health in Tanzania is an example of adopting a social justice discourse to ensure an equitable distribution of perinatal health care resources and services.

4. Discussion

Throughout the interviews, many participants voiced their concerns regarding the safety of women and neonates. Although they did not share specific stories about mortality or morbidity, they consistently spoke about the importance of attending to the safety of women and neonates by watching for danger signs while in the hospital and clinic. Participants also spoke about the urgency of teaching women and family members how to identify danger signs so they could come back to the hospital. The daily challenges of inconsistent access to necessary resources ultimately compromised the safety of women and neonates. Although participants told us that their skills were excellent, they were still concerned that the lack of consistent resources did not allow them to work to their full scope of practice. The lack of resources put women and neonates in compromising situations. Some women did not have a bed, family members were not permitted to accompany women due to lack of space, most women were sent home early, and many did not return most likely due to geographical, financial or other barriers.[11,13]

The Ministry of Health in Tanzania has recently identified a shortage of funding and a shortage of health care workers, particularly in publicly funded government hospitals and clinics.[27] This has been an ongoing problem over the past decade or more, evidenced by other researchers identifying limited staffing and space to be major challenges and barriers for the provision of safe and effective health care to women and neonates. The identified challenges have included; a need to address the shortage of trained health care professionals,[28] a need for professional guidelines and support for nurse-midwives[30] and a need to provide enabling work environments for health care professionals.[31] Recommendations to address these systemic and institutional needs include creation of guidelines and strategies to support nurse-midwives who provide postpartum care[30] and creating environments that enable and motivate health care professionals to deliver safe and effective care.[31]

Our recommendations to improve the delivery of perinatal care in Tanzania echo six of the ten recommendations outlined in a report by the High Level Commission on Health Employment and Economic Growth[31] (1) to create an adequate number of jobs with the appropriate skill-set, in geographical areas in need, (2) to address gender biases and inequities in the health workforce, (3) to reform current models of health service delivery and organization in ways that promote primary care and prevention, (4) to ensure that adequate financing and fiscal space is available through domestic and international, and public and private partnerships to provide optimal, accessible health care, (5) to create inter-sectoral partnerships and engagement between all levels of government, private sectors, and communities to support health strategies and reforms, (6) to ensure that appropriate data and information is collected and used to ensure accountability and transparency in health needs and health services delivery.

The application of each of these recommendations[31] has the potential to improve the delivery of postpartum care in Tanzania. For example, recommendation 3: reforming current models of health care delivery and organization in Tanzania could address the challenges currently involved with lack of space that was reported by the nurse-midwives and obstetricians in our study and the inconsistent availability of material resources. The creation of new jobs with appropriate skill sets and in locations which experience shortages of staffing (recommendation 1) could address staffing shortages that the nurse-midwives and obstetricians described in this study. Addressing financial concerns to ensure that health care services are adequately funded could improve the availability of material resources, space, and staffing for optimal perinatal care

outcomes. Inter-sectoral partnerships between governments, communities, and the private sector, in addition to the collection and dissemination of appropriate health data and information, could improve the accountability of perinatal health care services and delivery amongst all participants — health care providers, government, communities, and families. Finally, addressing the gender biases and gender inequities in the delivery and receipt of perinatal health care has the potential to reduce the high maternal-newborn mortality and morbidity rates in Tanzania.

The nurse-midwives and obstetricians in our study provided evidence to show that the care provided to women and neonates at three publicly funded clinics has been compromised. In a recent systematic review[32] that examined qualitative literature about the intrapartum care of women and newborns in sub-Saharan Africa, the authors described how limited resources and staff shortages can negatively influence the provision of maternal-newborn care, causing distress for midwives whose performance and professionalism are questioned under these challenging circumstances. Additionally, a retrospective review of maternal deaths in Muhimbili National Hospital found that substandard care factors were present in 82.3% of the cases reviewed.[14] Pembe et al.[14] identified medical service factors including; poor management, delayed investigation, and inadequate blood transfusions as components of substandard care resulting in maternal death.

According to the findings of our study, it is clear that health workforce planning needs to be addressed in a comprehensive manner that includes not only an examination of space, equipment, and availability of medicine and supplies. Health workforce planning must also consider the context in which the care is being delivered, the health care providers, and the needs of women, neonates, and families.[33–35] Ultimately, the provision of adequate, appropriate, and timely health care to women and children is a human rights matter[36] and the inconsistent ability to address the health needs of women and neonates reflects a failure to meet this basic human right. This study uniquely offers insights from the perspectives of the nurse-midwives and obstetricians who work within a context of inconsistently available resources. These perspectives add insights that can strengthen health resource planning and ensure that the human rights of women and neonates are addressed.

Bradley et al.[32] noted that overwhelmingly, the countries of the included studies in their review were former British colonies (twenty-three out of twenty-five studies). The institutionalization and socialization of birth has been influenced by colonialism and it is therefore important to address systemic challenges, such as limited resources and staff shortages, using approaches that include the perspectives of the people using and providing services. In order to assess and understand how maternal-newborn health care is being provided within the health care system in Tanzania, nurse-midwives, obstetricians, women, and families must be consulted, and their needs must be included. The findings of this study contribute to recent research conducted by Tanzania nurse researchers about postpartum experiences of mothers,[9,10] birth injuries,[37] birth experiences in health facilities,[31] HIV and infant feeding[38,39] and by Canadian nurse researchers health human resources planning.[40] In this study, the skills and knowledge of nurse-midwives and obstetricians appeared to be appropriate for their roles; however, the system in which they provide care does not enable them to work to full scope of practice due to; a shortage of staff, equipment,[12] and support from the government.

4.1. Study strengths and limitations

This study contributes to an improved understanding of the delivery of postpartum care services in Tanzania, from the perspectives of nurse-midwives and obstetricians. The findings from this study can provide a foundation for future postpartum care studies in Tanzania and in other countries. This was a small, exploratory study that provided an in-depth analysis of how the availability of resources influence the experiences of providing postpartum care for nurse-midwives and obstetricians at 3 publicly funded clinics. Although the findings from this study are applicable to Tanzania, the findings may be transferable to other low and middle income countries.

5. Conclusion

A paucity of data exists about postpartum care in Tanzania and the inclusion of the voices of the health care providers, nurse-midwives and obstetricians, about their experiences providing postpartum care is an important contribution for decision makers and for health researchers. Understanding the challenges that nurse-midwives and obstetricians are facing in low-and-middle-income-countries and how challenges such as; limited resources, staff shortages, and lack of governmental support influence the provision of care will assist researchers, decision makers and politicians as they address issues of mortality, morbidity, and disrespectful maternity care. The recommendations issued by the High Level Commission on Health Employment and Economic Growth provide an excellent framework for mobilizing strategies to address the resource challenges identified in this study.

Ethical statement

Research for the manuscript titled "Providing postpartum care with limited resources: Experiences of nurse-midwives and obstetricians in Tanzania" received ethical approval from the following Research Ethics Boards:

1) Dalhousie University Research Ethics Board
November 4, 2014
REB # 2014-3388

2) Muhimbili University of Health and Allied Sciences Research Ethics Board
2015
Ref No: MU/DRP/ERP/Vol.III/119

3) National Institute of Medical Research (NIMR) Tanzania
Ref No: NIMR/HQ/R.8a/Vol. IX/1959
May 2015

4) Commission for Science and Technology (COSTECH) Tanzania
Ref No: 2015-204-NA-2015-41
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Conflict of interest

The authors have no conflicts of interest to declare.

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