

ORIGINAL PAPER

Women's Intention to Prevent Vesico Vaginal Fistula Recurrence in Two Repair Centres in Zambia

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ABSTRACT

Objective: The study purpose was to determine the association between intention to prevent Vesico-Vaginal Fistula recurrence and knowledge of the risk factors of Vesico Vaginal Fistula recurrence, attitude towards Vesico Vaginal Fistula prevention and self esteem among women with Vesico-Vaginal Fistula in two repair centers in Zambia.

Design: This was a descriptive cross sectional correlational study in which data were obtained through the structured interview schedule.

Main Outcomes: Vesico vaginal fistula has been recognized as a preventable tragedy and a challenge in areas where access to health care with emergency obstetric care is poor. The situation is getting worse among women, and the key to ending fistula is to prevent it.

Measures: The Ministry of Health need to introduce waiting homes in hospitals with emergency obstetric care so that repaired women with VVF can wait for delivery.

The MOH needs to support community sensitization or public education on attitudes towards Vesico vaginal fistula prevention which will in turn improve intentions to prevent Vesico vaginal fistula recurrence.

Management at katete and Chilonga mission hospitals should ensure that counseling services are intensified to women with a repaired VVF so as to prevent recurrence.

Antenatal clinics should be used as an opportunity for teaching Vesico Vaginal fistula since the study finding review that 45% of the respondents did not know the risk factors of recurrence.

Results: Majority of the respondents (97%) had positive intentions to prevent VesicoVaginal Fistula recurrence. More than half of the respondents (55%) knew the risk factors of VVF recurrence, 61% had positive attitudes towards Vesico Vaginal Fistula prevention and 52% had low level of self esteem. There was a significant positive relationship between intention to prevent Vesico Vaginal Fistula recurrence and attitude towards Vesico Vaginal Fistula prevention and a significant negative relationship between intention to prevent Vesico Vaginal Fistula recurrence and self esteem. Knowledge of the risk factors of Vesico vaginal fistula recurrence was not significant. Using multiple regressions, attitude and self esteem were significant explaining 15% of the variance in intention to prevent VVF recurrence.

Conclusion: Vesico vaginal fistula is a very unpleasant experience for women. Corrective measures have been started by UNFPA but these need to be strengthened. There is need for innovation to consider other solutions that has not been tried before. This is important in order to prevent recurrence of Vesico vaginal fistula among repaired women in subsequent pregnancies.

INTRODUCTION

Vesico-vaginal fistula (VVF), the most common urogenital fistula, is an abnormal opening between a woman's vagina and bladder from which her urine continually leaks through the vagina¹.

Vesico vaginal fistula is a debilitating complication of obstructed labour in developing countries while 90% of VVF's in developing countries are attributed predominantly to inadvertent bladder injury during

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pelvic surgery². If obstructed labour is not treated by Caesarean section, it can result in death of the baby and the mother or fistula for women who survive.

Although it is difficult to determine precise rates, it is estimated that there are at least two million women living with fistula worldwide, primarily in sub-Saharan Africa and Asia and some 50,000 to 100,000 women are affected each year³. The prevalence of the total VVF in Zambia in all provinces which were reported in 2003 was 0.46%⁴.

Unfortunately, some women get recurrences of VVF, either from poor healing or during subsequent pregnancies^{5, 6, 7}.s study in Nigeria revealed that women with VVF have had multiple marriages and still desired a high family size (they still expected to have repairs and children) while⁵ reported that the failure rate of surgery increased three fold if the women had experienced one or more previous attempts. Hence, it is vital that women with VVF have the desire and follow prescribed ways in order to prevent Vesico Vaginal Fistula recurrence.

Vesico- Vaginal fistula can have devastating consequences for women, showing a divorce rate of 36% to 67%, stillborn rate of 55.6% to 85%, childless 83.3% and frequent maternal loss of self esteem, depression and suicidal thoughts^{1,7,5}. All these could lead to owl self esteem which impacts on receptiveness to preventive measures.

METHODS

Design

A descriptive correlational cross sectional study.

Sampling

The hospitals were purposely sampled because they are fistula repair centres. Respondents from the two study sites were selected using convenient sampling due to the low numbers of women with VVF reporting to the health care facility for treatment.

Data collection

An interview schedule was used to collect data within 3 months of data collection. Pollock's Health Related Hardiness Scale (HRHS.SS) was used to measure attitude while Rosenberg self esteem scale was used to measure the level of self esteem among women with Vesico vaginal Fistula.

Data analysis

Data was collected from women of childbearing age with a confirmed diagnosis of Vesico vaginal fistula who were receiving health care at one of the research sites during the time of study. Data was analyzed using descriptive statistical (mean, standard deviation) and inferential statistical (spearman's correlation coefficient, Regression) methods.

Ethical consideration

Ethical approval was received from Research Ethics Committee of the University of Zambia. Permission to conduct the study were sought from the Provincial Medical Officers for Eastern and Northern Provinces and Medical superintendents for Katete and Chilonga Mission Hospitals. Informed consent was obtained from the respondents before data collection. For this purpose an information sheet was read to the respondents so that they were informed about the study.

INTRODUCTION

A total of 75 women with Vesico vaginal fistula were enrolled. Majority of the respondents (69%) developed Vesico Vaginal Fistula between the ages of 12-20 years, married (75%), had primary education (75%), childlessness (40%), attended antenatal care during the pregnancy that resulted in VVF (39%) and were in labour for more than 24 hours (69%).

Majority of the respondents (97%) had positive intentions to prevent Vesico vaginal fistula recurrence. Table 1 below shows responses to questions on intentions to prevent VVF recurrence.

TABLE 1: Intention to prevent VVF recurrence (n=75)

Variable	Strongly Agree 4	Agree 3	Uncertain 2	Disagree 1	Strongly Disagree 0	Total
I will be delivered by a skilled attendant	31 (42%)	42 (56%)	0 (0%)	1 (1%)	1 (1%)	75 (100)
I will stay close to the hospital after 36 weeks of gestation	15 (20%)	53 (71%)	6 (8%)	1 (1%)	0 (0%)	75 (100)
I will go to the hospital immediately labour begins	11 (15%)	52 (69%)	2 (3%)	6 (8%)	4(5%)	75 (100)
I will deliver at the hospital	19 (25%)	53 (71%)	3 (4%)	0 (0%)	0 (0%)	75 (100)
I will have a vaginal delivery	7 (9%)	40 (53%)	17 (23%)	3 (4%)	8 (11%)	75 (100)
I will have a caesarean section	4 (5%)	20 (27%)	20 (27%)	22 (29%)	9 (12%)	75 (100)
I will use traditional medicine to speed up labour	2 (3%)	1 (1%)	1 (1%)	40 (53%)	31 (42%)	75 (100)
I will attend antenatal care as stipulated throughout pregnancy	16 (21%)	55 (74%)	3 (4%)	1 (1%)	0 (0%)	75 (100)

More than half of the respondents (56%) agreed they will be delivered by skilled attendants in subsequent pregnancy. Majority of the respondents (71%) agreed that they would stay close to the hospital after 36 weeks of gestation to wait for delivery. More than two thirds of the respondents (69 %) agreed that they would go to the hospital immediately labour begins in their subsequent pregnancies. Majority of the respondents (71%) agreed that they would deliver at the hospital during their subsequent pregnancy. More than half of the respondents (53%) agreed that they would have a vaginal delivery during their subsequent pregnancies. Less than one third of the respondents (27%) agreed that they would have a caesarean section during their subsequent pregnancies. Majority of the respondents (53%) disagreed that they would use traditional medicine to speed up labour during their subsequent pregnancies. Majority of the respondents (74%) agreed that they would attend antenatal care as would be stipulated throughout pregnancy during their subsequent pregnancies respectively.

Majority of the respondents (55%) were knowledgeable of the risk factors of Vesico vaginal fistula recurrence. Table 2 shows responses to questions on risk factors of VVF recurrence.

TABLE 2: Knowledge of the risk factors of VVF prevention

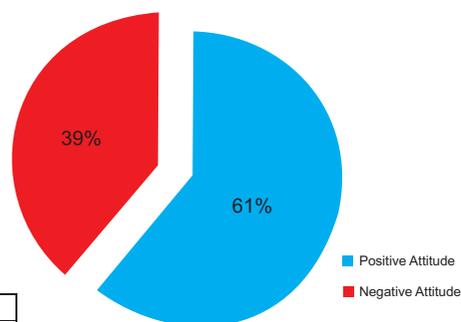
Variable	Wrong	Correct	Total
Is delivery by non skilled attendant a VVF recurrence risk factor	23 (31%)	52 (69%)	75 (100)
Is prolonged obstructed labour a VVF recurrence risk factor	14(19%)	61(81%)	75(100)
Is home delivery a VVF recurrence risk factor	26 (35%)	49 (65)	75 (100)
Is seeking emergency obstetric care a VVF recurrence risk factor	34 (45%)	41(55%)	75 (100)
Is vaginal delivery a VVF recurrence risk factor	47 (63%)	28(37%)	75(100)
Is using vaginal constrictors a VVF recurrence risk factor	42 (56%)	33(44%)	75 (100)
Is using traditional medicine to speed up labour a VVF recurrence risk factor	43 (57%)	32(43%)	75(100)
Is witchcraft a VVF recurrence risk factor	42 (56%)	33(44%)	75(100)
Is caesarean section a VVF recurrence risk factor	40 (53%)	35(47%)	75(100)
Is family planning a VVF recurrence risk factor	8 (11%)	67(89%)	75(100)
Is Gods Will a VVF recurrence risk factor	17(23%)	58 (77%)	75 (100)
Is Women Afraid of pushing a VVF recurrence risk factor	41 (55%)	34 (45%)	75 (100)

The table 2 shows that majority of the respondents correctly stated the risk factors of Vesico vaginal fistula as delivery by non-skilled attendants (69%), prolonged

obstructed labour (81%), home delivery (65%), not seeking emergency obstetric care (55%) and non-use of family planning methods (89%). However, majority of the respondents did not know that the following were risk factors of Vesico vaginal fistula recurrence such as vaginal delivery (63%), vaginal constrictors (56%) and using traditional medicine to speed up labour (57%). Majority of the respondents wrongly mentioned the risk factors of Vesico vaginal fistula recurrence as witchcraft (56%), Caesarean section (53%) and women afraid of pushing during labour (55%). However majority of the respondents (77%) knew that Gods will was not a risk factor of Vesico vaginal fistula recurrence.

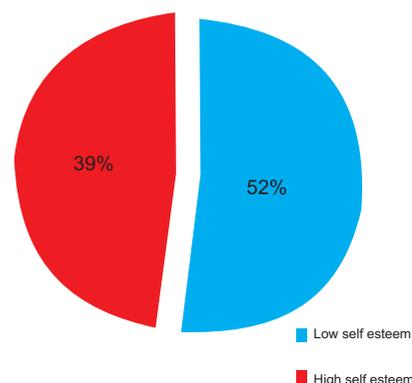
Majority of the respondents (61%) reported positive attitude towards Vesico vaginal fistula prevention.

Figure1: Level of attitudes towards VVF prevention



Majority of the respondents (52%) had low level of self esteem while (48%) had high level of self esteem (figure 2).

Figure 2: Level of self esteem



A spearman correlation co-efficiency was used to establish the relationship between intention to prevent

Vesico vaginal fistula recurrence and knowledge of the risk factors of Vesico vaginal fistula recurrence, attitude towards Vesico vaginal fistula recurrence and self esteem. The results showed that there was a positive statistical significance relationship between intention to prevent VVF recurrence and attitude towards VVF prevention ($r^2=0.27$, $n=75$, $p=0.05$, 2-tailed) indicating that as the level of intention to prevent Vesico vaginal fistula increases, attitude towards Vesico vaginal fistula prevention also increases. The results further showed that there was a negative statistical significance between intention to prevent VVF recurrence and self esteem ($r^2=-0.25$, $n=75$, $p=0.05$, 2 tailed) (Table 3) indicating that when intention to prevent Vesico vaginal fistula increases, self esteem decreases.

However, there was no relationship between intention to prevent Vesico vaginal fistula recurrence and knowledge of the risk factors of Vesico vaginal fistula recurrence indicating that knowledge did not have a direct influence on intention to prevent Vesico vaginal fistula recurrence.

TABLE 7: Relationships between intention to prevent Vesico Vaginal Fistula recurrence and Knowledge, attitude and self-esteem

VARIABLE	1	P VALUE
1.Intention	1	
2. Knowledge	.04	0.05
3.Attitude	.27*	0.05
4. Self esteem	-.25*	0.05

Correlation is significant at the 0.05 level (2-tailed)

Using multiple regressions, the model was significant with 2 independent variables explaining 15% of the variance in intention to prevent VVF recurrence. The strongest independent variable (as assessed by the standardized regression coefficient, β) was attitude ($\beta=.299$) followed by self esteem ($\beta=.270$). Knowledge was not significant ($\beta=.062$) (Table 4).

TABLE 4: Multiple regression

Predictor Value	B	P value
Knowledge	.062	.>005
Attitude	.299	.<005
Self-esteem	.270	.<005

DISCUSSION

Majority of the women who participated in the study were Bemba speaking people (67%). This may be due to the fact that one of the study sites was in the Northern Province (Chilonga mission Hospital) whose main tribal grouping is Bemba. This is consistent with study which revealed that 52.3% of the women were Bemba⁵. Majority of the respondents developed Vesico vaginal fistula between the ages of 12-20 years. This is due to the fact that the pelvis has not yet been well developed hence making the woman more likely to develop obstructed labour. This finding is similar to a study done in Eriteria which found out that majority of the respondents were 20 years old or younger when fistula occurred. Thirty women (40%) had no living children. This could be attributed to the fact that most pregnancies resulted in stillbirth. ⁵'s study revealed that 55.6% of women were childless. Only 15% of the women were divorced when they sustained Vesico vaginal fistula. Similarly, a study done by Holme et al., (2006)⁵ study conducted in Monze revealed that 15.1% of women with fistula are divorced. Majority (75%) had primary education. The low levels of education among the respondents may be attributed to the fact that all the respondents were female.

About a third of the respondents (39%) had attended the antenatal clinic for antenatal care four times during the pregnancy that resulted into VVF. More than two thirds of the respondents (69%) were in labour for more than 24 hours. This could be attributed to the fact that women were not given health education during pregnancy on obstructed labour and hence could not identify it in good time. These results are similar with ⁵ who revealed that 52.6% of women with VVF spent 2 days or more in labour.

Majority of the respondents (97%) had positive intention to prevent Vesico vaginal fistula recurrence. This could be due to the fact that these women with VVF were experiencing the disease and had no option but to intend to prevent future recurrence. More than half of the respondents (55%) knew the risk factors of Vesico vaginal fistula recurrence. Similarly, Engender Health and UNFPA study conducted in Bangladeshi reported that women with VVF felt embarrassed to discuss VVF and hence lacked knowledge⁶. Sixty one percent had positive attitudes towards Vesico vaginal fistula prevention. These findings can be attributed to the fact that these women were awaiting repair which improve the quality of life for them. Majority of the respondents (52%) had low level of self esteem. This could be attributed to the fact that the offensive odor that accompanies the incontinence related

to Vesico vaginal fistula is a source of shame, stigma and isolation.

Results showed a positive relationship between intention to prevent Vesico vaginal fistula recurrence and attitude towards Vesico Vaginal Fistula prevention. The findings of the present study are similar with a studies conducted among Nigerian women with Vesico vaginal fistula which revealed that women reported that they would have skilled attendant, agree to caesarean section, would have hospital delivery in subsequent pregnancies, blamed the traditional birth attendants for delaying their referral and /or forcing the delivery at home^{9,3}. Despite the fact the respondents exhibited positive intention to prevent Vesico vaginal fistula, there was a significant negative relationship between intention to prevent Vesico vaginal fistula recurrence and self esteem. The study findings are consistent with a study done in Eretria where women with a repaired Vesico vaginal fistula who returned for additional treatment were those who still felt isolated with low self esteem⁹.

Using multiple regressions, the model was significant with 2 independent variables explaining 15% of the variance in intention to prevent Vesico Vaginal fistula recurrence. The strongest independent variable was attitude followed by self esteem. Hence, there is need for positive attitude and low self esteem for one to have positive intentions to prevent Vesico vaginal fistula recurrence.

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