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# 'What about the mother?' Women's and caregivers' perspectives on caesarean birth in a low-resource setting with rising caesarean section rates



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#### ABSTRACT

Objective: in light of the rising caesarean section rates in many developing countries, we sought to explore women's and caregivers' experiences, perceptions, attitudes, and beliefs in relation to caesarean section. Design: qualitative study using semi-structured individual in-depth interviews, focus group discussions, and participant observations. The study relied on a framework of naturalistic inquiry and data were analysed using thematic analysis.

Setting: a public university hospital in Dar es Salaam, Tanzania.

*Participants*: we conducted a total of 29 individual interviews, 13 with women and 16 with caregivers, and two focus group discussions comprising five to six caregivers each. Women had undergone a caesarean section within two months preceding the interview and were interviewed in their homes. Caregivers were consultants, specialists, residents, and midwives.

Findings: both women and caregivers preferred vaginal birth, but caregivers also had a favourable attitude towards caesarean section. While caregivers emphasised their efforts to counsel women on caesarean section, women had often reacted with fear and shock to the caesarean section decision and perceived that there was a lack of indications. Although caesarean section was perceived as involving higher maternal risks than vaginal birth, both women and caregivers justified these risks by the need to 'secure' a healthy baby. Religious beliefs and community members seemed to influence women's caesarean section attitudes, which often made caregivers frustrated as it diminished their role as decision-makers. Undergoing caesarean section had negative socio-economic consequences for women and their families; however, caregivers seldom took these factors into account when making decisions.

Key conclusions and implications for practice: we raise a concern that women and caregivers might overlook maternal risks with caesarean section for the benefit of the baby, a shift in focus that can have serious consequences on women's health in low-resource settings. Caregivers need to reflect on how they counsel women on caesarean section, as many women perceived a lack of indication for their operations. Supportive attendance by a relative during birth and more comprehensive antenatal care counselling about caesarean section indications and complications might enhance women's autonomy and birth preparedness.

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# Introduction

In recent decades, caesarean section (CS) rates have risen globally (Betrán et al., 2007). As the rise does not appear to be explained by increased risk or medical indications (Leitch and Walker, 1998; O'Leary et al., 2007), there has been a growing attention to the under- and over-use of CSs within different settings

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and the problems that unnecessary CSs might cause (Althabe and Belizán, 2006). Unnecessary CSs in low- and middle-income countries can put strains on both institutional and individual resources (Ronsmans et al., 2006; Stanton and Holtz, 2006; Leone et al., 2008; Maaløe et al., 2012) and threaten health equity (World Health Organization, 2010). CS performed on non-medical indications in low-resource settings is also associated with higher maternal risks than vaginal birth (Souza et al., 2010; Briand et al., 2012) and the CS scar can cause problems in subsequent pregnancies (Silver, 2012). Moreover, CS might have psychological implications for the mother, with slower recovery, more time away from her family, and increased pain (Wendland, 2007; Kabakian-Khasholian, 2013).

Although birth preferences vary widely between different countries (D'Souza, 2013; Kuan, 2014), cross-sectional studies from Sub-Saharan Africa have reported the majority of women to prefer vaginal birth over CS (Aziken et al., 2007; Chigbu and Iloabachie, 2007; Enabudoso et al., 2011; Okonkwo et al., 2012). Surveys are, however, unable to capture complex explanations for women's birth preferences (Bohren et al., 2014). As women's individual perceptions are influenced by social norms and expectations, as well as the medical setting where they give birth (Kuan, 2014), delivery preferences must be understood within women's contexts (Lee et al., 2001; Leone et al., 2008; Abbaspoor et al., 2014; Bohren et al., 2014). Due to high fertility rates in most low-income countries, and the restriction that CS puts on reproduction (Silver, 2012), women's future fertility plans might also be of importance to their CS attitudes (Aziken et al., 2007; Khan et al., 2012). Also, most previous research from Africa has been on pregnant women (Chigbu and Iloabachie, 2007; Okonkwo et al., 2012); however, women who have undergone CS have better insights regarding the procedure and can contribute to a deeper understanding of acceptance, refusal, and request (Enabudoso et al., 2011). There is little known about how caregivers in Sub-Saharan Africa perceive CS (Chigbu et al., 2010), and how women and caregivers interact with regards to CS decisions. In light of a rapid rise in CS rate at a university hospital in Tanzania (Litorp et al., 2013), our aim was to explore women's and caregivers' experiences, attitudes, perceptions, and beliefs in relation to CS. Since women and caregivers might view CS and its complications differently (Wendland, 2007), we also sought to investigate their converging and diverging perspectives on CS.

## Methods

We performed a qualitative study at a university hospital in Dar es Salaam, Tanzania. To obtain a deep understanding of the CS rise within the specific context where it had occurred, data collection and analyses were inspired by naturalistic inquiry (Erlandson et al., 1993). This paradigm assumes that there is not one single objective reality, but instead, multiple subjective realities. In an organisation or group, these diverging realities are constructed to form convergent conclusions and realities, which act as a framework for the way in which people behave.

# Study setting

Tanzania is a low-income country with a fertility rate of 5.4 children per woman and a national CS rate of 5.0% (National Bureau of Statistics Tanzania, 2011). The Tanzanian society is largely patriarchal, with men enjoying most of the county's socio-economic resources and privileges (Otiso, 2012). In many Tanzanian communities, women's social position is dependent on being a mother, and women's only way to secure access to property and land is through a husband or grown-up son. In the Dar es Salaam area, most people live within 10 km of a health care

facility, and 90% of all deliveries are attended by a skilled professional (National Bureau of Statistics Tanzania, 2011). Maternity care is provided free of charge. The university hospital is the largest public hospital in the country and serves as a teaching and referral institution. After a reorganisation of the referral system, the proportion of referred patients at the university hospital has increased (Litorp et al., 2013) and the hospital has strengthened its position as a tertiary institution mainly focused on complicated deliveries. Still, however, almost two-thirds of the women who give birth at the university hospital are self-referred. Between 2000 and 2011, there was a sharp increase in the CS rate from 19% to 49% (Litorp et al., 2013). When women come to the hospital to give birth, they are admitted alone without a family member or friend to support them during labour. CSs are performed under spinal anaesthesia. Epidural for pain relief during vaginal birth is not available.

In 2004, private practice was introduced at the obstetric department, and women with private insurances now account for 25% of the total deliveries. Women with private status have a designated specialist who is responsible for their antenatal visits and deliveries, and are allocated to separate wards during labour. In the private practice, costs are paid by the woman or her insurance company, and doctors receive extra financial compensation when performing CS. Private patients who prefer CS can opt for CS during antenatal care visits, but it is up to the individual caregiver to decide whether he or she wants to perform CS on maternal demand. There are no large discrepancies in the CS rate between women with private and public insurance.

The analysis of the current study was informed by three previous research findings at the setting. First, the rise in CS rate at the hospital involves obstetric low-risk groups, which indicates that many CSs are being performed on questionable indications (Litorp et al., 2013). Secondly, since the CS rise started, perinatal outcomes have improved whereas maternal mortality has increased (Litorp et al., 2013). Lastly, a large proportion of the life-threatening conditions and maternal deaths at the hospital are attributed to CS complications (Litorp et al., 2014).

### Study procedures

Since firsthand experience is both the starting point and filter through which data are interpreted (Wolcott, 2008), we began the study with participant observations. During a coherent period of six months in 2012, and briefly in September 2010 and January 2014, the main researcher (HL), a postgraduate research student and medical doctor working with obstetrics, took part in meetings, rounds, antenatal clinics, and work at the labour ward, through which she was both an active and passive member of the medical team (Erlandson et al., 1993). Most of the observations were done with a 'hang around' approach (Wolcott, 2008), whereas some observations included detailed note-keeping.

In addition to participant observations, we performed semi-structured individual in-depth interviews with women and obstetric caregivers, and focus group discussions (FGD) with caregivers. Interviews were used to reflect individual experiences and perceptions, and FGDs were performed to capture opinions in light of social norms and expectations (Kitzinger, 1994). Open-ended questions and probing follow-up questions posed to women and caregivers are presented in Table 1. Newly delivered mothers (referred to as 'women' in the manuscript) who had undergone CS were approached face-to-face by the main researcher during their hospital stays, presented with written information about the study in Kiswahili, and asked to leave their phone number if they wanted to participate. When we recruited women, we tried to obtain variation in age, parity, number of CSs, area of residence, socio-economic background, and indication of CS. Two months

 Table 1

 Examples of questions posed to women and caregivers regarding caesarean section (CS).

Experiences of delivery

Women Can you please start by telling me about your past deliveries?
Probes: Circumstances? Reactions? Experiences of time afterwards?

Caregivers Can you please start by telling me about the last CS that you did?

Probes: Circumstances? Reactions to the decision? Understanding of the indications? Experiences in general?

Community perceptions of CS

Women What do you family members and friends say when you talk with them about your operation?

Probes: Husband? Friends? Relatives? Advises on mode of delivery?

Opinions of CS as mode of delivery

Women From your experience, what do you think about CS as mode of delivery?

Probes: Preferred mode of delivery? Advice to sister or friend?

Caregivers What do you think about CS as mode of delivery in general?

Probes: Risks? Traditions of birth? Advice to family members?

**Future fertility plans** 

Women How do you think regarding future pregnancies?

Probes: Future deliveries? Family size?

Caregivers As you know, many women want to have several children. How do you reason around that when you make decisions?

Probes: Affect decision? Depends on woman or her characteristics?

after discharge, women were contacted by phone and interviewed in their homes. Family members were asked to leave the room during the interviews. Seven interviews with women were performed by the main researcher using an interpreter, who was an external interpreter in three interviews and one of the research group members (AM, HLK) in four interviews. These interviews were performed in May 2012 and January 2014. Six additional interviews with women were performed in Kiswahili by the second author (AM), a postgraduate research student and obstetrician employed at the department, in March 2014.

Caregivers were approached face-to-face or by phone by the second or third author (HLK, PhD and obstetrician employed at the department), orally informed about the study and asked to participate. We recruited caregivers based on differences in sex, age, professional status, and working experience. Caregivers were interviewed by the main researcher at different private locations at their work place in January 2014. FGDs were arranged with midwives and doctors in separate groups and facilitated by the main researcher. To initiate the group discussions, participants were asked to reflect on the hospital's CS rate after being shown a graph of the CS rate between 2000 and 2011. BE (PhD and obstetrician employed elsewhere) took part in two interviews with women, two interviews with caregivers, and one FGD.

## **Participants**

We conducted a total of 29 individual interviews, 13 with women and 16 with caregivers, and two FGDs comprising five to six caregivers each. No one who was asked to participate refused. Interviews and FGDs lasted 35-80 minutes. Women were 21-36 years old, and had undergone between one and three CSs. Some women had undergone emergency CS, whereas others had undergone elective operation. Half of the women also had experience of vaginal birth. Women varied in terms of socio-economic background and five women had a private health care insurance. All but one co-habited with the father of the newborn. Some women confessed to Christian religious beliefs, whereas other women were Muslims. Caregivers were 27-70 years old and included two senior consultants (specialists with more than 10 years of experience), five specialists, 11 residents (medical doctors doing their three-year specialist training), and eight midwives. Their working experience in obstetrics was 2-45 years. All midwives and a third of the doctors were female.

#### Analysis

After the participant observations and first interviews with women in 2012, analysis began in order to incorporate additional, open-ended questions into the subsequent interviews conducted in 2014. We also performed new participant observations in 2014 to validate the findings from the new interviews and FGDs. After 10 interviews with women, 10 interviews with caregivers, and two FGDs no new information was retrieved, and we decided that we had met saturation (Erlandson et al., 1993). The last interviews were used for member-checks, where we verified data collected in earlier interviews with the new respondents (Erlandson et al., 1993). Data were also peer checked for authenticity with the two research group members employed at the department and presented to the caregivers during a work-shop about CS. During data collection and analysis, the main researcher took field notes and kept a reflexive journal.

The main researcher transcribed the audiotaped interviews and FGDs in English shortly after they had been conducted, in order to include any non-verbal communication into the transcripts. Interviews in Kiswahili were transcribed in Kiswahili and translated to English by AM. Transcripts were not returned to the participants. During analysis, repeated discussions were held between members of the cross-cultural and multiprofessional research team, including medical professionals and a professor in medical anthropology (SJ). After multiple readings of the transcripts, the main researcher generated a list of codes that reflected interesting aspects of the data. Together with BE, repeated similarities, patterns, and differences across the respondents were identified and interpreted into candidate themes using thematic analysis (Braun and Clark, 2006). After this process, which was undertaken in 2014, the main researcher reviewed the data set again, and revisions of the themes continued until they cohered meaningfully with clear distinctions between them. On the basis of our results, we situated our findings in the discussion about the potential conflict between maternal, newborn, and caregivers' interests with regards to CS and other health interventions (Rosenfield and Maine, 1985; Beckett, 2005; Wendland, 2007; Starrs, 2014).

## Ethics

Clearance to conduct the study was obtained from the Ethics Board at the University to which the hospital is affiliated. Women were provided with oral and written information about the study in Kiswahili, and given a small token of gratitude for participating. Caregivers were informed orally about the study. Oral informed consent was obtained from all respondents before collecting data, and all participants were informed that the researchers were medical doctors with an interest in CS.

## **Findings**

All women and caregivers regarded vaginal birth to be the preferred mode of delivery in absence of medical indications for CS, but caregivers were generally more positive towards CS than were women:

Mm... In general, I think it [CS] is good. It's good because it helps mothers to enjoy the fruits of pregnancy (Midwife B).

We could not see any difference in the way doctors and midwives perceived CS, and as long as there were good maternal and perinatal outcomes, some caregivers also advocated for CS without strict medical indications. We identified five themes that we believed affected or reflected women's and caregivers' experiences, perceptions, attitudes, and beliefs of CS: (1) events during the CS decision, (2) perceptions of maternal complications and risks, (3) the chance of a healthy baby, (4) external locus of control and influence of women's peers, and (5) socio-economic consequences for women. In Table 2, we summarise women's and caregivers' converging and diverging perspectives on these themes.

#### Events during the CS decision

Both women and caregivers regarded the caregiver as the main decision maker when it came to CS decisions. Women's experiences with the care encounter were divergent, but did not seem to depend on whether they had private health insurance or not. While some women had felt relieved when faced with the CS decision, most were shocked and afraid, since they viewed vaginal birth as 'normal' birth and had not expected to be operated. Most women had experienced little control over the decision, but accepted it because they trusted their doctor:

Despite my fears I took it well since he is a doctor, he is the expert and understands better (Woman J, one CS).

Although women had been provided with an explanation to why they needed surgery, many perceived that there was a lack of

indication for their operations. During the observations, the main researcher could see that women were often sparsely counselled before their operations. Several women had at first refused to undergo CS, but were later convinced by hospital staff. Many women felt uncomfortable to sign the consent form:

Before the operation you have to sign to accept dying during the operation. That scared a lot (Woman F, two CSs).

Two women with private health insurance had asked for CS. Both of them preferred vaginal birth, but wanted CS because of fear of poor perinatal outcomes or repetition of previous complications related to vaginal birth.

Caregivers in both interviews and FGDs seemed to think of the care encounter with public and private patients as two separate events. Caregivers emphasised their efforts to counsel women on CS indications and complications, but reported difficulties due to women's low educational level. They often felt that women just accepted their decision without much discussion:

We try to inform them, but in the end of the day you find that you as a doctor make the final decision (...) Informed decision is most of the time theoretical (Resident F).

All caregivers had experience of public patients refusing CS. These situations made caregivers feel disempowered and frustrated, but were handled by letting different staff counsel the woman and have the woman sign forms to protect the caregivers from litigation. Many caregivers argued that women should be better informed about CS during antenatal care to facilitate the communication during labour. Women with private insurance were described as well-educated and easy to counsel, but sometimes challenged the doctor's position as a decision-maker as they might request CS, a situation which caregivers regarded as uncomfortable:

Some of the patients come and ask 'Oh, I don't want to deliver vaginally'. So we need to face that, we need to advise them when we know that there are no indications for CS. But with these, it really [laughter] makes you feel forced to do an unnecessary CS (Specialist B).

Perceptions of maternal complications and risks

There were discrepancies in the way women and caregivers viewed maternal complications associated with CS. Some women

**Table 2**Summary of converging and diverging perspectives of caesarean section (CS) among women and caregivers.

Converging perspectives	Women's perspectives	Caregivers' perspectives
Events during the CS decision		
Caregivers are the main CS decision-makers.	Shocked and afraid. Little possibility to affect the CS decision. Perceived lack of CS indications.	Emphasise their efforts to counsel women, but refer to difficulties due to women's low educational level.
Perception of maternal complications and risks		
CS is potentially life-saving, but associated with both maternal morbidity and death.	CS is associated with maternal death.	Severe maternal complications are rare.
The chance of a healthy baby		
CS increases the chance of a healthy baby, which justifies the maternal risks.	CS increases the chance of a healthy baby, which justifies the maternal risks.	CS increases the chance of a healthy baby, which justifies the maternal risks.
External locus of control and influence of women's peers		
Religious beliefs and women's peers affect women's CS attitudes.	The power over events during birth lies in the hands of God. Community members advise each other on mode of delivery.	Influence of religious leaders and community members is troublesome as it diminishes the caregivers' role.
Socio-economic consequences for women		
CS might have negative socio-economic consequences for women. CS will restrict family size.	Socio-economic consequences are troublesome. Grief that CS has put restraints to family size.	Socio-economic consequences do not affect CS decisions. Justify CS by saying that most women only want two or three children.

stated that if there were complications during birth, CS could be a life-saving procedure. On the other hand, all women associated CS with maternal mortality:

You can lose your life, both during and after the operation. I was very afraid (Woman E, three CSs).

Several women had experienced complications after surgery, including improper wound healing, long recovery time, and pain. Women witnessed that there was an extensive exchange of information within the community concerning potential CS complications, such as severe pain and infections, problems with the belly, becoming paralyzed, or instruments being left in the abdomen, which led to a fear of CS. Caregivers expressed severe maternal morbidity and mortality associated with CS as trouble-some but rare. More common minor complications were brought up by some, but were not given much attention when making decisions. Some caregivers regarded the maternal risks associated with CS and vaginal birth as equivalent, and there was a debate in the residents' FGD which delivery method was associated with higher risks. Many caregivers referred to the improved safety of CS during recent years when they justified their use of the procedure:

Earlier on, CS was very dangerous in our setting. Nowadays that we feel that CS is safe, we tend to do more CSs (Senior consultant A).

The chance of a healthy baby

There seemed to be a perception among women, community members, and caregivers that CS was safer for the baby than vaginal birth. Many women had experience of losing a baby in a previous vaginal birth, or had a close relative with such an experience, which made them agree to CS despite their fear that they may die during the operation:

I had to be brave so that my baby would come out safe (Woman I, one CS).

Caregivers in both interviews and FGDs viewed vaginal birth as an unpredictable event that might jeopardise the fetus, and midwives often talked about CS as a way to 'secure the baby'. Doctors stated that they sometimes overlooked the maternal risks associated with CS in order to assure a good perinatal outcome, even when indications for CS were dubious:

Maybe someone will think 'What about the mother?' and even the risk of the operation (...) But I think that is not given so much consideration – they'll think of the baby (Specialist C).

External locus of control and influence of women's peers

Since CS was not supported in their religion, some women felt reluctant to undergo the operation. Others had a fatalistic approach that CSs and CS outcomes were controlled by God:

I accepted to sign [the consent form] because I believed that God had planned it all (Woman I, one CS).

Although CS attitudes among friends and family members largely depended on their CS experiences, almost all women stated that vaginal birth was the preferred mode of delivery in their communities and respondents often felt 'different' because they had undergone CS:

Why cannot I deliver like others? (Woman F, two CSs).

Some described strategies suggested to or tried by them during pregnancy in order to avoid CS. These included prayers, regular exercise, not showing up at antenatal check-ups, or hiding notes in their antenatal card so that staff would not schedule them for operation. The husbands' roles in the discussion on mode of delivery diverged, but most women stated that their husbands had not expressed any clear opinions on the matter. Women confirmed that they shared their own CS experiences with other community members, and stated that they would advise other pregnant women to have vaginal birth.

Some caregivers had experiences of religious leaders influencing women to refuse CS despite caregivers' medical advice, a situation that was perceived as very frustrating. Caregivers stated that women's CS attitudes depended on their social position, education, and economic background, and that women with higher social class usually had a more favourable attitude towards CS. Some tribes were, on the other hand, known to be particularly negative towards CS:

If you need CS, then [the tribe thinks] you are a lazy woman (...) Even the husband won't respect you – that is their custom (Resident F).

Such influence might put the caregiver in a difficult situation with CS refusal, and caregivers were concerned about CS stories shared in the communities, as these stories might lead to rumours about which hospitals to go to in order to get, or avoid, CS.

Socio-economic consequences for women

Many women stressed that costs related to the operation and their inability to work afterwards led to a troublesome economic situation and made them dependent on others. Women also realised that CS put restraints on the number of children they could have and felt limited by the CS:

I don't feel good, because it affects my plans and also the number of children that I can have (Woman D, one CS).

Women thought that once you had given birth through CS, the next deliveries would also be CSs, and the pain and complications that this might cause made them reluctant to undergo repeat CSs. Socio-economic problems following CS, such as financial difficulties or that the husband would want to divorce a woman who had undergone CS, were recognised by some caregivers, however, seldom affected their decisions. Some caregivers reflected on the limitation that CS would put on women's future reproduction, but justified CS by stating that they could deliver vaginally next time or that most women nowadays wanted only two or three children and that:

It is better to have a few, healthy children, but born with CS (Resident C).

Few considered that the woman might lose the newborn delivered by CS, and would then remain with fewer tries to get a living child.

#### Discussion

We have displayed similarities, differences, and paradoxes concerning women's and caregivers' perspectives on CS in a low-resource setting. Although both groups considered vaginal birth to be the preferred mode of delivery, doctors as well as midwives were generally more positive towards CS than were women. Both women and caregivers did, however, justify the maternal risks with CS by the need to guarantee a healthy baby. In line with the naturalistic paradigm (Erlandson et al., 1993), women's and caregivers' different perspectives were largely shaped by the respondents' contexts. Women often regarded CS as an unnatural,

fearful, and unexpected event potentially associated with death; something that made them different from their friends and sisters; and something that might have long-term socio-economic consequences. We found that many of women's CS perspectives were influenced by beliefs about CS within their communities and among their peers. Likewise, caregivers' perspective that CS was a relatively safe procedure, a way to secure a good perinatal outcome, and a procedure preferred by women in the higher social class, seemed to be commonly accepted notions at the obstetric department.

### The vanishing mother

That African women associate CS with maternal death has been documented before (Essén et al., 2000, 2011; Aziken et al., 2007; Chigbu and Iloabachie, 2007) and is rational considering the context (Souza et al., 2010; Briand et al., 2012; Litorp et al., 2014). Caregivers, however, partly dismissed severe maternal CS complications by referring to improved safety during recent years, an argument reported among other obstetricians (Bagheri et al., 2013). Likewise, women's experience of complications such as pain, wound problems, longer recovery time, and negative feelings about birth were often disregarded when making decisions. This finding is coherent with literature arguing that medical professionals' views of CS complications are often doctor-centered, concentrating on the doctor's surgical performance or events during hospital stay, whereas women's subjective experiences are not given the same attention (Wendland, 2007).

As in other studies (Okonkwo et al., 2012; Kabakian-Khasholian, 2013), both women and caregivers considered CS to be safer for the baby than vaginal birth, and assuring a good perinatal outcome was sometimes prioritised over possible maternal CS complications. Since a Tanzanian woman's social status and future economic security are largely dependent on her ability to produce healthy children (Otiso, 2012), women might feel obliged to take high risks to have a live baby. Caregivers might be liberal with CS because they perceive the risk of severe maternal complications after CS as smaller than the risk of poor perinatal outcomes after vaginal birth. It is evident that we should strive to optimise perinatal outcomes, but in this setting there seemed to be a shift in focus from maternal to perinatal health. In light of the discussion on the potential conflict between maternal and newborn health in relation to CS and other interventions (Rosenfield and Maine, 1985; Beckett, 2005; Starrs, 2014), we raise a concern that maternal risks with CS might be overlooked for the benefit of the baby, which can have serious short- (Souza et al., 2010; Briand et al., 2012) and long-term consequences (Silver, 2012) on women's health in a low-resource setting.

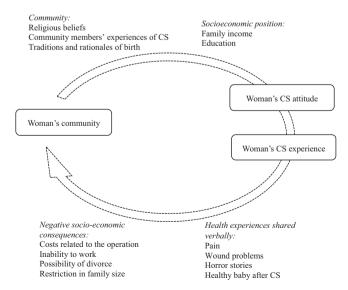
## CS put into women's context

Women's CS attitudes were largely affected by their sociocultural contexts. Religion plays an important role in many Tanzanian's everyday lives (Otiso, 2012), and religion might act as a way to cope with stress, anxiety, and unpredicted events (Winkelman, 2009). The sense of fatalism expressed by women that CS outcomes were controlled by God, is coherent with other literature from Sub-Saharan Africa, where women put their faith of delivery outcomes in religious and traditional beliefs (Bohren et al., 2014). When religion and religious leaders became too influential, however, it was often regarded as a problem by caregivers, as it challenged their position as decision-makers. Our respondents also attested that stories of CS, both positive and negative, were widespread in the community and affected CS attitudes. A previous study from six developing countries argues that shared knowledge about CS complications leads to a more negative attitude to surgery (Leone et al., 2008). In contrast to other reports (D'Souza, 2013; Kuan, 2014), women in our study had seldom requested CS. Instead, many women considered CS as an unnatural intervention and preferred vaginal birth to be like 'everyone else' (Chigbu and Iloabachie, 2007; Enabudoso et al., 2011: Bohren et al., 2014).

In line with previous research from developing countries, women in our study were concerned that the CS prevented them from performing their usual chores (Khan et al., 2012; Bohren et al., 2014), affected the family economy (Chigbu and Iloabachie, 2007: Enabudoso et al., 2011: Khan et al., 2012: Bohren et al., 2014), and decreased the number of children that they could have (Aziken et al., 2007; Khan et al., 2012). These issues, which were crucial to women, are often forgotten in the debate about CS, and the fact that caregivers seldom involved such socio-economic factors in the decision-making again illustrates how maternal interests were set aside (Wendland, 2007). As relatives are the main decision makers on whether or not and where to seek obstetric care, and the decision is influenced by community perceptions of the seriousness of the condition, perceived quality of care at the facility, and costs involved (Pembe et al., 2008; Bohren et al., 2014), knowledge about community perceptions and socio-economic consequences of CS can help to understand both norms related to pregnancy and childbirth (Essén et al., 2000) and women's care seeking behaviour (Bohren et al., 2014). In Fig. 1, we illustrate how factors in women's social context affected their CS attitudes, and how their CS experiences might affect their communities.

#### Strengths and limitations

Since we included both women and caregivers, we were able to capture their converging and diverging perspectives on CS. The qualitative design made it possible to explore how CS was viewed within women's social context, and thereby captured how the wider community influenced birth preferences. Interviewing women in their homes enhanced openness, as illustrated by the fact that women, despite being interviewed by medical professionals, expressed negative feelings about the CS decision and care encounter. We could not detect any differences across women's responses depending on by whom they were interviewed, and whether an interpreter was used or not. The main researcher's



**Fig. 1.** Illustration of how factors in women's social context affected their caesarean section (CS) attitudes, and how their CS experiences might affect their communities.

position as a foreigner, yet a colleague who had spent six months in the study context, appeared to facilitate openness during interviews with caregivers. Validity of findings was sought in several ways (Erlandson et al., 1993). Prolonged engagement started in 2010, when three of the authors (HL, KLH, BE) conducted a quantitative study at the setting. Member checks (Erlandson et al., 1993) were done to verify our results. We triangulated the findings by including different categories of respondents (women, doctors, and midwives) and by using different methods (individual interviews. FGDs, and participant observations) (Erlandson et al., 1993). Opinions expressed by caregivers in interviews and FGDs were similar, which indicate that individual views and social norms of CS cohered regarding these themes. The main researcher's firsthand experience through observations provided guidance during data analysis when women's and caregivers' perspectives diverged. Having a cross-cultural and multiprofessional team stimulated our discussions and provided different angles and inputs on the data.

As all qualitative findings are defined by the specific context in which they occur, generalisability is often limited (Erlandson et al., 1993). We hope that our results might guide future inquiries, as well as stimulate discussions and reflection on the use and overuse of CS globally. There were divergent opinions among women on the matter of CS, and this might vary even more depending on socio-economic background, time in pregnancy, or time elapsed post partum. This study cannot conclude anything about birth preferences, generally, among Tanzanian women and caregivers, but provides a deeper understanding of the reasons behind their CS attitudes. Although caregivers expressed the same opinions in interviews and FGDs, data from the FGDs were not as rich as those from individual interviews. This might partly be due to caregivers' high workloads and colliding schedules, which made it difficult to gather participants in a 'stress-free' session. For practical reasons, we were unable to arrange a FGD with women, which could have provided us with valuable information. Translated transcripts can introduce bias since meaning may get lost in translation (van Nes et al., 2010). In most of our interviews, the translator was a member of the research team, and analysis was done in dialogue between the research group members to make sure that our interpretation reflected the source data.

### Conclusion

We raise a concern that women and caregivers might overlook maternal risks associated with CS in order to 'secure' a healthy baby, a shift in focus which can have serious consequences on women's health in low-resource settings. Caregivers need to reflect on how they counsel women on CS, as many women had experienced little control over the decision and perceived that there was a lack of indication for their operation. Supportive attendance by a relative during birth and more comprehensive antenatal care counselling about CS indications and complications might enhance women's autonomy and birth preparedness. Studies like ours can display disparities and paradoxes in CS perspectives and might help to prevent misconceptions between women and caregivers. In light of the potential overuse of CS in some settings, future research should seek to identify factors in the health care milieu that might influence caregivers to perform medically unjustified CSs.

#### **Conflict of interest**

We wish to confirm that there are no known conflicts of interest associated with this publication and there has been no significant financial support for this work that could have influenced its outcome.

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