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LEVELS AND ASSOCIATED FACTORS OF DEPRESSION AMONG VESICO-VAGINAL FISTULA PATIENTS IN A STATE HOSPITAL, NORTHWEST NIGERIA

Mental Health Nursing

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ABSTRACT

Vesico-vaginal fistula (VVF) is the commonest urogenital fistula in Sub-Saharan Africa. The psychological consequences of the condition though neglected may be more devastating than the physical injuries. The study aims to assess the levels and associated factors of depression among VVF patients in State Hospital in Northwest Nigeria. A descriptive survey research design was utilized and data was collected among sixty women (60) with vesico-vaginal fistula selected using purposive sampling technique using an interviewer administered questionnaire. The data was analyzed using SPSS Version 23.0 and findings were presented in frequency distribution tables. Findings from the study shows that more than half (60%) of the respondents were between 15-24years old, four-fifth (80%) of the respondents had no formal (Quranic) education and Three-fourth (71.7%) of the respondents were married. Majority of the respondents (61.7%) had moderate depression and the main factors associated with depression were lack of employment (96%), financial problems (95%), lack of family support (95%), and stigma from the society (91.7%). Their main coping strategies adopted were prayers and emotional support. The study concluded that majority of women with VVF are faced with moderate depression and these are linked to the factors associated with depression. The nurses, family, hospital management and the government should assist in providing psychological support through various services to enhance and also improve mental health and quality of life of women suffering from Vesico-Vaginal Fistula.

KEYWORDS

Determinants, Vesico Vaginal Fistula, Depression

INTRODUCTION

Obstetric fistula has been a maternal health concern in Africa since 2050 BC when physicians of ancient Egypt first reported the condition in literature (Hilton, 2013). Also, the continued existence of this condition, particularly in sub-Saharan Africa, represents the failure of the global community to address the sexual and reproductive health rights of women and girls, and to achieve equity in the distribution and access to reproductive health resources (World Health Organization; WHO, 2018).

Vesico vaginal fistula (VVF) is an abnormal fistulous tract extending between the bladder and the vagina that allows the continuous involuntary discharge of urine in to the vagina (Forsgren, 2014). This condition results when labour is prolonged and the presenting foetus becomes impacted within the birth canal. The vaginal soft tissue is compressed against the bony pelvis of the woman during labour and, if there is no timely intervention (such as emergency caesarian section), the vaginal tissue becomes necrotic. The necrotic tissue sloughs off, usually within three to ten days postpartum, and a hole develops in the birth canal which subsequently results in uncontrollable leakage of urine and/or feces through the vagina. This condition may be further complicated by infection, vaginal ulcers, scarring, and stillbirths, which are seen in 78 to 95% of cases (Wall, 2016; Kelly, 2013).

The W.H.O (2018) estimated that each year between 50,000 to 100,000 women worldwide are affected by obstetric fistula, and that more than two million young women live with untreated obstetric fistula in Asia and Sub-Saharan Africa. Nigeria has the highest prevalence of vesico-vaginal fistula (VVF) in the world, with between 400,000 and 800,000 women living with the problem and about 20,000 new cases occurring annually ;90% of the cases go untreated (Olaniyan and Sunday, 2011). According to James et al, (2013) out of estimated 150,000 cases of Vesico-Vaginal Fistula in Nigeria, 70% occur in the North and approximately 80% of the VVF cases reported were due to unrelieved obstructed labor during childbirth.

Developing Countries lack sufficient functioning maternity centers and women often fail to utilize available maternity services, therefore, the VVF with it devastating impact will continue to occur. Some women in Nigeria avoid hospital confinement due to poverty, illiteracy, and ignorance, being unaware of the benefit of hospital confinement and the dangers of delivering under the supervision of unskilled birth attendants. Other women avoid hospital confinement because of inability to pay the relatively high fees charged to hospital users (Etuk and Oyo-Ita 2005). In the UN General Assembly report on ending obstetric fistula published in 2016, it was identified that the three most cost-effective strategies to address obstetric fistula are the implementation of skilled birth attendance, emergency obstetric and newborn care and family planning (WHO, 2018).

A number of features of obstetric fistula may increase the likelihood of developing psychological disorders, including a traumatic birth experience, loss of a child, chronic disease and pain, divorce, stigma, and social isolation (Wall, 2016). A number of studies of psychopathology in fistula patients have generally documented high levels of psychiatric morbidity, including higher levels of depression and a more external locus of control compared to healthy controls. Depression is of public health concern because of the short and long-term detrimental effect. It is the leading cause of disability and disease burden worldwide and in the United States affecting millions of individuals worldwide, particularly women (Hasler, 2010).

In one of the several studies, 73% of fistula patients met study criteria for depression, and 17% endorsed suicidal ideation (Weston, *et al.*, 2011). Compared to female health care workers, fistula patients in Ethiopia and Bangladesh had a higher rate of general mental health

dysfunction (Goh, *et al.*, 2015). Additionally, some studies have indicated prominent themes related to sadness, grief, shame, and worrying (Watt, Wilson, & Joseph, 2014).

Obstetric fistula associated with mental health problems is one of the most burdensome health conditions among women in their early productive years. Studies in low-income countries, including Ethiopia, report that women with fistula have a significantly higher incidence of symptoms of depression, psychosocial dysfunction and anxiety (Wilson, 2015; Megabiew, *et al.,*, 2013). According to Weston, *et al.,* (2011), symptoms of depression are significantly associated with a lack of social support following fistula and living with fistula.

There are scarce documented literatures on the magnitude of depression among patients seeking care for obstetric fistula in northern Nigeria. The researchers had brief interaction with some of VVF patients in one of the healthcare facilities and observed that most of their expressions revolved around coping with challenges such as stigmatization, divorce, family abandonment and financial difficulties with some signs of depression among others which may significantly contribute to the development of depression. Hence, this study assessed the level of depression and identified the associated factors of depression among patients with obstetric fistula in one of the hospitals managing VVF in Kano State. The study also determined – I still feel that we will need this objective on levels of depression the factors associated with depression among the VVF patients and the coping strategies adopted by these patients.

MATERIALS AND METHODS

Research Design: A cross-sectional descriptive survey design was utilized in the study.

Research Setting: The study was conducted in Laure fistula center and Kwalli VVF Hostel of Murtala Muhammad Specialist Hospital (MMSH) Kano State. Murtala Muhammad Specialist Hospital is Located in Kano Municipal local government of Kano state north-western Nigeria. The hospital provides specialist and general curative medical services to patients from Kano and other neighboring states including Jigawa, Katsina, Zamfara, Bauchi and Yobe as well as from neighbouring Niger Republic. The hospital has a bed capacity of 800. It provides training facilities for resident doctors, nurses, laboratory technologists and physiotherapy students. The hospital is run by Kano State Hospital Management Board and has several departments which include the department of Internal Medicine, Obstetrics and Gynecology, Pediatrics, Surgery, Ophthalmology, ENT, Anesthesia among others.

The Laure fistula center of Murtala Muhammad Specialist Hospital and the patients waiting hostel in Kwalli, became operational in January 1990. The center is a dedicated fistula section of the Murtala Muhammad Specialist Hospital. The center has its own operating theatre and 35 beds for both pre and post-operative care. The outpatient clinic is run once every week.

Population for the Study: The population of the study comprised of all VVF patients between the ages of 9-49years in Murtala Muhammad Specialist Hospital (MMSH) made up of those in Laure Fistula centre, those in the VVF clinic and those discharged to Kwalli VVF hostel for rehabilitation.

Sample size and sampling technique: From a total number of 150 patients known population with vesico-vaginal fistula, a sample of 60 patients were selected using Nwana (1981) who stated that a sample 30%-40% can be used when the population is in few hundreds. Therefore, 40% of 150 gave a total number of 60 sample size. The purposive sampling technique was used to select participants diagnosed with Vesico vaginal fistula in MMSH who were willing and physically stable to participate in the study.

Instruments of Data Collection: The data was collected using an interviewer administered questionnaire, consisting of two sections: Section A on socio-demographic variables of the patients developed by the researchers and Section B, a depression scale which is an adapted Patient Health Questionnaire, used to assess depressive patients. The depression score ranged from mild, moderate and severe depressive states. The validity of the instrument was established by face/content analyses while test retest reliability yielded 0.75 on Cronbach coefficient.

Method Of Data Collection: The respondents were interviewed in their respective wards, hostels and at the clinic by the researchers using the questionnaire and the adapted Patient Health Questionnaire. The researcher introduced self to the respondents, clearly explained the purpose of the study and thereafter requested them to participate in the interview if they so wished to. The data was collected within a period of two (2) weeks.

Ethical Consideration:
In this study ethical approval was obtained from the Kano State Ministry of Health which was later submitted to Murtala Muhammad Specialist Hospital, where an approval was given to conduct the study. Consent of the participants was personally sort and confidentiality was guaranteed.

Data Analysis:
Data obtained were analyzed using IBM-Statistical Package for Social Sciences (IBM-SPSS) version 23.0. Data were presented using tables, frequencies and percentages.

RESULTS

Socio-demographic Characteristics Of The VVF Patients
Table 1 shows that 36 (60%) of the respondent were between the ages of 15-24years and majority are Muslims. Majority 50(83.4%) of the respondents belonged to the Hausa ethnic group and also most 51(85%) of the respondents had no formal education. Findings also showed that 38(61.6%) were self-employed and 43(71.7%) were married while 49(81.7%) were from a polygamous family.

Table 1: Distribution Of Respondents By Socio-demographic Characteristics N=60

Variables	Frequency	Percentage (%)
AGE(YEARS)		
15-24	36	60
25-34	19	31.7
35-44	5	8.3
RELIGION		
Islam	60	100
ETHINICITY		
Fulani	10	16.7
Hausa	50	83.4
EDUCATIONAL STATUS		
No formal education	51	85
Primary	7	11.7
Secondary	2	3.3
Tertiary	Nil	Nil
OCCUPATION		
Self Employed	38	61.6
Unemployed	23	38.3
MARITAL STATUS		
Married	43	71.7
Divorced	7	11.7
Widowed	10	16.7
FAMILY SETTING		
Monogamous	11	18.3
Polygamous	49	81.7

Level of Depression
Table 2 reveals the level of depression among VVF patients. It shows that about two-third 37(61.7%) of the vesico-vaginal fistula patients suffer from moderate depression while 21(35%) of them reported mild depression and 2.3% severe depression. This was analyzed using the scoring system provided by the scoring scale.

Table 2: Distribution Of Respondents By Level Of Depression N=60

Variables	Frequency	Percentage (%)
Mild	21	35
Moderate	37	61.7
Severe	2	2.3
Total	60	100

Factors Associated With Depression
Findings in Table 3 shows that majority of the respondents were of the view that lack of employment 58(96.7%), financial problems 57(95%), lack of family support 57(95%), belief that the disease may not be

completely cured 56(93.3%) and stigma faced from people in the community 55(91.7%) constitute the major factors associated with their level of depression.

Table 3 Distribution Of Respondents By Factors Associated With Depression N=60

Variables	Frequency	Percentage (%)
Stigma faced from people in the community	55	91.7
Lack of employment	58	96.7
Financial problem	57	95.0
Lack of family support	57	95.0
Belief that the disease may not be completely cured	56	93.3
Duration of the illness	30	50
Lack of partner in marriage	41	68.3
Lack of community support	49	81.7

Coping Strategies

The data in Table 4 shows that one-third (n=20; 33.3%) of the VVF clients use prayers/meditation and emotional supports as their main coping strategies. Others indicated the use of self-criticism and jokes (n=9; 15% and n=6; 10% respectively) as their coping strategies. This indicates a good number of the patients adopt emotion-focused strategies as coping strategies.

Table 4 Distribution Of Respondents By Their Coping Strategies N=60

Variables	Frequency	Percentage (%)
I refuse to belief that it has happen	2	3.3
I pray or meditate	20	33.3
I get help and advice from others	20	33.3
I use alcohol or drugs to make myself feel better	3	5
I criticize myself	9	15
I make jokes	6	10

DISCUSSION OF FINDINGS

Findings from the study revealed that close to two-thirds (60%) of the VVF patients were young adults(mean age was 24years with SD±1.6); mostly likely related to early marriage among Hausa, as a cultural system. Similar findings have been reported by Alio, *et al*., (2011) where the majority (45.6%) of those with VVF were aged 18 and 22 years old and by Kabir *et al*., (2003) in the same hospital where majority of the victims of VVF were much younger (16-20 years old). Earlier studies conducted in Sokoto by Hassan and Ekele (2009) revealed similar findings over ten years on, VVF was found to be commoner among teenagers. In contrast however, Nsemo (2014) in south-south Nigeria found the condition to be more among 21-39 year old.

Our present study also showed that 83.4% of the patients are from the Hausa ethnic group, with 85% not having any form formal education, although most reported having attended Islamic schools. This is not surprising in view of the Northern Nigerian Muslim's culture where children attend Islamic (Quranic) schools to learn basic Islamic knowledge. This study also reported that 71.7% of the VVF patients were married, with 11.7% divorced. Compared to the earlier studies, a study in Akwa Ibom State by Nsemo (2014) reported higher divorced rate (63.0%) among VVF patients.

On the level of depression among the VVF patients, the findings showed that all the respondents (100%) reported some level of depression. Based on the Patient Health Questionnaire used for this study, , over two-thirds (61.7%) reported moderate depression while 35% had mild depression and 2.3% had severe depression. Similar reports among patients with VVF in previous studies in Kano by Kabir, *et al.,* (2003) where 33% of the participants were mildly depressed are available. However, in Kenya the level of depression among women with obstetric fistula was generally reported to be 72.9%, with 25.7% meeting the criteria for severe depression (Berihen, *et al*., 2013).

Goh, *et al*., (2015) in Ethiopia found the rate of depression in women with VVF to be within the range of 23.2-38.8%. In a multi-centered study that examined the impact of VVF on mental health in Ethiopia and Bangladesh, Browning, *et al.,* (2010), the rate of depression was reported to be in the range of 24-40%. The level of depression maybe associated with the fact that women with VVF have experienced a sense of loss that affected them as women and as wives. They had to cope with being completely incontinent of urine with resulting poor hygiene and they are often divorced and isolated from their communities.

On factors associated with depression, the findings revealed that majority of the patients reportedstigma from the community members, lack of employment, financial problems, lack of family support and belief that the disease may not be completed cured as the major factors associated with depression experienced. Women from polygamous homes tend to receive lower spousal support than their counterparts from monogamous settings. Marital strain and marital dissatisfaction may serve as potent triggers for depression among participants in polygamous setting.

The findings from this study agreed with the findings of the study by Berihen, *et al.,* (2013) who reported that low educational level, unemployment, poverty and higher divorce rate are potent triggers of depression. The low level of educational is also linked to unemployment and poverty which predispose to depression as more participants with depressive disorder had less than secondary level of education.

Prayers and emotional support were the major coping mechanisms found among respondents accounting for larger proportion with respects to other coping strategies as such the respondents feel a sense of relief spiritually and emotionally by praying. This result is similar with that of Weston *et al.,* (2011) who reported that majority of their respondents attend religious crusade and also visit pastors for counseling**.**

CONCLUSION

From the findings of the study, it could be concluded that Vesico-Vaginal Fistula affects the teenagers and the very young women and that most of the VVF patients have some levels of depression with the majority having moderate level of depression. It was also discovered that factors such as stigma from the community members, lack of employment, financial problems, lack of family support and belief that the disease may not be completed cured were associated with the development of depression among the VVF patients. The VVF patients adopted coping strategies such as emotional support from significant others and prayers.

RECOMMENDATIONS

1. Efforts should be made to provide effective health education on the causes, management and effects VVF to the people in the community
2. There should be social support programmes for the VVF patients so as to reduce the chances of developing depression
3. Further studies are required on the association between depression and vesico vaginal fistula.
4. There should be an extensive Programme that should be implemented on health education, female child education and utilization of maternal health services in the rural areas.
5. Effort should be made to increase the number of functional health facilities with provision for effective referral system at rural areas so as to reduces the dangers of developing VVF.

Conflict Of Interest – none to declare

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