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Review Article

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Literature Review on The Development of an Intervention Program for Social Reintegration of Women who have had Obstetric Fistulas Repaired. Yaoundé, Cameroon

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Summary

Women who have undergone obstetric fistula repair face several challenges that sometimes force them to live apart from society. The objective of this literature review is to explore the intervention programs developed for their social reintegration. The integrative review methodology was applied to this literature search; several research equations were formulated with the key concepts of the theme translated into English. The selection of articles was done through the PubMed, Google Scholar and Hinari databases. Interest was also paid to gray literature related to the research theme. At the end of this research dynamic, 41 articles were selected for this study. The inclusion criteria were studies on interventions related to the social reintegration of women repaired from obstetric fistulas published over a ten-year period, from 2013 to 2023. The results establish that surgery is the main intervention used to alleviate the dysfunctions caused by obstetric fistula. In this therapeutic perspective, the interventional approach is more focused on the pathology to the detriment of the person. However, the life stories of women repaired from fistulas reveal negative experiences on the biological, psychological, social, and sexual and reproductive levels. Unfortunately, the few interventions identified in the literature do not constitute programs in the true sense. These interventions are primarily supportive, offering guidance to women as well as financial assistance addressing the economic dimension. They also highlight the reintegration needs reported by women who have undergone obstetric fistula repair.

 $\textbf{Keywords:} \ \textbf{Program development, Intervention program, Women repaired obstetric fistulas, Social reintegration}$

Introduction

The global community mobilized around the Sustainable Development Goals (SDGs), in conjunction with the Global Strategy for Women's, Children's, and Adolescents' Health, is working towards the elimination of maternal deaths and stillbirths between 2016 and 2030. This initiative is part of a broader effort to end the suffering of women affected by obstetric fistula *Saifuddin, et al.*, (2016) [40]. Every day worldwide, approximately 800 women die from

complications related to pregnancy or childbirth; for every woman who dies from maternal causes, approximately 20 are victims of maternal morbidities, one of the most severe forms of which is obstetric fistula *Djibo, et al.*, (2023) [14]. It is classified as a public health problem. The annual global incidence could reach 100,000 cases *Alison & El Ayadi, et al.*, (2020) [3]. Fistula typically occurs in women from the most marginalized and vulnerable communities,



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often due to limited access to adequate obstetric care *Ngongo, et al.,* (2022) [33].

It is very often caused by labor dystocic and prolonged Rachid Bellouk, et al., (2023) [38]. It can also be caused by tearing of soft tissues, during a rushed delivery, or by obstetric maneuvers. Banke, et al., (2013) [1]. Approximately 30,000 to 100,000 new cases of fistula occur each year in Africa (OMS, 2018). It is estimated that more than 2 million women suffer from untreated fistula, particularly in sub-Saharan Africa and South Asia Lumbungu Mbungu, et al., (2022) [26]. Obstetric fistula cases are found more in the northern half of sub-Saharan Africa, from Mauritania to Eritrea and in developing countries in Asia and the Middle East Tebeu, et al., (2020) [44]. They constitute a component of maternal health that is still neglected in developing countries Bomboka, et al., (2019). Vesicovaginal Fistula (VVF) is the most common clinical anatomical form Paluku, et al., (2023) [37]. In Cameroon, the prevalence is approximately 4 cases per 1000 women aged 15 to 49 years and the incidence of 500 to 1000 new cases per year has been reported Tebeu, et al., (2020) [44]. The woman who has developed obstetric fistula becomes vulnerable due to continuous flow of feces and/or urine which Favors possible rejection by the family or the community; these women live with stigma, discrimination and rejection Sanou, et al., (2015) [41].

The United Nations Population Fund (UNFPA), to reinforce the government efforts, has set up a Maternal, Neonatal and Child Health Support Program (PASMNI) since 2019 to respond to obstetric fistula and monitor women who have undergone fistula surgery (UNFPA, 2021). It has been recommended that surgical treatment of fistulas be combined with a holistic reintegration program that would complement the surgical care offered Alison El Ayadi, et al., (2020) [3] Byamugisha & Suellen Miller, et al., (2015) [4]. The reintegration of women who have had obstetric fistula repaired is an important step in their journey towards physical, psychological and social healing Delamou, et al., (2022) [10]. The literature review provided an overall view of existing knowledge and highlighted, from scientific publications, well-documented aspects as well as persistent gaps related to the subject of study Fortin et Gagnon, et al., (2016) [17]. The scientific approach of this review of the literature is guided by the thought of Karl Popper (1934) who asserts that every scientific problem emerges from prior knowledge Lepeltier et al., (2013) [25], that is to say to say that one can only identify a research question if one already has a certain level of knowledge on the subject. The absence of knowledge on an aspect of the object of study is essential, because it motivates research and the production of knowledge.

The questioning in this literature review is based on the current state of knowledge regarding social reintegration programs for women with obstetric fistula repair. The aim of this literature review is to highlight and analyze existing psychosocial reintegration programs. The following section will present the methodology with materials and methods used, before presenting the results obtained.

Materials and Methods

Materials

In this study, the aim was to explore in the literature the intervention programs developed for the social reintegration of women repaired from obstetric fistulas. An integrative review of the available literature was adopted for this literature review. A documentary search was carried out through the search engines Google, Google Scholar, PubMed, Hinari with the keywords of the theme and their synonyms translated into English in order to have access to the articles, documents and reports to achieve the research objective. Particular emphasis was placed on the publications of research work carried out in the world, in Africa and in Cameroon. The exploration of the corpus of scientific literature focused on interventions and strategies related to the social reintegration of women over a period of ten (10) years. The use of Boolean logic helped to establish the link between free concepts.

A first selection was based on the publication date which should be at most ten years old which allowed to have recent works. Each combination of the key terms of the subject of the study allowed the identification of a fairly varied number of articles in the databases. The results were stored in the library section created through the Zotero software. The selected articles were evaluated in several stages; first the identification of eligible articles by reading the title, abstract, keywords and the eligibility of the articles for their inclusion in the research, this on the basis of the entire reading of the manuscript *Mateo*, *et al.*, (2020) [28]. The import of the references into Zotero was followed by the identification of duplicates, and their deletion.

Methods

The literature review was carried out on the basis of three (03) tools:

- a) Zotero software for generating bibliography
- b) The keyword table obtained by the PICO method
- c) The research journal for documenting the research process.

The PICO method (illustrated in Table 1) (Table 1) was used as a means of identifying key concepts. After targeting the keywords of the theme, to obtain the synonyms in French, Hetop was used and the translation into English was carried out with Mesh-Term and sometimes with thesaurus.

Table 1: Key concepts according to the PICO method.

Variables	Keywords
Population	Women repaired from obstetric fistula
Pathology	Obstetric fistulas
Issue	Poor social reintegration of women with obstetric fistula repair
	a) Community activities
Indicators	b) Participation in meetings
	c) Fulfilled woman

Main Research Equation

(Intervention OR initiative OR measure OR program OR strategy OR protocol OR Treatment) AND (Social reintegration OR social readaptation OR social rehabilitation OR social revalidation OR social reconciliation OR social participation OR community reintegration) AND "Repaired women" AND Obstetric fistula OR Obstetrical fistula OR obstetric fistula OR Fistula).

Inclusion Criteria

Included in this documentary research are:

- Articles, books or other scientific journals with the concept of women repaired obstetric fistula in one of the search fields namely title, abstract and keywords).
- b) Those relating to interventions for the social reintegration of women repaired obstetric fistulas
- c) Publication year between 2013 and 2023, i.e. a period of 10 years.
- d) The language (French or English) as well as the availability and accessibility of the full text was one of the criteria for selecting articles.

Exclusion Criteria

Excluded from this documentary research:

- Articles about women with fistula repairs and addressing the points other than the reintegration of women;
- b) Articles on the topic whose full text was not accessible;
- c) Articles published in languages other than French and English;

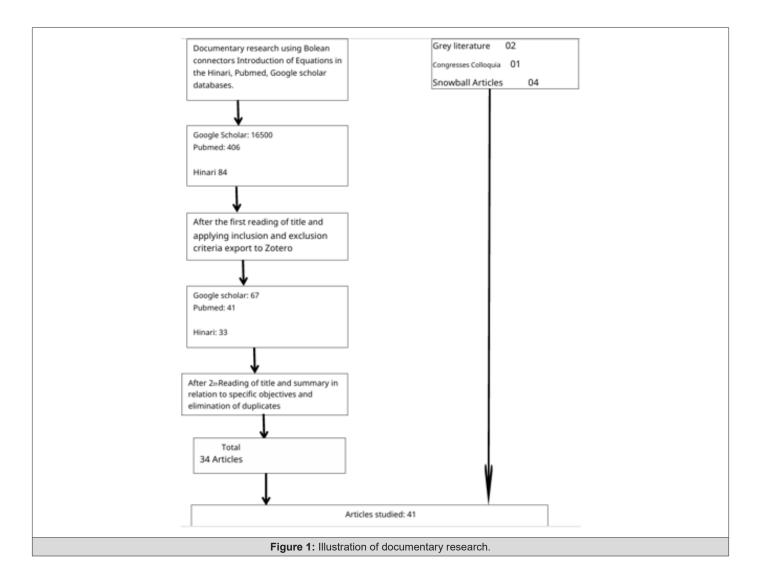
- d) Articles that deal with studies that do not have the term related to the Concepts of women with obstetric fistula repair in one of the research fields including title, content, abstract or keywords.
- e) Any document whose source was not specified was excluded; no attention was paid scope on any article based on research oriented towards other disciplinary fields and any article which was not related to our research objectives.

Document Research Strategies

In this study, an inductive research strategy was used. The methodology applied to the study is that of an integrative review.

As mentioned above, several search equations were formulated based on the key concepts. Each of these search equations was entered into the Hinari, PubMed and Google Scholar search engines one after the other. The selection began with an initial reading in order to retain the studies that were related to the research theme; first the titles, then the abstracts, then the keywords. The references of the identified articles were imported into the Zotero software to facilitate access when generating the bibliographic references. Duplicates were identified and eliminated. The creation of specific library collections contributed to the storage of data for each of the databases. Subsequently, a thorough reading of the articles was carried out in order to select those most relevant to the theme of the study. Data extraction was carried out using the "reading sheet". This sheet was developed by integrating the following elements: the names of the authors, the title of the study, the country, the year of publication, the research objectives, the methodology used, the research results. The analysis of its content made it possible to identify major themes which facilitated the obtaining of the results and their discussion. It was chosen for this study, forty-one articles the selection of which is illustrated by the diagram below.

A total of 16,990 articles were initially identified after a selective reading of the titles. Among these articles, 16,143 articles were excluded on the basis of their title or keywords. Then, 706 articles were excluded due to the previously defined selection criteria, while 33 articles were removed after a critical reading of the full text. Finally, 34 articles were included in the main selection. 07 articles identified by "Sno wball" effect included references from the gray literature, conference proceedings; they were added to the articles retained in the selection. Thus, 41 articles constituted the database for this research (Figure 1).



Results and Discussion

The database of 41 articles identified allowed us to identify four emerging themes. Here is a review of the state of the art regarding the social reintegration of women who have had obstetric fistulas repaired.

Interventional Approach

It is linked to the management of the fistula and constitutes a prerequisite for interventions for the social reintegration of women repaired from obstetric fistulas; this management can be early or late (surgical intervention).

Early care: It is essential to improve the chances of recovery and limit physical, psychological and social complications (WHO, 2009; 2021). *Tayler, et al.,* (2013) [42] in their quantitative study on the management of women with obstetric fistulas in Burundi, found that early urinary catheterization experienced as a conservative treatment for fistula had been performed in 31 women taken from the sample of 470 women with fistulas; the result of this intervention had been a total failure. The women were subsequently operated on and 4 of them had a successful intervention in the form of

closure of the fistula, but with persistent urinary incontinence Tayler-Smith, et al., (2013) [42]. The results reported by Tayler-Smith, et al., (2013) [42] in Burundi illustrate a near-total failure of early urinary catheterization as a conservative treatment for fistula. This is part of a trend confirmed by the systematic review by Hillary, et al., (2016). Indeed, this review highlights that, although prolonged bladder drainage can sometimes allow spontaneous closure of small fresh fistulas, the success rate remains low, varying between 6 and 15% depending on the contexts studied *Hillary*, et al., (2016) [19]. They point out that the effectiveness of this approach remains limited and highly dependent on factors such as the location of the fistula, its size, and the time to treatment. These results highlight the limitations of conservative treatment in low-resource settings, where fistulas are often extensive and diagnosed late. They confirm that, despite the possible benefit of early catheterization in certain cases, surgery remains the standard treatment and should be accompanied by management of residual incontinence and psychosocial reintegration.

Surgical management: Surgery has been identified as the primary (reconstructive) intervention deployed universally in the elimination of obstetric fistula. However, much remains to be done,

as it is estimated that approximately 2 million women in Africa are lagging behind. Untreated fistula, mainly in Sub-Saharan Africa and South Asia *Nembunzu*, *et al.*, (2022) [32]; similarly, in Nigeria there are approximately 400,000 cases of unrepaired obstetric fistulas *Benski*, *et al.*, (2021) [5].

Reconstructive surgery activities are regularly carried out across the campaigns to combat obstetric fistula. In Burkina Faso, a descriptive quantitative study on epidemiological, etiological, and psychosocial aspects showed that 130 of 170 women surveyed, or 70%, had been recruited during a surgical campaign Kaboré et al., (2014) [21]. Treatment is currently based primarily on surgery. The diversity of techniques simultaneously reflects the complexity of the lesions and the constant efforts to improve therapeutic results. The choice of intervention route is left to the surgeon's discretion: the transvaginal or lower route; the transperitoneovesical or upper route; or the mixed route, which combines the two approaches. The transvaginal route is the most common. In Congo, it was performed on 93.6% of the 31 women operated on, with a success rate of 74.2% at six months Massandé, et al., (2017) [27]. In Senegal, it was used in 93.8% of 829 women operated on over a nine-year period, with an 86.5% success rate Niassy, et al., (2020) [34]. In the Democratic Republic of Congo, this technique was used in 67% of 242 patients, with an average failure rate of 14% Bulanda, et al., (2018) [20]. In Guinea, all 450 women operated on benefited from this intervention route, with a 79.3% cure rate after eight months Diallo, et al., (2016) [11]. The transperitoneovesical route is rarer. In Senegal, it was used in 5.5% of fistula surgery cases Niassy, et al., (2020) [34], and in Mali, 5.5% of 53 women operated on benefited from this approach with a success rate of 81.8% Meuke, et al., (2021) [30]. The mixed route is even more marginal, used only in 0.7% of women in the study by Niassy, et al., (2020) [34].

Specific techniques include the Martius graft and the Chassar-Moir technique. The Martius graft involves harvesting a flap of fatty tissue from the labia majora to reinforce the repair area Figo, et al., (2023) [16]. This technique was performed in 34.6% of the 81 women operated on in Cameroon Teikeu, et al., (2015) [41] and in 10.3% of the 829 women operated on in Senegal Niassy, et al., (2020) [34]. The Chassar-Moir technique involves widely separating the bladder and vagina around the fistula by flap dissection, then suturing separately in two layers, one on the bladder wall, the other on the vaginal wall. This technique helps reduce tension on the suture line and promotes better healing. It was performed in 63% of the 106 patients in Senegal Diallo, et al., (2016) [12]. Furthermore, according to Niassy, et al., (2020) [34], 78.9% of the 829 women operated on benefited from this surgical approach. In Guinea, 82% of the 152 patients benefited from this surgical technique Diallo, et al., (2015) [12], and also 27.2% of the 53 multi-operated women in Mali, with an estimated success rate of 81.8% Meuke, et al., (2021) [30]. Results may vary depending on the context. In the Democratic Republic of Congo, success rates range between 72.9% and 93%, depending on the location of the fistula, the degree of fibrosis, surgical history, the technique used and the surgeon's experience Bulanda, et al., (2018) [20].

Experiences of Women with Obstetric Fistula Repair

Analysis of the experiences of women who have had obstetric fistulas repaired highlights the complexity and diversity of the challenges they face, particularly in terms of social reintegration, sexual and reproductive health, as well as persistent biological complications. On the sexual and reproductive level, it appears that women repaired from obstetric fistulas encounter difficulties in resuming a normal sexual life. They face stigma and social inequalities *Tebeu, et al.*, (2021) [43]; *Ntabe Namegabe, et al.*, (2016); *Drew, et al.*, (2016) [15]; *Lawani, et al.*, (2015) [24]; *Bomboka, et al.*, (2019); *Lumbungu Mbungu, et al.*, (2022) [26]; *Djibo, et al.*, (2023) [14].

The experience of women who have had their fistula repaired medically is marked by a fairly low fistula closure rate, estimated at approximately 74% *Diarra, et al.,* (2019) [12], 98.4% *Browning & Whiteside, et al.,* (2015), 86.15% *Meikena, et al.,* (2023) [29], fistula recurrence after closure, and urinary incontinence *Meuke Kuisssik, et al.,* (2021) [30]. 45% of repaired women in Malawi suffered from residual urinary incontinence after fistula repair *Drew, et al.,* (2016) [15]. The biological experiences of women repaired from obstetric fistulas are marked by the persistence of incontinence and the development of tissue fibrosis *Benski, et al.,* (2021) [5]. Remarriage after fistula repair is very unlikely for those who separate from their partners, yet the advent of a newborn is one of the possibilities for reintegration into the community *Bomboka, et al.,* (2019).

Psychologically, women who have had their fistula repaired carry a daily burden characterized by shame, suicidal thoughts, and sadness *Lumbungu Mbungu, et al.,* (2022) [26]. In Cameroon, 36% of women tended to hide, 32% had suicidal tendencies; 10% of them had attempted suicide *Tebeu, et al.,* (2020) [44]. Women who had undergone repairs in Ouagadougou experienced a feeling of humiliation and expressed suicidal tendencies *Kaboré, et al.,* (2014) [14].

On the sexual and reproductive level, in Congo 54% of women repaired from obstetric fistulas had lost all desire for motherhood; 17% had declared that they felt no desire to resume sexual intercourse *Tebeu, et al.*, (2021) [43]. In Mali, 69.3% of women repaired from obstetric fistulas were not sexually active *Djibo, et al.*, (2023) [14]; among the justifying reasons, a potential fear of recurrence was noted in 58 women; in 32 women or 17.7%, a fear of pregnancy; in 22 patients or 12.2%, a lack of sexual desire, frigidity *Djibo, et al.*, (2023) [14]. Anxiety, depression, loss of self-esteem and, consequently, loss of self-confidence largely explain this attitude among women, who undoubtedly need to reconcile with themselves to overcome these trials (WHO, 2021).

Socially, the life experiences of women with fistula repair are marked by persistent stigma, rejection, and abandonment; 41.5% of women in Guinea are abandoned by their spouses *Diallo*, *et al.*, (2016) [11]. The stigmatization of women with obstetric fistula repair manifests itself in various ways, profoundly affecting their social reintegration and psychological well-being. Several studies and reports have documented these manifestations in various social forms.

Around 80% of women in Chad are rejected by those around them due to incontinence (sometimes residual) and the unpleasant odors associated with this condition. This situation often leads to social isolation and marginalization (Rfi Afrique, 2023 July 16, 3:46 a.m.).

In Ivory Coast, they regularly face stigma and social discrimination, which often prevents them from participating in economic and community activities and exacerbates their precariousness *Fousso*, *et al.*, (2025) [18]. However, many women continue to encounter physical and psychological difficulties that hinder their ability to resume their previous social role or adapt to new circumstances *Alison El Ayadi*, *et al.*, (2020) [3].

Support Intervention for the Reintegration of Women Repaired from Obstetric Fistulas

Aspects related to interventions for the social reintegration of women after surgery have received little attention from authors. The main topics addressed in research were the themes related to surgical interventions and the results of these interventions in terms of failure or success.

Psychological care: Psychological support as an activity carried out to support the social reintegration of women after surgery has been the subject of intervention by very few authors. Only a few of them who had dealt with the management of fistula in their articles had looked at the aspect relating to psychological support for women in order to help them reintegrate into their social environment after surgery.

Drew, et al., (2016) [15], in a qualitative study conducted in Lilongwe, Malawi, on the sexual and reproductive health experiences of women who had undergone obstetric fistula repair, aimed to assess the concerns of these women. They found that only six out of twenty women had received psychological support Drew, et al., (2016) [15]. In another study, Djibo, et al., (2023) [14] examined the epidemiological and psychosocial aspects of women with obstetric fistulas at Somine Hospital in Mopti, Mali. Their study revealed that 59 of the 306 women who had undergone obstetric fistula repair, or 19%, had access to psychological support during their treatment Djibo, et al., (2023) [4]. Tebeu, et al., (2021) [43], studying the psychosocial and economic reintegration of women operated on for fistula between 2008 and 2017 in Brazzaville and Ewo, showed that 26% of the 34 women included had benefited from psychological monitoring Tebeu, et al., (2021) [43].

Economic Support

Four authors in their study, added economic assistance to reconstructive surgery as a means of social reintegration for women. This reintegration was essentially limited to literacy and Income-Generating Activities (IGAs).

In Cameroon, Sanou, et al., (2015) [41] in their descriptive quantitative study on knowledge, attitudes and practices in the social reintegration of women victims of obstetric fistula, conducted in three health districts in the Far North region, and whose objective was to conduct a situational analysis of knowledge, skills and practices in

the social reintegration of women repaired from obstetric fistulas in the Far North region of Cameroon, the results showed that 61.5% of women operated on in the Doukoula district had benefited from the social reintegration program; financial support had been the main reintegration intervention. Funds for commercial activities (62.5%) represented the most received assistance by women Sanou Sobze, et al., (2015) [41]. For 13 out of 24 health personnel surveyed, or 58.3%, psychosocial follow-up was the main reintegration activity in fistula care centers; Psychosocial monitoring was considered an essential link in activities aimed at facilitating the social reintegration of women in fistula treatment centers Sanou Sobze, et al., (2015) [41]. Several studies on the reintegration of women after obstetric fistula repair indicate a significant improvement in their quality-of-life following surgery, particularly when the procedure has been successful Kaba, et al., (2014) [21]; Drew, et al., (2016) [15]; Chimamise, et al., (2021) [7]; Debela, et al., (2021) [8]. These authors report that surgical repair contributes to physical, psychological, and social well-being, thereby enhancing women's autonomy and strengthening their community participation.

In Guinea, Delamou, et al., (2022) [10] in their qualitative study on the importance of social immersion in the social reintegration process of women repaired from obstetric fistula in Kissidougou and Labé, whose objective was to assess the importance of social immersion in the successful social reintegration of women undergoing fistula surgery in Guinea, found that women repaired from fistulas after surgery took part in an immersion program for a period of 03 months in a host family. Women who had obtained a successful result of fistula closure with urinary continence after surgery, at the end of this immersion stay, reported being satisfied with their new life, compared to women who had failed the repair and those who had persistent residual incontinence Delamou, et al., (2022) [10]. Similar results were found in Djibo, et al., (2023) [14] in Mali, who, in a study on "the epidemiological and psychosocial aspects of women with obstetric fistulas at Somine Hospital in Mopti", whose objective was to describe the sociodemographic aspects of patients with obstetric fistulas, found that out of 306 women surveyed, the awareness-raising activities carried out had improved the links between the repaired woman and the spouse and family respectively. Thus, the support of women by the spouse had improved from 76.92% to 83.7% and by 61.8% among women who were abandoned by their families Djibo, et al., (2023) [14].

Needs Expressed from Reintegration Interventions

Little research documents the activities performed during the hospital stay of women with obstetric fistula repair. The focus is typically on their hospital admission and the end of their hospital stay, with assessments categorizing outcomes in terms of success or failure of the surgical procedure. Such an approach risks giving the impression that obstetric fistula management remains primarily focused on a biomedical model, often at the expense of a holistic, woman-centred approach. While physical healing is essential, it is important to emphasize that the needs of the woman must be the central concern, taking into account her psychosocial, emotional, and economic dimensions (WHO, 2021; 2014) [46].

Alison El Ayadi, a researcher at the Bixby Center for Global Reproductive Health at the University of California, San Francisco (UCSF), presented on April 10, 2017, at a webinar organized by Fistula Care Plus entitled "After Fistula Repair: Understanding the Needs of Women in Uganda", an analysis of the challenges faced by women after obstetric fistula repair surgery. The author highlighted that current fistula surgery programs primarily prioritize the identification and surgical management of women, to the detriment of postoperative follow-up. However, this follow-up constitutes an essential dimension for conducting an assessment and responding to the physical and psychosocial needs of women who have undergone surgery. It appears to be a determining condition for their social and community reintegration. The author suggested that targeted interventions, such as psychological support, health monitoring after surgery, and economic support for women and their families could help improve recovery and facilitate community reintegration.

In Cameroon, *Tebeu, et al.*, (2020) [44] in their quantitative study on the psycho-social and economic reintegration needs of patients operated on for vesicovaginal fistula at the Hospital Ngaoundéré Regional University Hospital and Yaoundé University Hospital between October 2016 and June 2017, with the objective of "studying the psychosocial reintegration needs of patients operated on for vesicovaginal fistula", had identified unmet needs in the context of psychological assistance at 48.1% in the care of women repaired from fistulas. These needs were related to the death of the newborn, abandonment by the spouse and suicidal intentions *Tebeu, et al.*, (2020) [44]. Interventions for the reintegration of women repaired from obstetric fistulas sometimes focused on psychological support for women and very often on income-generating activities *Tebeu, et al.*, (2021) [43].

Limitations of The Study

In the context of this work, the elements necessary to fully achieve the set objectives were not found in the available literature. Indeed, the majority of research studies have focused much more on the management of obstetric fistula with a particular emphasis on surgery, which remains a restorative intervention. A few rare studies have addressed the social reintegration of women repaired from obstetric fistulas, but they were limited to isolated interventions, often addressed in a rather superficial manner such as psychological assistance, and in some cases, support for Income-Generating Activities (IGA), without taking into account the three important dimensions (physical, psychosocial and economic) for sustainable reintegration after surgery. We were unable to find any documented social reintegration program in the literature. However, in the villages of women repaired from fistulas in Mopti, Djamena and Nepal, it would appear that there are reintegration programs, but these are not sufficiently documented. Furthermore, the restriction of language (French and English) as an inclusion criterion led to the omission of certain scientific articles that could have contributed to achieving the research objective [1-46].

Another limitation of this literature review would be that it was

based on several studies conducted retrospectively for which the authors had limited opportunity to influence biases.

Acknowledgments

No Acknowledgments.

Conflicting Interest

No Conflicting Interest.

Conclusion

The fight to eradicate obstetric fistula and reduce the suffering caused by it requires several aspects including the social reintegration of women repaired from fistulas, the subject of the current literature review. In this literature review, the aim was to explore the intervention programs developed for the social reintegration of women repaired from obstetric fistulas. A literature search was carried out through the search engines Google, Google Scholar, PubMed, Hinari with the keywords of the theme and their synonyms translated into English in order to access the articles, documents and reports to achieve the research objective.

A total of 41 articles were selected over the 10-year period from 2013 to 2023. From these articles, several themes emerged: the interventional approach; women's experiences; support interventions; women's expressed reintegration needs. Reconstructive surgery has been identified as the primary intervention deployed universally for the elimination of obstetric fistula. This practice, although its primary objective is to repair and not to promote the reintegration of the operated woman, has limitations related to the recurrence of recurrences as well as the persistence of certain forms of residual urinary incontinence that women may face after their reconstructive surgery.

Interventions for the reintegration of women repaired from obstetric fistulas do not integrate the necessary dimensions for the sustainable reintegration of women repaired from obstetric fistulas. Indeed, it is essential to ensure, on the one hand, physical healing and restoration of reproductive health, on the other hand, psychosocial rehabilitation accompanied by the fight against stigma, and finally, economic empowerment coupled with community integration. Interventions have mostly focused on psychological support for women and sometimes on support for income-generating activities.

The life experiences of women repaired from obstetric fistulas highlight the persistent challenges they face. These women face rejection, social exclusion, and difficulties in terms of sexual and reproductive health. They are sometimes left to their own devices when faced with the problem of residual urinary incontinence. These highlighted elements hinder the social reintegration of women repaired from fistulas. Furthermore, the literature reveals that some draft intervention programs aimed at the social reintegration of women after reconstructive surgery have shortcomings. Indeed, these interventions are mainly focused on psychological support and, to a certain extent, on support for in-

come-generating activities. This literature review highlights the importance of a comprehensive, woman-centred care approach to promote successful social reintegration after obstetric fistula repair.

References

- Aduragbemi Banke T (2013) L'intégration des populations rurales burkinabé dans les programmes de réduction de l'incidence de la fistule obstétricale: Le travail effectué, la situation actuelle et les perspectives d'amélioration. Int J women's health 13: 117.
- Alexandre Delamou, Thérèse Delvaux, Alisson M EL Ayadi, Vandana Tripathi, Bienvenu S Camara, et al., (2017) Fistula recurrence, pregnancy, and childbirth following successful closure of female genital fistula in Guinea: A longitudinal study. Lancet Glob Health 5(11): e1152-e1160.
- 3. Alison M El Ayadi, Caitlyn E Peintre, Alexandre Delamou, Abner Korn, Susan Obore, Josaphat Byamugisha, et al., (2020) Programmation de la réadaptation et de la réinsertion en complément de la chirurgie de la fistule génitale féminine: Examen systématique de l'évaluation.
- Byamugisha J, El Ayadi A, Obore S, Mwanje H, Kakaire O, et al., (2015) Beyond repair: Family and community reintegration after obstetric fistula surgery-Study protocol. Reproductive Health, 12: 115.
- Benski, Anne Caroline (2021) Evaluation et efficacité d'une stratégie multidisciplinaire intégrée pour la prise en charge de la fistule obstétricale: Le modèle Tanguieta au Bénin.
- Boene H, Mocumbi S, Högberg U, Hanson C, Valá A, et al., (2020) Obstetric fistula in southern Mozambique: A qualitative study on women's experiences of care pregnancy, delivery and post-partum. Reprod Health 17(1): 21.
- 7. Chimamise C, Shiripinda I, Munjanja SP, Machinga M (2021) A comparison of quality of life of obstetric fistula survivors in Zimbabwe before and after surgical treatment. Afr J Urol 27(1): 10.
- 8. Debela TF, Hordofa ZA, Aregawi AB, Sori DA (2021) Quality of life of obstetrics fistula patients before and after surgical repair in the Jimma University Medical Center, Southwest Ethiopia. BMC Women's Health, 21(1): 212.
- Delamou A, Diallo M, Beavogui AH, Delvaux T, Millimono S, et al., (2015) Good clinical outcomes from a 7-year holistic programme of fistula repair in Guinea. Tropic Med& Int Health 20(6): 813-819.
- 10. Delamou Alexandre (2022) Santé sociale et génésique des femmes après réparation de fistules obstétrices: Insights from Guinée.
- Diallo AB, Sy T, Bah MD, Diallo TMO, Barry MS, et al., (2016) Fistules vésico-vaginales obstétricales en Guinée: Analyse des données de 3 sites de prise en charge de l'ONG Engender Health. Progrès en Urol, 26(3): 145-151.
- 12. Diarra M (2019) Epidémiologie de la fistule obstétricale au Mali.
- Diarra A, A Tembely, HJG Berthe, MI Diakité, B Traoré, et al., (2013) Intégration sociale des femmes opérées de fistule urogénitale obstétricale. Science Dir.
- Djibo S (2023) Fistule obstétricale: Aspects épidémiologique et psychosocial à l'hôpital Sominé DOLO de Mopti.
- Drew Laura B, Jennifer H, Tang (2016) Résultats à long terme pour les femmes après la réparation de la fistule obstétricale à Lilongwe (Malawi): Une étude qualitative.
- 16. FIGO (2023) Manuel FIGO de formation en chirurgie de la fistule.
- Fortin et Gagnon (2016) Fondements et étapes du processus de recherche: Méthodes quantitatives et qualitatives. chevelière éducation.
- Fousso M (2025) Côte d'Ivoire: le fléau des fistules obstétricales persiste malgré les efforts de prévention. Africa HO.

- Hillary CJ, Osman NI, Hilton P, Chapple CR (2016) The Aetiology, Treatment, and Outcome of Urogenital Fistulae Managed in Well- and Low-resourced Countries: A Systematic Review. Europ Urol70(3): 478-492.
- Joseph BN, Olivier M, Jean De DFY, Xavier K, Prosper K, et al., (2018)
 Fistules obstétricales dans la province du Haut-Katanga, République
 Démocratique du Congo: À propos de 242 cas. 29(34).
- 21. Kaboré AF, Kambou T, Ouattara A, Zango B, Yaméogo C, et al., (2014) Aspects épidémiologiques, étiologiques et impact psychosocial des fistules urogénitales dans une cohorte de 170 patientes consécutives, prises en charge dans trois centres du Burkina Faso de 2010 à 2012. Progrès en Urol 24(8): 526-532.
- Karl popper, Juignet Patrick (2015) Karl Popper et les critères de la scientificité.
- Lalwani S, Varma V, Kumaran V, Mehta N, Nundy S, et al., (2015) Complex Rectovaginal Fistula-An Experience at a Tertiary Care Centre. Indian J Surg 77 (Suppl 3): 1142-1147.
- Lawani O, J'ai de la Chance, Chukwuemeka A, Iyoke, Paul O Ezeonu (2015) Pratique de contraception après réparation chirurgicale de la fistule obstétricale dans le sud-est du Nigéria.
- 25. Lepeltier T (2013) La Logique de la découverte scientifique, de Karl Popper. In Histoire et philosophie des sciences (p. 152-152).
- Lumbungu Mbungu, Daddy (2022) Soutien psychosocial et qualité de vie des femmes souffrant de la fistule obstétricale: Cas de Fistula Clinic de Kinshasa, en République démocratique du Congo.
- 27. Massandé Mouyendi J, Mougougou A, Ndang Ngou Milama S, Mouketou JJ, Adandé Menest EF, et al., (2017) FISTULE OBSTETRICALE AU GABON: ASPECTS EPIDEMIOLOGIQUES, CLINIQUES ET THERAPEUTIQUES.
- Mateo S (2020) Procédure pour conduire avec succès une revue de littérature selon la méthode PRISMA. Kinésithérapie, la Revue, 20(226): 29-37.
- 29. Meikena HK, Bihon AM, Serka S (2023) Predictors and outcomes of surgical repair of obstetric fistula at Mekelle Hamlin Fistula Center, Northern Ethiopia. Int Urogynecology J 34(8): 1891-1898.
- 30. Meuke Kuisssik JF (2021) Fistules obstétricales multi-opérées, au cours d'une campagne de prise en charge au service d'urologie du CHU point G: Quels résultats attendre?
- 31. Ministère Fédéral de la Santé (2016) LIGNES DIRECTRICES SUR LE SONDAGE URETRAL POUR LA PREVENTION ET LA GESTION DE LA FISTULE OBSTETRICALE AU NIGERIA.
- Nembunzu D, Naomie Mayemba, Sidikiba Sidibé (2022) Factors Associated With Persistent Urinary Incontinence Among Women Undergoing Female Genital Fistula Surgery in the Democratic Republic of Congo From 2017 to 2019.
- 33. Ngongo CJ, Raassen TJIP, Mahendeka M, Lombard L, van Roosmalen J, et al., (2022) A retrospective review of genital fistula occurrence in nine African countries. BMC Pregnancy & Childbirth 22(1): 744.
- 34. Niassy AC (2020) MISSIONS CHIRURGICALES DE PRISE EN CHARGE DES FISTULES OBSTETRICALES EN AFRIQUE SUBSAHARIENNE. ASPECTS EPIDEMIOLOGIQUES, CLINIQUES ET THERAPEUTIQUES. Revue Africaine d' Urologie et d'Andrologie, 2(1): 1.
- OMS (2009) Principes directeurs pour la prise en charge clinique et le développement de programmes.
- OMS (2021) Orientations stratégiques mondiales de l'OMS POUR LES SOINS INFIRMIERS ET OBSTÉTRICAUX.
- Paluku JL, Mpoy CW, Wembonyama SO, Tsongo ZK, Kamabu EM, et al., (2023) Profil épidémiologique, anatomoclinique et thérapeutique des fistules obstétricales en République Démocratique du Congo. PAMJ -Clinical Medicine, 12(22).

- Rachid Bellouk (2023) Prise en charge des fistules recto-vaginales obstétricales dans le service de chirurgie générale de l'hôpital militaire Avicenne de Marrakech.
- Ruder B, Emasu A (2022) The Promise and Neglect of Follow-up Care in Obstetric Fistula Treatment in Uganda. In LJ Wallace, ME MacDonald, KT Storeng (Éds.), Anthropologies of Global Maternal and Reproductive Health: From Policy Spaces to Sites of Practice, 37-55.
- Saifuddin Ahmed, Erin Anastasi, Laura Laski (2016) Double burden of tragedy: Stillbirth and obstetric fistula. Lancet Glob Health, 4(2): e80-2.
- 41. Sanou SM, Sali BBA, Mabvouna BR, Douryang M, Teikeu TVV, et al., (2015) Etude des connaissances, attitudes et pratiques en matière de réintégration sociale des femmes victimes de fistule obstétricale: Région de l'Extrême-nord, Cameroun. Pan African Med J 20(172).
- 42. Tayler Smith K, Zachariah R, Manzi M, van den Boogaard W, Vandeborne

- A, et al., (2013) Obstetric fistula in Burundi: A comprehensive approach to managing women with this neglected disease. BMC Pregnancy & Childbirth, 13(164).
- 43. Tebeu PM, Bakouetila RS, Odzebe Anani W, Antaon JSS, Mabiala CR, et al., (2021) Réinsertion psycho-sociale et économique des femmes opérées pour fistules obstétricales et non obstétricales au Congo. Progrès en Urol, 31(2): 112 118.
- Tebeu PM, Olsen J pierre K, Zeck CN, Antaon JSS, Moukouta CS, et al., (2020) Besoins en réinsertion psycho-sociale et économique des patientes opérées de fistule vésico-vaginale au Cameroun. PAMJ-Clinical Med, 2(138).
- UNFPA F des NU pour le Développement (2021b) Le Traitement en Routine de Fistule Obstétricale désormais disponible à Ngaoundéré. UNFPA Cameroun.
- 46. World Health Organization (2018) Obstetric fistula (Fact sheet).