## ORIGINAL RESEARCH ARTICLE

# Perceived Health System Causes of Obstetric Fistula from Accounts of Affected Women in Rural Tanzania: A Qualitative Study

<sup>1\*</sup> Lilian T. Mselle and <sup>2</sup>Thecla W. Kohi

<sup>1</sup>Department of Clinical Nursing, Muhimbili University of Health and Allied Sciences, P.O. Box 65004, Dar es Salaam, Tanzania; <sup>2</sup>Department of Nursing Management, Muhimbili University of Health and Allied Sciences, P.O. Box 65004, Dar es Salaam, Tanzania

\*For Correspondence: E-mail: nakutz@yahoo.com; Phone: +255 717 565 610

#### **Abstract**

Obstetric fistula is still a major problem in low income countries. While its main cause is untreated obstructed labour, misconceptions about it still persist. This study aimed at exploring and describing perceived health system causes of obstetric fistula from women affected by it in rural Tanzania. This exploratory qualitative study included twenty-eight women affected by obstetric fistula. Semi structured interviews and focus group discussions were held and thematic analysis used to analyse perceived health system causes of obstetric fistula from women's account. Perceived health system causes of obstetric fistula fundamentally reflected the poor quality of obstetric care women received at health care facilities relating to staff unaccountability, late referral, and torture by nurses. The women's perception emphasizes the importance of improving the quality of obstetric care provided by health care providers in health care facilities. (Afr J Reprod Health 2015; 19[1]: 124-132).

Keywords: Obstetric fistula, perceived causes, health system, birth experiences, Tanzania

#### Résumé

La fistule obstétricale demeure toujours un problème majeur dans les pays à faible revenu. Alors que sa cause principale est un travail dystocique non traitée, les idées fausses à ce sujet persistent. Cette étude visait à explorer et à décrire la cause perçue de la fistule obstétricale dû au système de santé selon ce que disent les femmes qui en sont victimes en Tanzanie rurale. Cette étude qualitative exploratoire comprenait vingt-huit femmes atteintes de la fistule obstétricale. Nous avons recueilli et analysé des entretiens semi structurés et des discussions à groupes cibles et à l'aide d'une analyse thématique, nous avons fait une analyse des causes perçues de la fistule obstétricale dû au système de santé d'après ce que disent les femmes. Les causes perçues de la fistule obstétricale due au système de santé reflètent fondamentalement la mauvaise qualité de soins obstétricaux reçus par les femmes dans les établissements de soins de santé concernant l'irresponsabilité de la part du personnel, l'orientation tardive vers les spécialistes, et la torture de la part des infirmières. La perception des femmes met l'accent sur l'importance de l'amélioration de la qualité des soins obstétricaux assurés par les prestataires de soins de santé dans les établissements de soins de santé. (Afr J Reprod Health 2015; 19[1]: 124-132).

Mots-clés: Fistule obstétricale, causes perçues, système de santé, expériences de naissance, Tanzanie

## Introduction

Obstetric fistula (OF) is a debilitating condition that is largely caused by prolonged, obstructed labour<sup>1</sup>. Fistula develops after many days of unrelieved obstructed labour. It is one of the most severe childbirth injuries, which leaves an opening between either the bladder and the vagina (vesicovaginal fistula) or the rectum and the vagina (recto-vaginal fistula), resulting in urine and/or faecal incontinence.

Women affected by OF experience loss of body control, loss of social role as a woman, loss of integration in social life, and loss of dignity and self-worth<sup>2</sup>. They commonly lose their babies during childbirth and are subjected to social discrimination and abandonment<sup>2,3</sup>. Overall, OF has devastating social, economic and psychological consequences on the health and well-being of the affected women, which in turn affects their rehabilitation and reintegration to their families and communities even after fistula

Perceived Health System Causes of Obstetric Fistula

treatment<sup>4,5</sup>.

In 2012, about 2-3.5 million women worldwide lived with OF and the majority of these resided in Africa and Asia<sup>6</sup>. In Tanzania, institutional based data indicate that about 3,000 new cases of fistula develop each year<sup>7</sup>. The number may be increasing today due to increased influx of women affected by OF to the health facilities for treatment following active case finding programmes and advocacy for free fistula treatment<sup>8</sup>.

Studies on women affected by OF in resource-poor countries have shown that biological, social-cultural, environmental and health system factors contribute to the occurrences of OF<sup>9,10</sup>. Universal access to emergency obstetric care would help in preventing OF resulting from prolonged obstructed labour<sup>1,11</sup>. However, in Tanzania access to emergency obstetric care is still limited, which makes OF to be a major challenge<sup>12</sup>.

The availability, accessibility, acceptability and quality of health goods and services (AAAQ) concepts<sup>13</sup> asserts that in the realisation of right to health, adequate health infrastructure, goods and services must be accessible physically and economically, acceptable culturally and ethically and should be of adequate medical quality. It should be noted that access to health interventions such as emergency obstetric care (EmOC), skilled care, education and information on sexual and reproductive health and other sexual and reproductive health care services are of paramount in the prevention of maternal complications including OF.

Studies on OF in Tanzania primarily assessed the availability of fistula treatment<sup>7</sup>, prevention, treatment and repair<sup>14,15</sup>. Others focused on dimensions of living with fistula and the associated social vulnerability of affected women<sup>2,16,17</sup>, or explored experiences of labour and birth<sup>10,18</sup>, or have assessed reintegration and quality of life following fistula surgery<sup>4,5</sup>. There is only one study that was conducted in Tanzania on fistula describing perceived causes of fistula<sup>19</sup>. In this study participants came from the general population that are women of reproductive age, men, health providers, birth attendants and community leaders. It was also lent from this study that people still holds misconceptions about OF. This article aimed at exploring and describing

perceived health system causes of from women affected by it in rural Tanzania.

# **Methods**

## Study design

The qualitative study was conducted between 2008-2010 at the Comprehensive Community Based Rehabilitation (CCBRT) hospital, a private non-governmental organization hospital and a major service delivery point for fistula repair located in Dar es Salaam, Tanzania. The CCBRT hospital performs more than 200 vesico-vaginal fistula (VVF) and rectal vaginal fistula (RVF) operations each year.

## **Participants and Data collection**

Twenty-eight women affected by OF were conveniently recruited from CCBRT fistula ward. The inclusions criteria were women admitted at CCBRT hospital before or after fistula repair could speak Kiswahili and were willing to participate in the study. Women who met the inclusion criteria were identified, explained the purpose and the method of the study including the principles of confidentiality, and a suitable time for interview was arranged.

#### Data collection

To build the credibility and better understanding of the findings two methods of data collection were used semi-structured interviews and focus group discussions (FGDs). Of 28 women affected by OF recruited in this study, 16 participated in the interviews and 12 in the FGDs. Interviews and FGDs were held in Kiswahili, a language spoken by all participants, and were audio recorded- with permission from participants- to ensure that primary information is obtained as they come from the participants.

#### Semi-structured interviews

Semi structured interviews<sup>20</sup> with women affected by OF, lasting between 45 minutes and 2 hours, were conducted by the first author. The sample size of the women affected by OF was not predetermined. However, saturation<sup>21</sup> was

achieved after 16 interviews, where answers from women seemed to repeat information gained earlier and little new information was attained. Interviews were done in a private room adjacent to the fistula ward. An interview guide with openended questions and probes used was not rigidly adhered to, allowing the interviewer to explore issues as they emerged<sup>22</sup>. Although the interview guide used did not explicitly ask women about causes of, women explained what they thought were the causes of their fistulas when they were reporting their experiences of receiving care during the process of labour and birth. Notations of nonverbal expressions of the participants during the interview were taken.

## Focus Group Discussions (FGDs)

Two FGDs with women affected with OF were held at CCBRT hospital. One discussion group included women lived with OF before they had fistula repair (BS) and another with women after fistula repair (AS). Each group included six participants of different regions of the country. The first author moderated discussions and she was assisted by two research assistants, one taking notes and another making observations. The FGD guide was used centered on women's laboring and

Perceived Health System Causes of Obstetric Fistula

birthing experiences with health care facility. Discussions lasted for 1-2 hours.

## Data analysis

Thematic analysis <sup>23</sup> guided analysis of data. All interviews and discussions were transcribed verbatim into Kiswahili, and read and compared against audio-recorded materials to verify consistency of the content. Three translated transcripts from Kiswahili into English were then translated back into Kiswahili to check for the quality of translation. Thereafter the translated transcripts were read and compared against the original text to validate the content. The translated transcripts were read several times to obtain an overview of the material as narrated by women. The massive data was reduced by identifying phrases and sentences related to perception of health system causes of obstetric fistula, which were coded in the margin of the transcript sheets. The coding was predominantly close to the text using women's own descriptions. The codes with similar content were then brought together into categories (See Table 1). Authors discussed and reflected on interpretation of women's account, and agreed on the categorisation<sup>24</sup>. Anonymous quotes were used to illustrate the facts. Where

**Table 1:** Examples of the process of analysing women's account on perception of health system causes of their fistulas by inductive thematic analysis

Code		Category	Relevant Quotes
-	a nurse was not there nurse was not around to monitor the labour progress if you have money you will receive very good service They need to take care of patients without nepotism Nurses' negligence	Staff unaccountability	I think if a nurse was around monitoring I would not have ended with this problem, and if they would have failed, they could have taken me to theatre many hours earlier, I would not have been like this. they are not careful in the way they perform their work. They need to take care of patients without nepotism. Therefore, I think this is negligence.  If a nurse or a doctor knows you, or if you have money to give them, you will receive very good service but if you do not, you suffer. the reason I see is nurse's negligence.
-	because they delayed to transfer me to the main hospital did not tell me early about the problem I was having	Late referral	Perhaps, it is because they delayed to transfer me to the main hospital. If I was referred earlier perhaps they could have operated me and get a baby and I would not have ended up with all these other problems.  the problem was that doctors did not tell me early about the problem I was having.
_	they beat me around the waist while others were pulling my legs	Torture from Nurses	they beat me around the waist while others were pulling my legs and I was tired.

#### Ethical considerations

The Muhimbili University of Health and Allied Health Sciences (MUHAS) Research and Ethical Review Board approved the study. Permission for data collection was granted by the CCBRT hospital and women gave their written consent to take part in the study after receiving detailed information regarding the purpose of the study, voluntary nature of participation and about confidentiality.

#### Findings and Discussion

#### Characteristics of Participants

The 28 women enrolled in this study were between 17-50 years of age and 50% (n=14) got fistula in their first labour before they were 21 years old. Twenty-two (79%) were from rural remote areas of Tanzania, and 14 were from central regions of Tanzania. Central regions of Tanzania are regions that are considered to be among the poorest regions in terms of less cash crop cultivation and industrial development. Eight were illiterate, 16 were primary school leavers and only four had education beyond primary. All women were peasants, petty business persons or homemakers.

#### Health System Causes of Obstetric fistula

In the analysis of the perception and views of women affected by OF, regarding health system causes of their fistulas it was realized that women associated their negative obstetric care experiences to the causes of fistula. Obstetric fistula is mainly caused by untreated obstructed labour. Description of perceived health system causes of were organized into three categories; staff accountability, late referral and torture from nurses.

#### Staff unaccountability

Immediate and skilled care during labour and delivery is crucial for safety of the future mothers and their new-borns, because life-threatening complications are largely unpredictable. In Tanzania, health system utilization for essential

maternal health services is still low, with the very low coverage among the poor. Estimates indicate that around 50% of births in Tanzania occur in health facilities, among these only 51% received skilled care<sup>25</sup>. Studies in Tanzania<sup>17,26</sup> and elsewhere<sup>27,28</sup> demonstrated that even after women arrive early in the health facility, still they are not assured of receiving adequate obstetric care. This is due to institutional factors including staff competence and lack of staff managerial support. Women affected by OF in this study attributed their fistula problem to unaccountability of nurses because they were not available to monitor their progress of labour. Women felt that if nurses were around and had they received help from them, they would not have ended up with fistula problem.

(...) the day when I had labour pains, a nurse was not there (...) the baby's head was already out (...) I think if a nurse was around I would not have ended with this problem, and if they would have failed, they could have taken me to theatre many hours earlier (...) (PM)

Women also perceived that their fistula was a result of nurses negligence, and not known by them in places of delivery or their inability to give money to health care providers for them to receive better care and prompt assistance. The following accounts from women illustrate:

If a nurse or a doctor knows you, or if you have money to give them, you will receive very good service but if you do not, you suffer (...). They need to take care of patients without nepotism (...) I think this is the result of negligence (SK)

(...) the reason I got fistula I see is nurses' negligence (JA).

Women experience of health care providers' negligence and nepotism reported in this study corroborates with findings by other researchers<sup>29,30</sup>. In these studies, a large number of women reported experiences of neglect by doctors and nurses on duty, who only paid attention to their friends and relatives or private patients. During discussions the perception on nurses neglegence was also reported when one woman said:

I think nurses contribute to the development of fistula. (...) they keep you waiting for so long in labour without making any decision of taking you to theatre for operation (FGD-AS)

# Late referral

The availability and access to EmOC is important in ensuring prompt treatment of pregnancy and labour related complications, and is key in both improving maternal outcome<sup>11</sup>, and attaining Millennium Development Goals (MDGs) 4 and 5. To facilitate access to quality primary and reproductive health care for all Tanzanian, as stipulated in its national health policy<sup>31</sup>, the Government has extended basic health care infrastructure into peripheral rural areas, where majority of people live. The health system is organized in a referral pyramid, starting from dispensaries at the bottom and rural health centres that provide Basic Emergency Obstetric Care (BEmOC) and treatment of minor conditions. At the district level, there are district hospitals at first referral level where necessary drugs, equipment and skilled staff are available to provide comprehensive emergency obstetric (CEmOC) that include basic emergence care (parenteral- antibiotics, oxytocic drugs and anticonvulsants pregnancy-induced for hypertension) and also performing caesarean section and blood transfusion.

There are also regional hospitals in each region, with the highest levels being national and specialized hospitals<sup>32</sup>. Obstetric care is provided in all levels of health facilities depending on the obstetric care need of a woman (i.e. BEmOC or CEmOC). In 2008 as much as 72% of Tanzanian population lived within 5 km and 93% within 10km of health care facility<sup>33</sup>.

The WHO estimates indicate that 15% of all pregnant women will develop pregnancy and childbirth related complications that would require access to first referral care<sup>34</sup>. Using a partograph could facilitate timely detection of difficult labour and early referral decision to the facility providing EmOC, thus preventing obstructed labour and thereby preventing obstetric fistula<sup>35</sup>. In Africa however, factors such as lack of knowledge on the use of partograph, non-availability of partograph, and shortage of midwives with the right

attitude<sup>36,38</sup> prevents many women from accessing adequate obstetric care.

A woman with prolonged obstructed labour due to cephalo-pelvic disproportion (CPD) will definitely require immediate Caesarean section<sup>39</sup> in a health facility offering CEmOC. In such situations, accessing health facility providing EmOC is critical. However, to establish the obstructed labour that would require surgical intervention, midwives should make close monitoring of a woman's progress of labour. In this study, women perceived the major causes of their fistulas to be failure to foreseen obstacles to normal delivery and late referral from dispensary to a health facility which provides CEmOC:

I was in labour for a long time while in the hospital. Labour pains comes and goes and each time when you call nurses tells you, wait, though I had very strong pains. I didnt see the reason as to why I could not be sent for operation early...I think nurses contributed to my problem (FGD-BS).

# Another woman during interview said:

(...) I was delayed to be transferred to the main hospital. If I was referred early perhaps, they could have done an operation and get my baby and I would not have ended up with all these problems (KS)

Effective communication is key to all clinical care team, particularly in the maternity services. It becomes effective only if the relevant information is made available to, and understood by, those who need to act on it<sup>40</sup>. Therefore, each team member should possess the skills necessary to promote effective communication. Failure of midwives to communicate poor progress of labour to women for them to reallocate to an adequate health care facility was perceived as a cause of fistula:

If I was informed early about the problem, my family could take me to a big hospital for operation (...) (NM).

(...) the problem was that doctors did not tell me early about the problem I was having for me to move on to another hospital (JA)

Other women who stayed in labour for long time without being refered for adequate care had their stories to share: I went to the dispensary early in the morning just after labour started. I was in labour until at aroung 2 pm when the membranes ruptured, still I was told to wait. Until on the next day at 2am is when they transfered me to another hospital for operation! that is how I lost my baby and got fistula (FGD-AS).

Even women, who were previously informed of the importance of caesarean section in the subsequent pregnancy as a mode of delivery due to CPD, still nurses, could not take necessary action than asking them to wait:

I was already in hospital for 9 days when labour started. I was previously told that since I had rupture of uterus, in the next pregnancy I should attend to the health facility early for operation. I was in labour for 12 hours and each time I reminded nurses to send me for operation. However, "They continued telling me that there was no problem". When the doctor came the next day, he asked nurses, "why didnt you call me early?" You have delayed this woman, and now the baby is already dead" (FGD-AS).

In Kazaura and colleagues' study<sup>19</sup>, perceived health system causes of reported were delivery by operations or forceps and removal of the urinary catheter. Women in this study did not report these findings. Similar to the findings of the study from Tanzania<sup>19</sup>, and elsewhere<sup>9,39,41</sup>, prolonged labour due to big babies was perceived by women to cause fistula:

The delivery was difficulty because the baby was big and that was the cause of this problem (LD)

## Torture from nurses

Skilled attendance at birth is considered to be the most critical intervention for ensuring safety of the baby and of the expectant mothers. It accelerates the timely delivery of emergency obstetric and new-born care when life-threatening complications arise. Skilled attendance denotes not only presence of skilled midwives with right attitude to perform midwifery work, but also the enabling environment<sup>11</sup>. Women in this study did not

describe these qualities of midwives. They reported experiences of being beaten by midwives when assisting them during delivery. For women these unethical and unprofessional acts were responsible for their fistula occurrences:

(...) I think it is because of torture from nurses while they were trying to assist me during delivery, they beat me around the waist while others were pulling my legs and I was tired (RB)

This study illustrates poor access to obstetric care for women affected by OF. Access to skilled obstetric care has been identified as a major condition to lower maternal morbidity and mortality<sup>42</sup>. It is commonly expected that in the health facility women would receive adequate obstetric care from skilled providers 43,44. When these expectations are unmet, women usually loose trust with health care system and resort to seeking unskilled obstetric care<sup>26,45</sup>. They may bypass a nearby health facility and go to one that is far away if it is perceived to provide better services<sup>12,46</sup>, which contribute to delays. Actions of health care providers are often more important for patient satisfaction than the hospital physical environment. Women experiences of negligence, nepotism, delays and torture by nurses contribute to poor access of skilled obstetric care in the health facility<sup>47</sup>. Thus, denying women rights to obstetric care<sup>48</sup>.

### **Methodological Considerations**

This study contributes to the important knowledge on the views of the understudied vulnerable group of women affected by OF in Tanzania with special emphasis to their perception on causes of their fistulas. Many women in this study had lived with fistula for many years and therefore, they may not have accurately remembered the events that led to that occurred many years birth Nevertheless, their openness and consistent responses to the questions and probes during interviews left little doubt that these women recalled their birth experiences accurately. Convenient sample was used, which does not allow generalizability. Nevertheless, this is inherent nature of a qualitative study design. The views expresses by women in this study may not Perceived Health System Causes of Obstetric Fistula

necessarily reflect the views held by other women affected by OF in other contexts. These views may be relevant to perception of other women who are affected with it in other countries, which have similar social-economic context as Tanzania. The validity or dependability of the study findings could be established through provision of the direct quotes of women affected by OF.

## Conclusion

In this study, woman perceptions on causes of their fistula seem to reflect their experiences of receiving poor quality of obstetric care that was provided by health care providers at different levels of health care facilities. Much as the Government of Tanzania is striving to bring many women to give birth in health facilities, there is need for the Government to ensure that women who manage to get to the health facility for obstetric care receive adequate care consistent with their expectations. With the government efforts to provide health facilities with equipment, materials, and supplies and increasing staffing levels, it should also put mechanisms that will make health providers accountable to their work and able to take personal responsibility in case of fault. Such improper conduct by nurses during the provision of obstetric care, breach the code of ethical conduct, grounded in the philosophical ethical principle of fidelity and respect for dignity, worth, and self-determination of persons. Feedback mechanisms by women-through exit reflections or other mechanisms- are required. These feedbacks would help the health facility to improve the quality of obstetric care and hence the Government meet its national health policy objective on improving access to reproductive and maternal health care, and make a necessary step towards the achievement of the MDGs of reducing neonatal and maternal deaths and disabilities.

# Acknowledgements

We wish to thank women affected by obstetric fistula for sharing their birth care experiences. Staff working at fistula wards at CCBRT particularly Dr. Marenga and Mrs Kweka. We would like to thank the gender, generation and

social mobilization - NUFU Project, for financial support.

# **Contribution of Authors**

LTM developed the concept of the study and the design. Organized and collected qualitative data. LTM and TWK did the data analysis and interpretation. LTM drafted the paper, which was critically reviewed and revised by TWK. Both authors read and approved the final manuscript.

# References

- Cron J. Lessons from the developing world: obstructed labor and the vesico-vaginal fistula. MedGenMed. 2003; 5: 24.
- Mselle LT, Moland KM, Evjen-Olsen B, Mvungi A and Kohi TW. "I am nothing": experiences of loss among women suffering from severe birth injuries in Tanzania. BMC Women's Health. 2011; 11: 49.
- Ampofo EK, Omotara BA, Otu T and Uchebo G. Risk factors of vesico-vaginal fistulae in Maiduguri, Nigeria: a case-control study. *Tropical doctor*. 1990; 20: 138-9.
- Pope R, Bangser M and Harris Requejo J. Restoring dignity: Social reintegration after obstetric fistula repair in Ukerewe, Tanzania. Global Public Health: An International Journal for Research, Policy and Practice. 2011: 1744-692.
- Mselle LT, Moland KM, Evjen-Olsen B, Mvungi A and Kohi TW. "Hoping for a normal life again": Women reintegration experience and expectations after fistula repair in Tanzania *J Obstet Gynaecol Can* 2013; 34: 927-38
- UNFPA. When chidren harms: Obstetric Fistula. New York: United National Population Fund, 2012.
- Bangser M. Tanzania Fistula Survey 2001. Dar es Salaam, Tanzania: Women Dignity Project, 2002.
- UNFPA. State of World Population: making 1 billion counts: Investing in adolescents' health and rights.
- Hassan MA and Ekele BA. Vesicovaginal fistula: Do the patients know the cause? *Annals of African Medicine*. 2009; 8: 122-6.
- 10. Mselle LT, Kohi TW, Mvungi A, Evjen-Olsen B and Moland KM. Waiting for attention and care: birthing accounts of women in rural Tanzania who developed obstetric fistula as an outcome of labour. BMC Pregnancy and Childbirth. 2011; 11: 75.
- Graham WJ and Hussein J. Ethics in Public Health Research: Minding the Gaps: A Reassessment of the Challenges to Safe Motherhood. American journal of public health. 2007; 97: 978.
- Olsen OE, Ndeki S and Norheim OF. Availability, distribution and use of emergency obstetric care in northern Tanzania. *Health Policy Plan*. 2005; 20: 167-75

- Yamin AE. Addressing Maternal Mortality Implicates Many Human Rights. Focus on Right to Health. 2009.
- 14. Majinge CR. Successful management of vesicovaginal fistula at St Gaspar Hospital Itigi, Singida, Tanzania: a preliminary report. *East Afr Med J.* 1995; 72: 121-3.
- Mteta KA. latrogenic ureteric and bladder injuries in obstetric and gynaecologic surgeries. East Afr Med J. 2006; 83: 79-85.
- 16. Bangser M. Obstetric fistula and stigma. *Lancet*. 2006; 367: 535-6.
- 17. Women's Dignity Project and Engender Health. Risk and Resilience: Obstetric Fistula in Tanzania: An overview of Findings and Recommendations from the Study. Dar es Salaam, Tanzania.2006.
- 18. Mselle LT, Moland KM, Mvungi A and Olsen B-E. Why give birth in the health facility? Users' and providers' accounts of poor quality of birth care in Tanzania. BMC Health Services Research. 2013; 13: 175.
- 19. Kazaura M, Kamazima R and Mangi E. Perceived causes of obstetric fistulae from rural southern Tanzania. *African Health Sciences*. 2011; 11: 377-82.
- Kvale S. Interviews: An Introduction to Qualitative Research Interviews: SAGE Publications, Thousands Oaks. 1996.
- 21. Morse JM. The significance of saturation. *Qualitative Health Research*. 1995; 5: 147-8.
- Minichiello V, Aroni R, Timewell E, Timewell E and Alexander L. *In-depth iterviewing: Principles, Techniques, Analysis.* 2nd ed. Longman, Melbourne, 1995.
- Braun V and Clarke V. Using thematic analysis in psychology. *Qualitative research in psychology*. 2006; 3: 77-101.
- Lincoln YS and Guba, E. G. Naturalistic inquiry. Beverly Hills, CA: Sage Publications, Inc., 1985.
- NBS and ICF Macro. Tanzania Demographic and Health Survey 2010. Dar es Salaam, Tanzania: National Bureau of Statistics and ICF Macro, 2011.
- Mrisho M, Schellenberg JA, Mushi AK, Obrist B, Mshinda H, Tanner M and Schellenberg D. Factors affecting home delivery in rural Tanzania. *Tropical Medicine & International Health*. 2007; 12(7): 862-72.
- Nathan LM, Rochat CH, Grigorescu B and Banks E.
   Obstetric fistulae in West Africa: patient perspectives.
   *American Journal of Obstetrics and Gynecology*.
   2009; 200: e40-e2.
- 28. Bell J, Hussein J, Jentsch B, Scotland G, Bullough C and Graham W. Improving Skilled Attendance at Delivery: A Preliminary Report of the SAFE Strategy Development Tool. *Birth*. 2003; 30: 227-34.
- 29. Asuquo EEJ, Etuk SJ and Duke F. Staff Attitude as Barrier to the Utilisation of University of Calabar Teaching Hospital for Obstetric Care. African Journal of Reproductive Health / La Revue Africaine de la Santî Reproductive. 2000; 4: 69-73.
- 30. Bangser M, Mehta M, Singer J, Daly C, Kamugumya C and Mwangomale A. Childbirth experiences of women with obstetric fistula in Tanzania and Uganda

- and their implications for fistula program development. *International Urogynecology Journal*. 2011; 22: 91-8.
- Ministry of Health. National Health Policy. Dar es Salaam, Tanzania: The United Republic of Tanzania. Dar es Salaam, Tanzania2003.
- Ministry of Health and Social Welfare. Tanzania Service Availability Mapping 2005-2006. Dar es Salaam, Tanzania. 2006.
- Ministry of Health and Social Welfare. Human resource for health strategic plan 2008- 2013. Dar es Salaam, Tanzania2008.
- 34. WHO. Mother-Baby Package: Implementing Safe Motherhood in Countries. Practical Guide: Maternal Health and Safe Motherhood Programme. Division of Family Health, World Health Organization, 1994.
- 35. Mwangi A and Warren C. Taking Critical Services to the Home: Scaling-up Home-based Maternal and Postnatal Care, including Family Planning, through Community Midwifery in Kenya, FRONTIERS, Population Council. 2008.
- 36. Opiah MM, Ofi AB, Essien EJ and Monjok E. Knowledge and utilization of the partograph among midwives in the Niger Delta Region of Nigeria. *African journal of reproductive health*. 2012; 16: 125-32.
- Qureshi ZP, Sekadde-Kigondu C and Mutiso SM. Rapid assessment of partograph utilisation in selected maternity units in Kenya. *East Afr Med J.* 2010; 87: 235-41.
- 38. Engida Yisma, Berhanu Dessalegn, Ayalew Astatkie and Fesseha. N. Knowledge and utilization of partograph among obstetric care givers in public health institutions of Addis Ababa, Ethiopia. BMC Pregnancy and Childbirth. 2013: 17.
- Neilson JP, Lavender T, Quenby S and Wray S.
   Obstructed labour: Reducing maternal death and disability during pregnancy. *Br Med Bull*. 2003; 67: 191-204.
- The King's Fund. Improving safety in maternity services: Communication. 2008.
- Miller S, Lester F, Webster M and Cowan B. Obstetric fistula: A preventable tragedy. *Journal of Midwifery* & Womens Health. 2005; 50: 286-94.
- 42. WHO, UNFPA, UNICEF and AMDD. Monitoring emergency obstetric care: a handbook. Geneva: WHO. 2009.
- 43. Graham WJ, Bell JS and Bullough CHW. Can skilled attendance at delivery reduce maternal mortality in developing countries [monograph on the Internet]. Safe motherhood strategies: a review of the evidence Studies in health services organisations & policy. 2001; 17.
- 44. World Health Organization. Making pregnancy safer (MPR): Skilled attendants. WHO, 2005.
- National Bureau of Statistics (NBS) and ORC Macro. Tanzania Demographic and Health Survey 2004-5. National Bureau of statistics and ORC Macro, (eds.). Dar es Salaam, Tanzania, 2005.
- 46. Kruk M. E., Mbaruku G, McCord CW, Morgan M,

# Mselle & Kohi

# Perceived Health System Causes of Obstetric Fistula

Rockers PC and Galea S. Bypassing primary care facilities for childbirth: a population-based study in rural Tanzania. *Health Policy Plan*. 2009; 24: 279-88. 47. Otis KE and Brett JA. Barriers to hospital births: why do many Bolivian women give birth at home? *Revista* 

Panamericana de Salud Pública. 2008; 24: 46-53.
48. Physicians for Human Rights. Deadly Delays: Maternal Mortality in Peru. A Rights-Based Approach to Safe Motherhood. United States of America, 2007.