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ORIGINAL ARTICLE

Treatment-seeking behaviour and social status of women with pelvic organ prolapse, 4th-degree obstetric tears, and obstetric fistula in western Uganda

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Abstract
Introduction and hypothesis This study looks at a trilogy of women's health issues including severe pelvic organ prolapse, unrepaired 4th degree obstetric tears and obstetric fistula, all of which can cause significant suffering in the lives of women and their families.
Methods Women undergoing surgery for severe pelvic organ prolapse, unrepaired 4th degree obstetric tears and obstetric fistulae, were interviewed to assess their perceptions of what caused their condition, subsequent impact on their social situation and sexual activity, and whether they had sought treatment previously.
Results One hundred fifty women participated in the survey, including 69 undergoing surgery for genito-urinary fistula, 25 with faecal incontinence only (including 24 women with unrepaired 4th degree obstetric tears and 1 woman with an isolated rectovaginal fistula), and 56 women with severe pelvic organ prolapse. All groups of women were exposed to abandonment by their families with 42 % of women with genito-urinary fistula, 21 % with unrepaired 4th degree obstetric tear, and 25 % of women with severe pelvic organ prolapse rejected by their husbands. Most of the women had actively sought treatment for their condition with no success due to unavailability of treatment or misinformation.
Conclusions This study confirms the social stigma associated with obstetric fistula, however also highlights the social stigma faced by women suffering with severe pelvic organ prolapse and unrepaired 4th degree obstetric tears in western Uganda. There is an urgent need for education and training in obstetric management and pelvic organ prolapse management in such areas of limited resources.

Keywords Social status · Obstetric fistula · Pelvic organ prolapse · Obstetric anal sphincter injury

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Introduction

This study looks at a trilogy of women's health issues: severe pelvic organ prolapse (POP), unrepaired 4th-degree obstetric tears and obstetric fistula, all of which can cause significant suffering in the life of women and their families. The prevalence of POP in worldwide literature is around 32 % [1], with 19 % of women [2] requiring surgery for prolapse in their lifetime. While there are no specific data available on prevalence or incidence of prolapse available in countries where health systems are unable to meet its reproductive and women's health needs, it would be expected to be at least of a similar level.

Obstetric fistula remains a major health issue for women, with obstructed labour the most common cause worldwide. In Uganda, it is estimated that 2.6 % of reproductive-age women [3] have fistula, which equates to 142,000 women [4]. The overall management of obstetric fistula remains fragmented, with accessibility to treatment variable. It is now well documented that women with untreated obstetric fistula suffer significantly with debilitating health issues and social isolation [5, 6]. There is, however, a paucity of information on the

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perceptions of women suffering severe POP in developing countries or its effect on their social situation. In addition, there is little information on the lives of women with unrepaired 4th-degree obstetric tears.

This study aimed to obtain an understanding of women's perception of the cause of their POP, 4th-degree obstetric tear or obstetric fistula and subsequent acceptance or nonacceptance by their families. It also explores the reasons women may not have sought previous treatment, and what treatment is available. We believe this is the first study examine these issues in women with POP and unrepaired 4th-degree obstetric tears in a developing country.

Materials and methods

This study is a part of a broader study that received ethics-committee approval. A total of 150 women underwent surgery for POP, genital tract fistula or repair of unrepaired 4th-degree obstetric tear at three separate camps at the Kagando Hospital, western Uganda, between April 2011 and July 2012. Women were notified via radio announcements in local languages about the availability of assessment and surgery. All surgery, including the cost of transportation, medications, investigations, hospital stay and food, was free of charge to the patient. All women were invited to participate in the study; 150 women agreed to do so and to answer a survey following surgery during their inpatient postoperative period. One of two nurses (HN, IS) experienced in fistula care questioned the women in their local languages and documented the responses in English. The survey (Table 1) focused on the women's perception of what caused their condition and the subsequent impact on their social situation and sexual activity. Women were also asked whether they had sought previous treatment; their demographics were also obtained.

Table 1 Questionnaire

1. How many babies have you had?
2. How many are alive?
3. How old were you when you had the first baby?
4. Delivery method: vaginal, caesarean section?
5. How long have you had this condition?
6. What do you think caused your condition?
7. Does your husband accept this condition?
8. Have you been sexually active since having this condition?
9. Have you ever had treatment for this condition? Yes/No
If "yes" please provide details of previous treatment
If "No" please provide reason

Results

Sixty-nine women were diagnosed with genitourinary fistula, 25 with faecal incontinence only (including 24 with unrepaired 4th-degree obstetric tear) and 56 with POP.

Obstetric fistula

Sixty-nine women underwent surgery for repair of genitourinary fistula (VVF), with four of these women having a concomitant rectovaginal fistula (RVF). The average age of these women at presentation was 26.9 years (16–45, median 28). Two of the women did not recall their age at first delivery; however, of the remaining 67 women, the average age at first delivery was 17.1 years (13–25, median 16). The stated age is often inaccurate, as many women are not aware of their birth date. Instead, they use life events as a guide to their estimated age. The average number of deliveries for each woman was 3.4 (1–10, median 2), with the number of live births 1.6 (1–8, median 1). Forty-four (64 %) women had a caesarean section (including two who underwent a caesarean hysterectomy), and 25 (36 %) had vaginal deliveries (including one vacuum delivery). The mean duration of their VVF was 13.3 months (1–144, median 3). The VVF were classified intraoperatively by the authors (HK and JG) (Table 2) using the Goh classification [7]. This classification system demonstrates a better ability to predict successful fistula closure compared with another commonly used classification system [8]. Fistula classification and delivery mode are shown in Table 3. Seven were circumferential fistulas. One woman had a ureteric fistula requiring reimplantation. Of those women who delivered vaginally, four had circumferential VVF and one had a vacuum extraction. A circumferential fistula is one in which there is transection of the urethra or complete dislocation of the distal urethral portion from the proximal part.

Vaginal closure of the VVF was possible in 66 (96 %) of women, with one closure abandoned due lack of bladder tissue. Two of these women had vaginal reimplantation of the ureter during fistula repair. Another two women required an abdominal procedure for fistula closure, including one requiring an abdominal ureteric reimplantation. Most women (90 %) identified labour/childbirth as the cause of their VVF,

Table 2 Classification of genitourinary fistula type [7]

Fistula type	Description
Type 1	Distal edge of fistula >3.5 cm from external urinary meatus
Type 2	Distal edge of fistula 2.5–3.5 cm from external urinary meatus
Type 3	Distal edge of fistula 1.5–<2.5 cm from external urinary meatus
Type 4	Distal edge of fistula <1.5 cm from external urinary meatus

Table 3 Mode of delivery and fistula classification type [7]

Fistula type	Cesarean section (n=43)	Vaginal delivery (n=25)
Type 1	13	6
Type 2	13	9
Type 3	12	8
Type 4	5[a]	2 (including vacuum)

[a] Excluding 1 woman with a ureteric fistula

with six believing their caesarean section caused the VVF and one not knowing. Thirty-six (52 %) women remained supported by their husband, and 29 (42 %) had been rejected by their husband. Of those whose husband no longer accepted them, ten had been divorced and four had husbands who had taken another wife. Four women had no partner at the time of her delivery. Of the 69 women, 32 (46 %) were sexually active despite their VVF, and 37 (54 %) were not.

Twenty-nine women (42 %) stated that they had received previous treatment for their VVF, with 21 (30 %) having a documented history of previous unsuccessful fistula surgery. Of the 40 women who had not had previous treatment, 11 (16 %) were seeking treatment when they heard the radio announcement and therefore attended the hospital; 10 (15 %) had sought treatment at other health-care facilities but were told there was no treatment available. Seven (10 %) women identified lack of money as the reason they could not access treatment, and seven (10 %) were unaware of any treatment being available. Three women stated they lived in very remote areas and therefore could not access health care, and two had been scared to travel.

Unrepaired 4th-degree obstetric tears

Twenty-five women presented with faecal incontinence only, which included one with a low, isolated RVF and 24 with unrepaired 4th-degree obstetric tears. Of the women with 4th-degree tears only, mean age at presentation was 30 years (19–66, median 29), and mean age at first delivery was 17.7 years (14–23, median 18). The average number of deliveries was 3.6 (1–12, median 3), with a mean of 3.3 (1–10, median 3) live births. All were delivered vaginally. The average time interval from 4th-degree tear to presentation was 25.5 months (1–372, median 4). Twenty-one (88 %) women identified labour as causing the faecal incontinence, while two said they were cut by the traditional birth attendant and one who did not know what caused her condition. Eighteen women (75 %) said their husband accepted their condition. Three women had been divorced by their husbands due to the condition, while two had not told their husband of their problem. One woman was single (Table 4). Seventeen of the 24 women (71 %) were currently sexually active.

Twenty (83 %) women had not received any previous treatment for their 4th-degree tear. Seven (29 %) had been told by their health-care facility that there was no treatment available. Five (21 %) could not afford treatment, two were unaware that any treatment was available, one woman was too scared to seek treatment, one was afraid to tell her husband and one was in a remote location. Three women had recent injuries.

Table 4 Acceptance of condition by husbands in the different groups of women

Husbands	VVF (n=69)	4th-degree tear only (n=24)	Prolapse (n=56)
Accept	36 (52 %)	18 (75 %)	25 (44 %)
Reject	29 (42 %)	5 (21 %)	14 (25 %)
No husband	4 (6 %)	1 (4 %)	1 (2 %)
Died			16 (29 %)

One woman with isolated rectovaginal fistula (RVF) only: not accepted by husband

Pelvic organ prolapse

Fifty-six women were treated surgically for POP. The average age at presentation was 55.9 years (20–100, median 53) (as mentioned previously, many women do not know their correct age). Thirty-one (55 %) women had stage 3 pelvic organ prolapse (POPQ) [9], 25 (45 %) had stage 4 pelvic organ prolapse, and 1 woman had a concomitant unrepaired 4th-degree tear. A 20-year-old woman was nulliparous with a stage 3 uterine prolapse. The average parity of the 56 women was 7.9 (0–19, median 8), with the average number of live children 4.7 (0–12, median 5). The majority of women were delivered vaginally, with only two women having at least one caesarean section. One woman (para 9) had one caesarean section, and one (para 10) had two caesarean sections. The average time that women had been symptomatic for POP was 13.4 years (1–50, median 10); however, one woman did not know how long she had had the condition. While 16 (29 %) women did not know what might have caused their condition, 22 (39 %) thought that their labour and childbirth was the cause, and 11 (20 %) blamed digging and heavy work for their POP. One woman thought it was due to her advanced age. Other reasons included intestinal worms, HIV or sexually transmitted diseases (STD), a train accident or an illness in their uterus. Of the 56 women with prolapse, the nulliparous woman was not married and 16 (29 %) of women were widowed. Fourteen of the remaining 39 women with POP stated that their husband did not accept their condition. This included nine women who said they were divorced due to their prolapse. The other 25 said that their husbands did accept them (Table 4). Twenty (36 %) women remained sexually active; of the 29 who were not, only five said it was due to the prolapse and another two said their husbands were impotent. Thirty-six (64 %) had women sought prior treatment for their POP. Only six of them had undergone previous surgery elsewhere. Eighteen women had used local

herbs (traditional healer), and one had sought assistance from witchcraft. Eight had been dispensed tablets at a health-care facility for prolapse treatment, and two had been told they had cancer and were prescribed some form of cancer treatment. Seven women had sought help at a health-care facility and were told there was no treatment available; six of these women subsequently used local herbs. Of the 20 women (36 %) who had not previously sought treatment, ten had been unaware of any treatment options, seven could not afford any treatment and three were from very remote areas.

Discussion

Results of this survey provide a new awareness of the perceptions of women suffering from POP, obstetric fistula and unrepaired 4th-degree obstetric tears. It also provides additional information on demographics and types or grades of obstetric fistula and POP in women presenting to the Kagando Hospital, Uganda. All groups of women were exposed to abandonment by their families due to their conditions: 42 % with obstetric fistula were not accepted by their husband. This is consistent with another Ugandan study identifying > 52 % of women with obstetric fistula being divorced from their husband [6]. In Nigeria, > 73 % of women were divorced after their fistula developed [5]. In contrast, in a long-term follow-up of women following fistula repair in rural western Ethiopia, only 5 % were divorced while suffering from fistula [10]. More than 20 % of women with unrepaired 4th-degree obstetric tears were not accepted by their husbands, and 25 % with severe POP were also rejected by their husbands. Thus women suffering from unrepaired 4th-degree obstetric tear and severe POP are exposed to significant social stresses and loss of family cohesion, which they attribute to their obstetric injury or prolapse. All women interviewed desired curative treatment, and most attempted to seek help within the confines of their finances and available options.

Of the women suffering with prolapse, 64 % had received ineffective treatments from either health care facilities, traditional healers or through witchcraft. In addition, from their experience, many were unaware of any treatments being available or could not afford what treatment was available. While many of the women suffering with prolapse used local herbs from their traditional healer with no effect, there are cases documented in which the insertion of caustic herbal suppositories into the vagina caused fistulae [11]. An alarming number of women did seek help from a health-care facility but did not receive appropriate care. Some were even told they had cancer, and some others were told there was no cure. It is therefore clear that if the suffering of women with POP is to be reduced, education on multiple levels, especially for health-care workers, is required. Forty-two percent of women with VVF had a history of a previous attempt at surgical repair and were therefore more familiar with the available treatment options. The women who had not had previous surgery were often unaware of any treatment option or unable to afford treatment. Nearly 16 % were actively seeking treatment when they heard the radio announcement.

Most women (> 89 %) knew that their labour and childbirth was responsible for their fistula. In a Nigerian study [12], only 70 % of women correctly attributed their fistula to the prolonged labour. Around 9 % of women in our study also thought that treatment (caesarean section) for delivery of their baby caused the fistula. In contrast, Bangser et al. [6] identified that 84 % of women perceived their fistula was caused by their health-care providers. We agree with Kazaura et al. [13] that widespread community education is required regarding pregnancy and childbirth or else women will not seek assistance from a hospital.

This study also exposes a large group of women who have unrepaired 4th-degree obstetric tears and subsequent faecal incontinence. This is a group of women not previously studied and who also suffer significantly with rejection by their husband (> 20 %) and the social stigmas of faecal incontinence. Most of these women were either told by their health-care facility that no treatment was available, they were unaware of the availability of treatment or they were unable to afford treatment. With an incidence of overt obstetric anal sphincter injury in the literature of 1.7 % [14], and limited access to health care, it can be expected that there is an enormous volume of women suffering with unrepaired 4th-degree obstetric fistula in areas where health systems are unable to meet its reproductive and women's health needs.

Compared with other areas where caesarean section rates only reach 18 % [15], the rate in this study was very high (~ 64 %) in the group of women with VVF. All women with VVF and a history of caesarean section had evidence of obstructed labour as the cause for their fistula. Personal communications of the authors (HK and JG) with obstetric practitioners in the region, including eastern Congo, identified the lack of use of instrumental deliveries. In other words, the woman had to either push the baby out unassisted or the delivery was by caesarean section. This obviously results in some very difficult caesarean sections, with the foetus presenting well down in the maternal pelvis. Such difficult caesarean sections may result in further maternal injuries and delay in delivery.

Training in obstetric instrumental deliveries is vital in these areas. The authors (HK and JG) invited obstetric colleagues to hold vacuum delivery workshops in eastern Congo and western Uganda. Many health-care facilities in Uganda are staffed by doctors without specialty training in obstetrics and gynaecology. Managing high-risk and complex labours, difficult caesarean sections and repair of obstetric anal sphincter injuries is often the responsibility of junior doctors with no supervising specialist available. While assisted vaginal deliveries

are very common, accounting for 12 % of births [16] in countries with excellent maternal health systems and low maternal and perinatal morbidity and mortality rates, the use of instruments to expedite delivery is still unavailable in many regions. There is a great need for further training of local doctors in the management of labour and obstetric skills. This plea of course echoes the recommendations of many other health-care professionals who advocate prevention and subsequent acute management of obstetric-related pelvic floor injury [17]. The cost of surgery is usually in excess of what is affordable in regions of subsistence living and significant poverty. External sources of funding are often needed to allow these women to gain access to treatment options.

The main limitation of this study is the lack of available validated questionnaires in the many local languages spoken in regions such as western Uganda. The questions used in this survey were designed to be as clear as possible.

Conclusions

Our study confirms the social stigma in VVF women in western Uganda. It also emphasizes the social stigma imposed on women suffering from severe POP and unrepaired 4th-degree obstetric tears. Education and training in obstetric management (e.g. obstetric anal sphincter injury repair, vacuum extraction) and POP management is urgently required.

Conflicts of interest None.

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