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Women's Quality of Life after Obstetric Fistula Repair in Tanzania

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Abstract

Background

Obstetric fistula is a significant public health problem that causes severe physical, psychological, and social challenges, resulting in a poor quality of life for affected women. Surgical repair is intended to restore their health and well-being. This study explores the lived experiences of women concerning their quality-of-life following fistula repair in Dar es Salaam, Tanzania

Methodology

Data was collected using a semi-structured interview guide with ten purposively recruited women who had undergone obstetric fistula repair after six months of treatment in Dar es Salaam. Qualitative content analysis was conducted using a deductive approach for pre-determined codes, and later an inductive method was conducted to capture any new emerging codes. The research study was approved by the Institutional Review Board of the Muhimbili University of Health and Allied Sciences.

Results

Following surgical treatment, the women recovered from leaking urine and associated odors, enabling them to resume their social, religious and economic activities. Although some women were afraid to be remarry due to mistrust and the fear of the fistula redeveloping, others were able to marry and have children after the repair. Successful fistula treatment dramatically improved the women's quality of life.

Conclusion

Obstetric fistula treatment led to a marked improvement in women's quality of life. Successful repair enabled them to regain physical strength, resume sexual relations and childbirth, and reintegrate into social and economic life. Increased community awareness of the treatment's advantages contributed to the enhanced well-being of these women.

Keywords: *Obstetric fistula repair, Quality of life, Experience after repair, Tanzania.*

Background

Obstetric fistula is a public health concern that severely reduces the quality of life for affected women, even after repair. Globally, up to 3.5 million women live with this condition, with over 100,000 cases developing annually (1,2) . In Tanzania alone, more than 21,000 women live with obstetric fistula and over 3,000 new cases occur each year (3). The surgical treatment of obstetric fistula is available in Tanzania and many women get cured 30-40 days after repair (4). For example, in 2015 at CCBRT Hospital approximately 500 VVF and RVF were performed (5). Studies have reported inadequate social reintegration and rehabilitation plans (6) and that requirements and difficulties for family or community reintegration were historically and culturally based (7) leaving women living a poor quality of life.

Women affected by obstetric fistula encounter challenges including stigma, discrimination, divorce, abandonment, limited emotional support, isolation, and financial dependence (8). These challenges prevent women from engaging in social economic activities. Although following fistula repair many women felt a dramatic sensation of relief and happiness, some women continued to experience mental anguish, stigma, and physical problems regardless of the outcome of the procedure. For example, following repair women face social challenges including failure to conceive, marriage separation, divorce, and the misconception of not being in the position to give birth once more or developing another fistula from sex or childbirth (9,10).

Most studies conducted in Tanzania on obstetric fistula commonly describe experiences of living with fistula condition (11,12), causes of obstetric fistula (5,12,13) experience and expectation of reintegration after fistula repair (14,15). No study was conducted in Tanzania describing the quality of life of women after their fistula was repaired.

The biopsychosocial model (16) guided the understanding of participants' experience of quality of life after surgical treatment of obstetric fistula. The biopsychosocial model focuses on biological, psychological, and social factors. It is often related to the connection between obstetric fistula and bodily health. Psychological factor refers to an aspect of mental recovery and emotional well-being while social well-being is the interpersonal factors focus on social connections and community activities post-fistula repair. One's well-being after fistula repair is considered when one has all aspects of biological and psychological health. The study explored experience of women who underwent fistula repair in different perspectives such as physical, social economic and reproductive wellbeing. The study also will identify strategies that would address women’s challenges after repair. The findings will also be used as a baseline for future community-based studies of women following successful obstetric fistula repair.

Methods

Study design

The qualitative phenomenological research was carried out at CCBRT Hospital in Dar es Salaam to explore women's lived experiences on quality of life after obstetric fistula repair (17). The CCBRT hospital is one of the major referral hospitals in Tanzania providing obstetric fistula surgical treatment (5). When women get healed after repair were discharged home and were called back for follow-up after six months to determine the successfulness of the fistula repair. The hospital also recruits women who have been cured following repair to empower them economically through the Mabinti project at CCBRT Hospital, which has four months sewing training program for women post-fistula surgical treatment. The project established a women empowerment centre called "Mabinti". After four months of training, women are given a sewing machine for free to enable them to self-employment and help generate their income. The program enrols fifteen women in each batch.

Recruitment

A purposive typical case sampling technique (18) was used to recruit women who had surgical treatment of obstetric fistula. To be included in the study the participants had to have six months or more time after surgical treatment of obstetric fistula at CCBRT and could speak Kiswahili language. The WHO recommends that after six months following surgical repair of an obstetric fistula, women are likely to recover physically and psychologically as the recovery commonly occurs gradually (1). The in-charge of the Mabinti Centre facilitated the identification of ten participants who were eligible for the study. Thereafter the first author (CSK) approached the participants and explained the purpose of the study, principles of confidentiality, voluntary nature of participants, and data collection procedures. Women who agreed to participate in the study provided written informed consent before an interview was arranged.

Data collection

The first author (CSK) who has a Nursing degree with previous training in qualitative research conducted ten semi-structured face-to-face interviews in Kiswahili language- the Tanzania native language. Demographic information was collected from each participant at the start of their interview. The interviews were conducted in the evening after the training, in a quiet room within the Mabinti Centre that was away from hearing reach of other participants and providers using a topic guide with suggestions for probing. The questions in the interview guide were

framed to explore the experiences of women on quality of life after fistula repair. Topic guides were initially developed through the literature review to inform questions and were reviewed and refined after each interview. Based on the research topic that was explored and the experience of the researcher in conducting qualitative interviews, the saturation of data was achieved with ten participants who were purposively recruited for the study (19). Field notes were written directly after each interview to reflect on initial thoughts and reactions, ensuring that emerging topics are followed with subsequent interviews. With the written consent of participants, all interviews were audio recorded. The interviews lasted on average 35 minutes. The research team met regularly to review the progress of data collection that continued until saturation was achieved (20).

Data analysis

The data were analysed by the first (CSK) and last author (LTM) using both deductive and inductive qualitative content analysis (QCA) including open and predetermined coding, category development, and abstraction (21,22). The audio-recorded interviews were transcribed verbatim in the Kiswahili language, coded, and the relevant quotes were translated into English. Analysis of data using the original native language spoken by the participants and researchers to avoid multiple interpretations of data and ensure results emerge from the participant's account (23). While analysis had already begun during interview transcription, open coding was conducted during the first reading of the transcripts. Thereafter, the transcripts were read through several times and coded manually. Meaning units were identified, coded, and transferred to the word document for classification into sub-categories and categories as shown in Table 1. The meaning units and categories were discussed and compared among researchers to increase the credibility of the study findings (24).

Table 1: An example of analysis indicating categories, sub-categories and codes

Categories	Sub-Categories	Codes
Physical well-being	Regaining physical control	Not leaking urine No smell
	Gaining body recovery	Recovered from leaking completely Skin scratch healed Recovery from foot drop
Socioeconomic well-being	Engaging in social activities and gatherings	Engage in family events Participate in religious gatherings

		Gained new happiness and hope
	Sustaining self and family life through work	Got paid job Self- employment Farming Earning money through sewing
Reproductive well-being	Assuming marital roles	Having sex Married again Give birth
	Losing trust to marry again	Men are not trustworthy friends No trust in men Hesitant to remarry

Results

The characteristics of ten participants who were involved in this study are presented in Table 2. The majority of participants were between 20-30 years old, 60% had completed primary education and 30% were remarried. Among ten women experienced obstetric fistula repair, four of them were remarried and among four, three women got pregnant though two women out of three give birth by caesarean section to live babies and the third woman experienced miscarriage after six months of pregnancy. The content analysis resulted in 3 main predetermined categories: (i) Physical well-being; (ii) Socioeconomic well-being; and (iii) Reproductive well-being.

Table 2: Social demographic characteristics of participants at the time of data collection

Participants	Age in Years	Years in School	Marital status	Parity	Living children	Duration with fistula in month(s)	Years after repair
1	33	7	Re-married	2	1	13	7
2	31	7	Married	1	0*	13	12
3	29	7	Re-married	2	1*	1	5
4	37	7	Re-married	2	1*	26	11
5	36	12	Separated	3	2	3	4
6	28	7	Single	1	1	3	2
7	23	14	Single	1	1	1	1
8	30	7	Separated	2	1	3	2
9	29	0	Separated	3	2	13	3
10	29	12	Separated	4	3	1.5	1

Physical Well-being

Regaining physical control

Following surgical treatment, the women's experienced a complete resolution of symptoms, including urinary and faecal incontinence. They reported a restored ability to control urination, stating they could now hold urine and choose when and where to void. This was a stark contrast to their previous condition of continuous, uncontrollable leakage.

> *"Currently, there is no clothes wetness as compared to the situation I was in before repair. (…) when I feel the urge to urinate, I can hold urine until I get to the toilet" [IDI-2].*

Another one said that,

> *"I have no leaking anymore; I can remain clean without urine smell or no maps of urine on the clothes (…) [IDI-8].*

Gaining body recovery

Women experienced obstetric fistula symptoms reported having fully healed, and they believed that this allowed them to take opportunities that had previously been unavailable to them. They reported that their lives had taken a U-turn after receiving fistula therapy. The U-turn adjustments restored the hope and quality of life that had been lost due to the fistula condition. Women no longer have foot problems, are free from skin scratches, and all other bodily functions are working normally.

> *"My life is back now; I'm doing all my work. And I have become a woman like others who have not experienced this challenge" [IDI-1].*

Another one said that,

> "*I'm thankful to God because, in my first recovery, I found new hope than during fistula time when I was terrible! hope was lost for sure" [IDI-5].*

Socio-economic well-being

Engaging in social activities and gatherings

Based on the women's experiences of urine incontinence as a result of having a fistula condition, women were left alone, stigmatized, and abandoned by their relatives and communities. Following obstetric fistula repair, women said they were able to take part in a variety of social, religious, and familial events and activities. After a protracted time of self-isolation, the participants reported feeling welcomed back into their families.

> *"When I returned to my family I was accepted well with a party, my family members and my friends received me with refreshment, it was a long time since we met last" [IDI-1].*

Another one said that,

> *"I have no leaking anymore (…) and I can be with people who used to run away from me because* of the smell of urine" [IDI-8].

Sustaining self and family life through work

Because of their obstetric fistula condition, most women were terminated from their jobs. This forced them into lifelong financial dependency, severely harming their quality of life. After the treatment of an obstetric fistula, women were able to establish their small enterprises, engage in farming activities, and find jobs that allowed them to support themselves and their families.

> *"I have a job; after being treated for fistula here at this hospital, I was brought to the girls' centre and studied for one year which was 2011, when I completed in 2012, I went home but I was brought back to this hospital for work, I am employed here" [IDI-3].*

Reproductive well-being

Assuming marital roles

Before undergoing fistula treatment, most women were unable to have sex due to urine incontinence and odour. However, many eagerly wished to remarry and have children. Women in this study reported that they chose to remarry to fulfil their dreams of motherhood, while others resumed sexual relations without any problems.

> "*I got this second child with a second husband because I did not manage to get a child with the first husband, unfortunately, the first child died during the process of childbirth [IDI-3]."*

Losing trust to marry again

The women reported that previous rejection and stigmatization by their husbands and partners had caused them to lose faith in men. Other women believed that avoiding remarriage was best due to this eroded trust. They stated that being single parents was sufficient, as they were uncertain about finding a suitable partner for remarriage.

> "*I find it difficult to trust men who can come and ask for a partner relationship! It is hard to accept marriage (…) let me use the knowledge and skills given to me here at Mabinti centre than depending on men" [IDI-6].*

Discussion

Understanding women's quality of life after obstetric fistula repair is crucial in ensuring holistic care is provided, and helps healthcare providers to utilize multidisciplinary approaches when offering the treatment. This study revealed that women's quality of life after obstetric fistula repair is not the same among all women. Their differences were associated with the duration stayed after the repair. Those women who were repaired more than five years ago were more likely to show an encouraging experience such as physical and psychological recovery. Despite their individual experience, the crucial point of improvement for all women after obstetric fistula repair started after the successful closure of the fistula.

The current study revealed that women were able to regain physical control after obstetric fistula repair. Participants reported that they have regained control of urine and faecal, and have completely body recovery. This Finding aligns with the study conducted in Uganda which reported that physical well-being after fistula repair was improved as women were able to hold urine and decide where and when to urinate without leaking into their clothes (25). Also, the result correlates with Bashah and colleagues' study which displayed that a woman recovered from skin scratch damage, foot drop and gained the ability to maintain personal hygiene after the obstetric fistula repair (26). The study conducted in Guinea reported that fistula repair was an insufficient approach to overcoming physical well-being challenges which differs from the current study (10). The difference might be explained by the nature of the study population. This study included typical women with lived experience of phenomena for more than six months after repair. So, women described their lived experiences on quality of life after fistula repair which also includes issues of psychological recovery that normally takes place slowly. Others were mistreated by their husbands and health care providers that led to psychological trauma that needs to be addressed as well as for better health.

Women suffering from obstetric fistula distance themselves from social gatherings and some community activities as they feel shame when clothes are wet and smell urine (25)(10). This study revealed that after obstetric fistula repair women were accepted again by their family and the community. Some families prepared a welcome party where they sang some welcome songs and had a refreshment together with the women. Other women reported being able to attend religious services and practice their beliefs together with other community members which seemed to increase their happiness and new hope that was lost before the repair. The findings matched with the study conducted in Uganda and reported that women were loved, valued, and respected after successful obstetric fistula repair, and when they returned to their homes, some special welcoming parties were prepared for them (25).

Most women before the repair were not able to engage in daily income generation activities which traumatized them financially and psychologically (12,27). The current study discovered that after the treatment of an obstetric fistula, women were able to start their small businesses, engage in farming activities, and look for jobs that allowed them to support themselves and their families. This was consistent with the studies conducted in Tanzania and Uganda that reported women were engaged in income-generating activities after fistula repair, for instance, doing small business of selling and buying small goods, getting back to the job and others were exposed to sewing activities (8,14,15) However, other participants of this study experienced a delay in getting a job and others did not manage to return to their respective employment because their employers thought that they have not recovered enough to resume work.

Most women that were suffering from obstetric fistula abstain from sex despite their wish for remarry and have children due to urine and faecal incontinence (25). This study reported that some women after obstetric fistula repair resumed sexual relations without any problems, decided for remarry and gave birth to fulfil their dream of having children and others. This finding is in line with studies conducted in other parts of Africa that reported women after successful fistula repair were reintegrated and resumed sexual relationships with their partners or different partners. Others because they did not get children on the occurrence of fistula, so, they expressed their desire to get children openly either from the same partner or a different partner (9,10,15,25). The current study also revealed that after obstetric fistula repair, some women reported losing trust and faith in relationships due to the previous experience of being rejected and stigmatized by their partners. Since they no longer trust men, some women didn't like remarry and others opted to stay as single parents. This was consistent with the study conducted in Mwanza – Tanzania that reported other women who developed fistula during the first pregnancy had no interest in men because were abandoned by men after the occurrence of fistula (14,28).

Strengths and limitations of the study

The study was conducted by a team of experienced researchers, with regular discussions during data collection as well as during analysis. Key findings and categories were presented to school of nursing as member checks during co-design workshops in June 2021. The study reported only on women's experiences and did not include providers' or community members' narrations, which will be presented in different publications. The tool used for data collection was designed to capture several topics to identify quality of life gaps. The study interviewed women with the duration of six months after fistula treatment to collect data. Women came

from different geographical areas and following them to their homes after discharge was not possible logistically. Several other studies have used a similar approach. The interviews were conducted in a quiet private area outside maternity by experienced interviewers for sharing freedom and for confidentiality. Women shared both their negative and positive experiences, so we believe the findings were not hindered by the location or timing of interviews.

Conclusion

Following fistula repair women's quality of life improves. Women can give birth again, can go to social gathering and can engage to income generating activities. Extension of support for women after repair is important for fulfilment of their long-term needs including psychosocial support, access to economic opportunities, and becoming mothers. Healthcare facilities should be updated for fistula treatment provision and community campaign to encourage women who live with obstetric fistula to seek fistula repair. The findings of this study provide baseline information for comprehensive community-based studies to explore the quality of life of women after fistula treatment.

Ethical approval and consent to participate

Ethical approval was granted by the Institutional Review Board (IRB) of the Muhimbili University of Health and Allied Sciences (MUHAS) Ref. No.DA.282/298/01.C/1661. Written consent for the interviews and recording of conversations was sought and received from all participants. Assurance for confidentiality and safe storage of the data was provided in writing. Women who seemed to still need psychological support were counselled immediately after interview session. Participants were informed that they could withdraw their participation at any time without consequence.

Abbreviations

CBRT	Comprehensive Community-based Rehabilitation Tanzania
IDI	In-depth Interviews
MUHAS	Muhimbili University of Health and Allied Sciences
OF	Obstetric Fistula
QCA	Qualitative Content Analysis
QoL	Quality of Life
RVF	Rectal-Vaginal Fistula
VVF	Vesico-Vaginal Fistula
WHO	World Health Organization

Declarations

Availability of data and materials

The datasets generated and analysed as part of this study are not publicly available to maintain the participants' confidentiality. However, all transcripts are available from the corresponding author upon reasonable request.

Competing interests

The authors declare that they have no competing interests.

Funding

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Authors' contributions

CSK, AAL, and LTM were responsible for the study conception and design and CSK was responsible for the drafting of the manuscript. CSK performed the data collection and CSK and LTM performed the data analysis. CSK, AAL, and LTM made critical revisions to the paper. LTM and AAL supervised the study. All authors read and approved the final manuscript.

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