Clinical and Psychosocial Outcomes of Obstetrics Fistulae in Sub-Saharan Africa: A Review of Literature

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ABSTRACT
Obstetric fistulae are preventable and treatable diseases of immense public health importance which render women debilitated and devastated with physical, mental, psychological, economic and social problems. It is prevalent among the less privileged with limited access and utilization of reproductive health services which reflect the state of health care delivery especially emergency obstetric care in a country. Over the years, the impact of obstetric fistulae has led to several studies on the prevalence, clinical outcome and experiences of affected women, but there is paucity of information on the psychosocial and economic impact of obstetrics fistulae in developing countries. This review is therefore an attempt to bridge this gap and hopefully point attention to the need to consider these impacts when designing further interventions for patients with Obstetrics fistulae.

Keywords: Vesicovaginal fistula, Rectovaginal fistula, Psychosocial, Economic, Clinical outcome

INTRODUCTION

Obstetric fistulae (OF) comprising of vesicovaginal fistula (VVF) and rectovaginal fistula (RVF) occur in situations where women involuntarily leak urine and/or feces through the vagina following a complicated delivery. VVF and RVF are preventable diseases that are mainly caused by prolonged obstructed labor and affect women in low-income countries with subsequent significant impact on their quality of life and psychosocial functioning. These women are often stigmatized, lacking self-worth and relational ability with 97.2% reporting being humiliated by family members and friends [1,2].

Fistula continue to disproportionately affect women in the Sub Sahara Africa (SSA) where the reported incidence rates were 1-4 per 1,000 deliveries [3]. Nigeria has been reported to have a high prevalence in the world with about 400,000-800,000 cases and about 13,000 new cases occurring annually [3,4]. Though research works on repairs of OF have been largely successful, prevention holds better promise in reducing the psychosocial and economic burden and promoting reproductive health of the women at risk.

Previous reviews had focused on incidence and prevalence of OF as well as associated risk factors in low-resource countries and globally [5,6]. This review is focusing on the clinical and psychosocial outcomes of the disease condition such as quality of life alongside interventions for prevention.

Prevalence and incidence of obstetrics fistula

A systematic review of prevalence and incidence of OF in low and middle-income countries reported a prevalence of 1.57 per 1000 women of reproductive age in sub-Saharan Africa compared with 1.2 per 1000 women in South Asia, and with an overall figure of 0.29 per 1000 globally [5]. Several studies have documented the preponderance of OF among all VVF and RVF in SSA [5-7,8]. Obi et al. (2008) documented that 87% of VVF were OF with most resulting from vaginal delivery and then followed by caesarean deliveries, caesarean hysterectomy and instrumental deliveries [6]. However, there has been reduction in the proportion of VVF that are OFs from 95% in 1981 to 60% in 2005 and 40% in 2017 which indicate significant improvements in maternal care over the years, though the increasing incidence of iatrogenic fistulae has been worrisome [5,6,9]. Ethiopia has the highest burden of obstetric fistulae globally with a lifetime prevalence of 7.1 per 1000 women of reproductive age and 3 per 1000 in SSA [8].

Epidemiology of obstetric fistula

Prolonged obstructed labour (POL) is the major cause of fistula while other strong predisposing factors are low...
socioeconomic class and early marriage/pregnancy [10-13]. Other documented factors included short stature, malnutrition, underweight, lack of formal education, failure to access antenatal care, residence in rural area or living far away from a health facility, use of abdominal compression during delivery, home delivery, delay in seeking health care, delay in reaching a health-care facility, delay in receiving prompt and adequate health care, lack of equipped health facilities, and shortage of trained health care personnel [4,5,14,15]. These points were corroborated in a systematic review of national demographic surveys in 27 sub-Saharan countries with the report of illiteracy, short stature, sexual violence and young age at sexual debut or at first childbirth being risk factors that remains strongly associated with OF [10]. However, some studies reported non-significant association between education and fistula apparently without considering that education plays important role in age at marriage and at first childbirth [10,16,17]. Though, it will be worthy to note the vast variability in the quality of education in different countries in SSA [10].

Parity has shown inconsistent results as a risk factor for fistula [5,11-13,15,18]. Contrary to studies before twentieth century where most women were deserted and divorced or separated, more women with fistula have remained currently married which implied a better understanding of the clinical condition in the society [5,11,13,15-17].

Experience/Perspectives of patients and family members

Women with VVF and RVF in SSA face enormous challenges in accessing care because of low socioeconomic status, non-availability of transportation coupled with poor state of road networks in many communities [19,20].

VVF does not only affect those with the condition but the experiences of the women often have impact on their husbands, family members, peers and the community. Family members are often burdened, anxious, sad and helpless over the condition with a greater burden on the families of divorced or separated women [20]. The husbands and family members are also saddled with the responsibility of caring, seeking for medical care and mobilizing funds for care, providing support during the pre- and post-operative care and rehabilitation of the affected women [20].

Other documented barriers to accessing care include poor recognition of the severity of the condition because of lack of proper information or non-availability of treatment as well as deficient maternal health services, personnel, and limited fistula repair services [21,22].

Effect of fistula on women’s social functioning

The severity of OF relates to the profound effect on daily living of the affected women especially with their husbands, in laws, family and the community. Separation and divorce have been reported as a common occurrence mostly because of the associated stigmatization or because they fail to satisfy their husband’s sexual needs and/or failure to bear children [23-25]. Other problems include unemployment, isolation, shame, reduced sense of worth and sexuality concerns [25-27].

A study in Ugandan reported that the families of the women with fistula have a higher frequency of abandonment compared with women having other genital disorders like pelvic organ prolapse and severe obstetric tears [21]. The women were sometimes unsure of where to live, with mixed opinions about whether to stay with their families or husbands while some were disallowed from eating with family members or joining community groups [28,29].

Concerning the effect of neglect, abandonment or rejection, Siddle et al. (2013) in a retrospective review of patients that presented for surgical care in Tanzania reported that women with fistula seemed to be affected more when isolated by husbands and the community compared to when abandoned by their own family [26]. However, of greater concern is their future fertility which remains a major burden for most OF patients as those that never had children are worried about whether they could bear children later in their lifetime [28]. Often, as the women become incapable of performing their family roles as expected, they are perceived as “useless” beings and even after undergoing fistula repair their acceptability after re-integration back into the community is impeded by different socio-cultural factors [24].

Outcome/Success rate of repair

Fistula repair has become largely successful as documented in several studies (Table 1), although there have been inconsistencies on the actual definition of a successful outcome [30]. Some authors refer to success as favorable outcome after closure of the hole while others define it as closure of the hole without stress incontinence at the time of discharge whereas some others view success as continence in the months after repair [30,31]. According to the World Health Organization (WHO), a successful repair of fistula is achieved if the fistula is closed, continence is achieved and the woman reintegrated into the family and community (that is, to make the woman able to resume a full and active life) [31].

Numerous interventions and/or innovations have been

<table>
<thead>
<tr>
<th>Study</th>
<th>Country/Study population</th>
<th>Factors associated with closure and incontinence</th>
<th>Median fistula closure duration</th>
<th>Closure rates</th>
<th>Continenence rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maulet et al. 2013 [23]</td>
<td>Mali, Niger</td>
<td>Previous repair attempted VVF</td>
<td>Discharge and 3 months</td>
<td>HIV+93.5% HIV–40% 6 months</td>
<td>HIV+100% HIV–87.5% 6 months</td>
</tr>
<tr>
<td></td>
<td></td>
<td>First time VVF (n=185): 86.5%</td>
<td></td>
<td>HIV+91.7% HIV–89.7% 12 months</td>
<td>HIV+100% HIV–58.7% 12 months</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Previous repair attempted VVF (n=60): 73.3%</td>
<td></td>
<td>HIV+91.7% HIV–94.7%</td>
<td>HIV+100% HIV–96.1%</td>
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<tr>
<td></td>
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<td>First time VVF + RVF (n=9): 66.7%</td>
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<td>Previous repair attempted VVF + RVF (n=6): 50%</td>
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</tbody>
</table>

Table 1: Outcome/Success rate of repair.
Table 1: Outcomes of VVF and RVF repair in SSA studies.

<table>
<thead>
<tr>
<th>Study (Year, Reference)</th>
<th>Location</th>
<th>Outcomes of VVF and RVF repair in SSA studies.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kayondo et al. 2011 [33]</td>
<td>Uganda</td>
<td>Closure: Large fistula size; Circumferential fistula, moderate to severe vaginal scarring* Residual stress incontinence: Type IIb fistula*, Circumferential fistula, previous unsuccessful repair* 77.9% (n= 77)</td>
</tr>
<tr>
<td>Kirschner et al. 2010 [34]</td>
<td>Nigeria</td>
<td>Continence more likely in patients with intact urethra, an upper or midvaginal fistula, and less fibrosis. Incontinence after first surgery: younger, lower parity, fewer living children, more days in labour, more months with fistula at time of first surgery</td>
</tr>
<tr>
<td>Savan et al. 2010 [35]</td>
<td>Niger and Turkey</td>
<td>Mean time with fistula (months): 53.6 (SD=77.5) Successful fistula closure (n=977): 64.1% Postsurgical continence (n=977): 70.5% Dry at discharge 1st Surgery (n=926): 64.2% 2nd Surgery (n=131): 56.5% 3rd Surgery (n=25): 60% 4th Surgery (n=2): 100% Continenec: 4 of 29 in Turkey 5 of 24 in Niger</td>
</tr>
<tr>
<td>Nielsen et al. 2009 [36]</td>
<td>Rural Ethiopia</td>
<td>% dry (n=38) Completely dry: 57% Incontinence: 35% Still had fistula: 8%</td>
</tr>
<tr>
<td>Lewis et al. 2009 [37]</td>
<td>Sierra Leone</td>
<td>Associated with surgical success: Older age at fistula occurrence, index pregnancy 4+, location (midvaginal best, circumferential worst), surface area (&lt;2cm), urethral status (intact), and fibrosis* Mean fistula duration: Primary repair cases: 62.1 months Subsequent repair cases: 92.9 months Primary operative success: 70%</td>
</tr>
<tr>
<td>Browning et al. 2008 [38]</td>
<td>Ethiopia</td>
<td>Women with less urethral involvement improved better over follow up time Among 240 index cases returning for follow up: 85.1% of 148 cured at discharge remained cured, 14.9% worse 53.3% of 92 discharged with same incontinence grade, 44.6% had incontinence score improved</td>
</tr>
<tr>
<td>Raassen et al. 2008 [39]</td>
<td>Kenya, Tanzania, Uganda</td>
<td>Patients operated within 3 months had better outcome Mean duration of fistula=36.4 months; Median duration 11 months (Range 0.25-516 months) 581 first time obstetric fistulas caused by obstructed labour Overall closure rate: 93.8%</td>
</tr>
<tr>
<td>Roenneburg et al. 2006 [40]</td>
<td>Niger</td>
<td>Primary Fistula repairs in 65 women: Complete healing 57% (22% of those with complete healing had continued incontinence from stress incontinence, mixed incontinence or detrusor overactivity) Failed repair 17% Lost to follow up 26%</td>
</tr>
<tr>
<td>Husain et al. 2005 [41]</td>
<td>Eritrea</td>
<td>Mean fistula duration: 4.1 years (Range 3 months to 20 years) Successful repair Among primary VVF: 63% Among recurrent VVF: 61% Urethral reconstruction in urethrovaginal cases: 77% RVFs: 67%</td>
</tr>
</tbody>
</table>

implemented to improve the outcomes of OF surgical repair (Table 2). A shorter duration of catheterization has been shown in an Ethiopian study to be equally as successful as a 14-day option [42]. Even though, the same author had previously demonstrated with a retrospective study that there was no difference between 10, 12 and 14-day catheterization post repair [43]. In addition, a randomized controlled trial, explored the effect of bladder trimming and found out that it did not significantly influence success of repair; however, those fistulae trimmed left larger holes compared with those repairs where the bladder was not trimmed [44]. Fewer studies examined the control of incontinence after repair with findings of post-fistula stress incontinence [43]. A retrospective study examined three different types of sling procedures for stress incontinence but found no significant difference [19]. Regarding the role of physiotherapy, Castille et al. (2014) compared the postoperative outcomes of 2 consecutive groups of women with OF, and showed that physiotherapy improves the chance of a successful outcome after surgical repair [48]. In addition, good outcomes were reported with the use of local anesthesia for simple uncomplicated VVF repair and performing the procedure as a day case [45-47]. Also, one stage repair for a combined fistula (VVF and RVF) instead of multiple stage repairs has been done with successful outcome [45]. Therefore, it will be expedient for surgeons involved in fistula
Depression is commoner among older women, divorcee, unemployed, self-perception of fistula as a severe problem, those without social support and those living with fistula for more than 3 months [51,52]. Over half of women with OF in an Ethiopian study had suicidal ideations alongside other feelings such as shame, loneliness and being devalued as a woman [18,29].

Appropriate interventions could significantly reduce the prevalence of depression among women with OF as well as decrease the risk of suicidal ideations, PTSD, somatic complaints and maladaptive coping mechanism. Group psychological therapy significantly reduced depression scores, suicidal ideation and improved self-esteem among women with OF in Nigeria after surgical repair [49]. Additionally, in some settings, religion has been shown to play a major role in the alleviation of psychological distress among them [54]. Thus, clinicians and psychotherapists need to explore and take advantage of the high level of religiosity in many African communities to plan interventions for women with fistula. This should however be done in conjunction with religious leaders whereby spiritual counseling can be offered alongside psychotherapy and clinical treatment while ensuring compliance and acceptability [54]. These religious groups can also be utilized to drive community awareness and education on OF prevention.

Regarding quality of life (QOL) of women with OF, some studies in the SSA focused on activities most commonly affected by fistula as an index of QOL. Among Tanzanian women, community and religious activities, attendance at local meetings were more affected when compared to activities of daily living [26]. In Nigeria, when the QOL in different domains were considered pre and post fistula repair, the most affected domains before repair were the mental and social health which significantly improved after successful repair [55,56].

**Social reintegration /Rehabilitation**

Maulet et al. described four mobility patterns of fistula patients as homebound, itinerant, institutionalized and urbanized [23]. These categorizations reflect the pattern of care received, with the homebound group wishing to settle at home soon after repair while the itinerant category makes regular returns to the hospital for repeated repair. The institutionalized women tend to stay in the hospital for longer periods while those urbanized stayed in the vicinity of the repair centre [23]. Rehabilitation and integration of women with fistula back into the society is a key component of their care. Women usually suffer adverse change of social status either from
losing their jobs, being abandoned by husbands, families and society. Therefore, following the repair of fistula, there is need for getting them back into their normal functioning [18]. Family support and getting back to work have been reported as key factors in the recovery of social status but the return to normal life is found to be affected by the length of years the woman lived with fistula [28,57]. Women that have lived with fistula for several years requires special psycho-social support during reintegration [28]. Studies have also identified the need to obtain more of the opinions and desires of the affected women as opposed to those of their healthcare providers, in planning their reintegration into society [58]. However, majority of the women with successful surgical repairs reported that, over a period of time, they were able to resume many of the social and economic activities they engaged in prior to the development of the fistula [57].

In addition to rehabilitation, there have been concerns about future fertility and pregnancies, this area deserves attention by counselors educating women on life after successful fistula repair [57].

**Knowledge/Perceived causes/Views of patients**

Correct knowledge of the causes, symptoms and prevention of fistula is crucial in efforts at combating and eradicating OF. Though a Nigerian study reported that 70% of women with VVF correctly identified POL as a cause of fistula, misconceptions were still common among women with the condition [59]. Common misconceptions are that God or evil spirits, curse or sin caused OF as a form of punishment, mismanagement during caesarean section or adjunct care given to them in the management of obstructed labour [59-61]. These misconceptions coupled with the poor state of the health system have significantly discouraged women from utilizing healthcare facilities [20,59]. Poor or low knowledge about the risk factors, symptoms, course and available treatment options of OF have also been reported in different studies [62,63].

**Table 3** shows awareness, knowledge and misconceptions about fistula in SSA studies. Mass health education campaigns are needed to improve the awareness and knowledge of OF while correcting the misconceptions.

<table>
<thead>
<tr>
<th>Study and year of publication</th>
<th>Methodology</th>
<th>Country</th>
<th>Sample characteristics</th>
<th>Key findings: Awareness, source of information and associated factors</th>
<th>Misconceptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banke-Thomas 2013 [62]</td>
<td>Quantitative</td>
<td>Burkina Faso</td>
<td>121 women in rural and urban areas Median age 19 years. 50.4% had no school education; 45.5% married</td>
<td>36.4% aware of OF (37.9% rural, 34.9% urban) 47.6% rural vs 24.1% rural sufficiently informed Source of information: media (45.5%) Family and friends (41%) Rural women less likely to receive information from media Identified means of transport in emergency: Motorcycle: 71.7% Ambulance: 15.7%</td>
<td>11% thought they could have pregnancy complications needing emergency treatment</td>
</tr>
<tr>
<td>Kazaura 2011 [63]</td>
<td>Quantitative and Qualitative</td>
<td>Tanzania</td>
<td>334 participants 21.9% aged 25-29 years; about 60% less than 35 years; 9.3% males 24% never attended school; 57% only had primary education 30.9% delivered at home</td>
<td>61.1% aware of OF 18.5% of men vs 19.4% have seen a case of OF Local names exist for OF Source of information: mostly from neighbours, followed by health personnel, electronic media, by seeing a case, relative, print media 3% associated OF with prolonged labour Other causes: Wrong operation during CS 24% Baby too big 11.5% Poor family planning 3.1% FGD and IDI findings: Health workers feel OF is not a big problem in area contrary to community members perceptions Perceived causes: Short height, narrow birth canal</td>
<td>Fetus passing through wrong path 2.1% Sex in the puerperium 2.1% FGDs and IDIs Health worker mistakenly puncturing the bladder when removing catheters Sorcery Having sex before recovery from CS</td>
</tr>
<tr>
<td>Kasamba 2013 [64]</td>
<td>Qualitative</td>
<td>Uganda</td>
<td>4 FGDs (10-14 participants each) males and females aged 18-49 years</td>
<td>Majority aware about obstetric fistula Perceived causes: Delays to access medical care Induced abortions Conception at an early age Utilization of traditional birth attendants at delivery Complications during surgery for difficult deliveries</td>
<td>Misuse of family planning, having sex during menses Curses by relatives Sexually transmitted infections, Rape Gender-based violence</td>
</tr>
<tr>
<td>Zheng 2012 [60]</td>
<td>Quantitative</td>
<td>Uganda</td>
<td>20 sisters of 12 VVF AND RVF cases Sisters mean age: 37 years (range, 21–70 years; mostly farmers (n=16)</td>
<td>All sisters aware of OF as a health condition Awareness of symptoms: Lack of control of urine/feces 15/20 Smell 7/20</td>
<td>Aetiology: Delivery/operation 12/20 Health worker directly caused fistula 6/20</td>
</tr>
</tbody>
</table>

Table 3: Community awareness and perceptions concerning VVF and RVF.
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<table>
<thead>
<tr>
<th>Author and year</th>
<th>Country</th>
<th>Sample characteristics</th>
<th>Psychosocial burden/financial burden</th>
<th>Intervention</th>
<th>Social integration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Krause et al. 2014 [21]</td>
<td>Uganda</td>
<td>69 women who underwent surgery for repair of (VVF)</td>
<td>7 (10 %) women identified lack of money as the reason they could not access treatment. 25 (42 %) of these women were rejected by their husbands, 29 were not sexually active.</td>
<td>Education and training in obstetric management was recommended</td>
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</tr>
<tr>
<td>Khisa et al. 2012 [25]</td>
<td>Kenya</td>
<td>8 women, 5 had successful surgery, 3 were unsuccessful</td>
<td>3 were divorced while 1 was marrying but living separately in the same compound with her husband. The women lost their relationships, experienced infertility, were stigmatized, had psychological trauma, and economic loss.</td>
<td>Establish community perceptions of and support to women who had suffered obstetric fistula.</td>
<td>One of the women was undergoing vocational training at a local polytechnic.</td>
</tr>
<tr>
<td>Maulet et al. 2013 [23]</td>
<td>Mali and Niger</td>
<td>120 fistula patients' cohort. At 6 months follow-up n=115 At 18 months follow-up n=109</td>
<td>Marriage of majority of the patients was affected. Some husbands abandoned while some had to share their husbands with co wives.</td>
<td>Urbanised pattern women (n=23). They were opportuned to work in near fistula repair centre or in town while awaiting new surgery.</td>
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<tr>
<td>Siddle et al. 2013 [26]</td>
<td>Tanzania</td>
<td>Fistulae women recruited from the disabled ward at Comprehensive Community Based Rehabilitation in Tanzania (CCBRT), n=100</td>
<td>38 of the women had feelings of isolation from their husband and community affected the women in 45 % of cases, inability to fulfill daily commitments and participate in community activities affected 79 % and 80 respectively.</td>
<td>66 % of the patients used the transportMypatient scheme to access the fistula service at CCBRT</td>
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<tr>
<td>Mselle et al. 2012 [28]</td>
<td>Tanzania</td>
<td>n=151 recruited at CCBRT.</td>
<td>(51.3%) felt they won’t be accepted by their husbands and (89%) was afraid of unacceptance from friends even after successful fistula repair.</td>
<td>About (80%) the women have hope and expectation of working and becoming self-sustaining after surgery</td>
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</tr>
<tr>
<td>Pope et al. [57]</td>
<td>Tanzania</td>
<td>Affected women who had already received treatment and returned to their communities (n=25), non-affected women matched by age and socio-economic circumstances (n=25) and affected women awaiting surgery or discharge (n=21), N=71</td>
<td>52% of those who already had repairs reported problems such as physical weakness, economic hardships and emotional issues, 56% were divorced</td>
<td>Follow-up of the women</td>
<td>68% reported that help from family members with chores or with starting businesses made reintegration easier.</td>
</tr>
<tr>
<td>Ojengbede et al. 2014 [49]</td>
<td>South Sudan</td>
<td>120 women with OF that presented for the fistula campaign programme, 73 were repaired but only the results of 60 were considered for analysis.</td>
<td>Participants exhibited different grades of mental ill health</td>
<td>Group psychological therapy (GPT). The mental health status of the participants before and after GPT was assessed</td>
<td>A systematic reduction in proportion of all mental health measured after GPT was observed.</td>
</tr>
<tr>
<td>Weston et al. 2011 [51]</td>
<td>Kenya</td>
<td>70 obstetric fistula patients attending a national fistula camp.</td>
<td>72.9% of the OF patients were depressed. 84.6% had difficulties in activities of daily living due to depression</td>
<td>Mental health care and family support were recommended.</td>
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<tr>
<td>Umoiyooh et al. 2011 [55]</td>
<td>Nigeria</td>
<td>QoL of 150 women was compared before and after 6 months after successful repair</td>
<td>Before repair, in the mental health domain, the mean quality of life score was 32.4 ± 8.7 and the social health domain mean score was 20.2 ± 2.7</td>
<td>Successful fistula repair</td>
<td>Significant improvements were reported in the women's interpersonal relationships, sexual functioning and level of support from friends and relatives.</td>
</tr>
<tr>
<td>Fiander et al. 2012 [69]</td>
<td>Tanzania</td>
<td>Fistula referrals from regions in Tanzania</td>
<td>Transport burden of accessing fistula care</td>
<td>TransportMypatient initiative</td>
<td>The transportMypatient initiative transported 166 fistula patients from almost all regions in Tanzania in 2011, accounting for 49% of total repairs.</td>
</tr>
<tr>
<td>El Ayadi et al. 2019 [75]</td>
<td>Uganda</td>
<td>Follow-up of 60 women a year after obstetric fistula surgery</td>
<td>There was improvement in all psychosocial health indicators in all the women.</td>
<td>Post-surgical reintegration success as regards long-term success of post-surgical family and community reintegration.</td>
<td>Reintegration, self-esteem and quality of life all increased through 6 months and remained stable thereafter.</td>
</tr>
<tr>
<td>Donnelly et al. 2015 [76]</td>
<td>Ethiopia</td>
<td>51 post fistula repair surgery women</td>
<td>They all had fear of developing another fistula, most commonly from sex or childbirth, isolation, marital conflict, and/or economic vulnerability</td>
<td>Involvement of women affected by fistula for community outreach and metrics for evaluating rehabilitation and social reintegration efforts were suggested</td>
<td></td>
</tr>
<tr>
<td>Mohamed et al. 2016 [77]</td>
<td>Kenya</td>
<td>190 young fistula survivors</td>
<td>The main psychological effects of fistula were sadness, shame and loss of self-worth.</td>
<td>Community sensitisation, counselling services and skills / vocational training sessions should be part of psychosocial support services to fistula victims and survivors</td>
<td></td>
</tr>
<tr>
<td>Odu et al. 2013 [1]</td>
<td>Nigeria</td>
<td>252 VVF patients</td>
<td>Stigmatization, low self-worth and rational ability of patients</td>
<td>It was recommended that adequate support by family and friends be given to VVF patients</td>
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</tbody>
</table>
Interventions for prevention of Fistula

There is need for community involvement and strategies aimed at preventing fistula and/or getting more women with the condition to access care. Short and long-term strategies of preventing OF using the Haddon matrix have been postulated [2]. Short-term strategies appeared most effective and include enhanced surveillance of labour, improved access to emergency obstetric services with competent medical care for women both during and after obstructed labour, and the development of specialist fistula centers to treat injured women in areas with high prevalence. The long-term strategies should include universal access to emergency obstetric care, improved access to family planning services, increased education for girls and women, community economic development, and enhanced gender equity [2]. Additionally, the implementation of catheterization as a primary prevention of fistula in women with prolonged/obstructed labour among healthcare workers will reduce the incidence of obstetric fistula [66].

In Ethiopia and Uganda, the use of volunteer teams of midwives and obstetricians to build capacity of local staff in emergency obstetric care improved hospital attendance rates for obstetric services and reduced maternal mortality and proportion of deliveries resulting in fistula over a three year period [67]. A similar volunteer pilot programme using community mobilization where women identified in prolonged or difficult labour are helped to access care early before complications occur recorded no case of OF in the period after the intervention [68].

In Tanzania, transport MY patient initiative used mobile phones to transfer funds to women with OF to enable them to transport themselves to the facility; this resulted in increased number of fistula repairs in the community [69,70].

Other interventions that have yielded positive results include a counseling programme for women with fistula in Eritrea which improved the knowledge and self-esteem of the women [71]. Mass treatment programmes for fistula patients have also been reported in some SSA countries such as Nigeria, Guinea and Ethiopia [5,72,73]. In addition to treating patients such mass campaigns potentially increase the level of awareness of communities about aetiology of OF and its prevention. Linked to community campaigns is the use of aggressive community screening for case finding in order to obtain estimates of prevalence and incidence of the condition [74].

Psychosocial outcomes of Obstetric Fistulae patients

Psychosocial barriers are essential factors that can affect a woman’s care seeking decisions. Aside enduring the ordeal of obstructed labour, women with obstetric fistula face significant psychosocial challenges [75]. In addition to urinary, faecal or combined incontinence, the psychosocial morbidity including societal stigmatization, divorce and separation, loss of income due to difficulty in securing a job or livelihood and reproductive system difficulties like infertility are enormous consequences (Table 4) [1,21,23,25,26,70].

Low self-esteem, feelings of rejection, stress, anxiety, mental health dysfunctions, and PTSDs, loss of dignity and self-worth, loss of sexual pleasure, depression and suicidal thoughts are other documented psychosocial consequences that can follow this morbidity [1,28,49,51,57,76].

A unique approach to the treatment of fistula is the establishment of fistula hospitals that provide holistic approach to the management of women with the condition especially in countries with high incidence of the disease. Such hospitals will form a veritable hub for fistula treatment, rehabilitation and research. This will also give room for women with OF to relate and encourage themselves while formulating behavioural changes in improving their management [46,47,64,65,77].

There is need for more studies on the burden of mental illness among women with fistula in SSA. Additionally, research is needed on the effect of different interventions that could help reduce mental health morbidity among these women.

CONCLUSION

This review examined the literatures in detail and summarizes the clinical and psychosocial outcomes among women with fistula with a focus on SSA. It also highlighted various aspects of the clinical care in SSA. Additionally, it offers a synthesis of the literature on the suffering and frustration encountered by women with VVF and RVF in SSA by providing evidence of poor psychosocial outcomes among the women. Interventions are urgently needed to prevent this disease and improve the quality of life of those affected by the condition.

REFERENCES


