

THE PREDISPOSING FACTORS AFFECTING THE PREVALENCE OF VESICO-VAGINAL FISTULA AMONG WOMEN OF REPRODUCTIVE AGE IN NORTHERN NIGERIA

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ABSTRACT

This paper reviewed the predisposing factors affecting the prevalence of vesico-vaginal fistula among women of reproductive age. It is however noted from the study that age, education, Malnutrition and height among others are some of the determining variables responsible for vesico-vaginal fistula occurrence. The paper further observed that vesico-vaginal fistula is prevalence among underage girls who started to bear children before their physical development is complete, women of low academic status who remain confirmed within the compounds of their husbands, women who are malnourished and those who are stunted, small and short in stature. The paper recommended that parents should desist from giving out their underage girls out in marriage, girl child education should be given priority and girls should be given good diets to prevent malnutrition.

Keywords: Predisposing factors, Prevalence, vesico-vaginal fistula, Women, Reproductive age, Northern Nigeria.

INTRODUCTION

Some of the notable predisposing factors affecting the prevalence of vesico vaginal fistula among women of reproductive age in northern Nigeria are reviewed in this paper as shown below.

AGE

In northern Nigeria, girls are usually married between the ages of 12 and 14, and some are married as early as 9 or 10 (Longhurst, 1982, Rehan, 1984). Research has shown that most of the so-called mothers that get married between the age of 9- 16 are themselves babies who should still be under the care and teenage of their parents (Kanu, 1990: Odu, 2000) and this act contradicts the Ekiti State. Gender-Based violence prohibition law of 2011 which prohibits marrying or giving an under-age girl into marriage. The reason given for this early marriage is to ensure proper control of the girls and to prevent sexual misconduct before they are given out in marriages. It should be noted that it is the culture nearly in all parts of northern Nigeria that girls are given out in marriage. They have no say, and their opinion is not needed concerning the man to marry. As a matter of fact, they are given out in marriage before they can talk, and as they grow up, they get to know the husbands given to them, and they quietly accept whether they like the choice or not. There is no room to even complain.

According to Wall, (1998), marriage occurs at an early age in northern Nigeria even sometimes before menarche; therefore it is not surprising that early teenage pregnancy is a common occurrence. Women in this category who are themselves babies start to bear children before their physical development is complete which contributes to cephalo- pelvic disproportion (Lawson, 1989).

Tahzib (1985) carried out a study on vesico vaginal fistula in Nigerian children. They were actually children because of the 80 cases studied; all of them were below the age of 13. He found out various causes why they had vesico vaginal fistula, and the main cause was obstructed labour. Research has shown that the age at marriage contributes greatly to the obstructed labour. When they get married too early, their pelvic would not have developed to allow easy passage of their babies. Harrison (2000) puts it this way “the fault is with the bony pelvic cavity. It is too small to permit easy passage of the baby during labour”, hence obstructed labour results.

In a case- control study of risk factors of vesico- vaginal fistulae in Maidugiri, Nigeria carried out by Ampofo, Omotara, Otu and Uchebo (1990), it was discovered that VVF patients married at an earlier age on average than controls. The difference in age at marriage was found to be significant with a chi square value of 27.0 ($p < 0.001$). Also, more than a quarter (30%) of the fistulae occurred in women who delivered before they were age 15, and more than half (58.8%) of them delivered before 18 years. Another study in Zaria, Nigeria by (Harrison, 1985) revealed that 20% of fistula patients fell under age 16 in comparison with only 11% in the entire obstetric population. The majority of studies from Africa especially Northern Nigeria where age is analyzed show that 80% of the women with fistulae are between the ages of 9- 30. This is supported by various studies that will thus be presented.

In an analysis of 70 cases of urinary fistulae, which were treated between April- December 1974, by Abbo and Mukhtar (1975), 85% of the women were found to be between ages 12 and 30 and were primiparae. Also, Monseur (1980), corroborated this in his study of 100 cases of extensive uro-genital necrosis at the National University in Lubumbashi, Zaria from 1966- 1976, reported that 80% percent of the 17 cases analyzed were under 25 years old, and 40% under 20. Lending credence to these studies is another study carried out by Docquier and Sako (1983), in Niamey Hospital in Niger of 283 patients with vesico- vaginal fistulae out of which 28 recto – vesico vaginal fistulae were found, and 3 of them later died. Of the remaining 25, 20 (80%) were aged 15- 19, and 18 (72%) were primiparae. Furthermore, Haile (1983), using a questionnaire, and an inquiry into the clinical records of 18 obstetric fistula patients found out that their marriages were arranged by their parents when they were as young as 5, and the age distribution indicated that 50% of the women were aged between 15 and 20 years.

Tahzib (1983) who had earlier carried out a similar study now expanded the scope and studied 1,443 patients with VVF in Zaria, Nigeria and found out that 475 women (33%) were aged 16 and under, and 80 of these women “babies” were 13 years or under. This is seen as child abuse, if it were to be in the developed countries, their parents would have been arrested. Also, Wadhawan, and Wacha (1983) found out in their 8- years study of urinary fistulae in Lusaka, Zambia of 54 fistulae which were caused by prolonged labour, 26% were aged 19 and under, 55% aged 30 and under, while 38% were primiparous women.

Lister (1984) declared, based on her experience and personal involvement in the treatment of vesico vaginal fistulae in Zaria northern Nigeria, that the average age of patients with VVF in Zaria is 16 years old. In the retrospective analysis of records of the Postgraduate Institute of Medical Education and Research in India carried out by Dhall (1989), of the 34 cases of VVF and RVF, 40% were under 20 years, 32% were between 20 and 24, 28% between 25 and 34 while 76% were primiparae. In the same region at Nepal, Dhall (1989) described his VVF patients as young primiparae who lose their firstborn due to prolonged and neglected labour. Falandry, Dumurgier, Scham, Ivoulson, and Picand (1989) put it this way after carrying out a

study on VVF, “ it is a social and psychological tragedy for these very young women, half of them are primigravid, aged between 15 to 20 years with an average age of 18.

Statistical data from the civil Hospital, Karachi, Pakistan between 1984- 1988 of 27 VVF patients reveals that primiparous women accounted for 44%, 26% were aged 16- 20, and the resultant effect of 93% were from obstetric causes. Waaldijk (1989) reported in a study of 775 women he carried out in northern Nigeria that 73% were under 25 years of age.

All the reviewed studies indicate that women develop vesico – vaginal fistula during their first pregnancy, and it can also be seen that children beget children even though most of the deliveries result in stillbirths. The age factor is clearly indicated and outlined in a table drawn from the study of 100 fistula patients carried out by Murphy (1981) in Zaria, Northern Nigeria. The table is thus adapted and presented below:

TABLE 1

AGE GROUP (YEARS)	FISTULA PATIENTS			CONTROL GROUPS			
	NEW	LONG	TERM ¹	A ²		B ³	
AGE AT MARRIAGE	%	No	%	No	%	No	%
< 12	14	8	15	2	4		
12 - 13	40	23	44	20	44		
14 - 15	34	17	33	23	51		
16 - 17	7	2	4				
18 – 19	2						
20 – 24		1	2				
25 – 29	1						
Not known	2	1	2				
Total	100	52	100	45	100		
AGE AT BIRTH OF FIRST CHILD							
12 – 13	12					24	12
14 – 15	21					46	22
16 – 17	31					61	30
18 – 19	18					24	12
20 – 24	16					42	20
25 – 29						9	4
Never pregnant	2						
Not known						1	
Total	100					207	100

1. Long- term patients: 52 patients who had been incontinent for not less than 2 years.
2. Control group A: 45 patients with post- partum cardiac failure.
3. Control group B: 207 patients already treated for post- partum cardiac failure between 1969 and 1972.

It can be seen from this table that the VVF patients were of a much younger group than in the control groups. Murphy concluded from her findings “ it is customary in Hausa land for women to marry before menstruation commences, and it is quite common for them to be less

than 16 years of age at the birth of their first child. The majority of the Hausa women were Moslem and early marriage is associated with Islamic practice". The last sentence of associating early marriage with Islamic practice may be that of ignorance, and strict male domination in that part of the country, Nigeria. There are Moslems in the southern part of Nigeria, and observation has shown that they do not marry early at all. Also in more Moslem dominated nation, cases of VVF associated with early marriage is not as rampant as Nigeria where it is only in the northern region that Moslems can be assumed to be more than the Christians. Therefore, early marriage may not likely be connected with Islamic practice. This is one of the questions to be answered through the collection of data. However, there are some exceptions to the rule. In a study of 40 cases of urinary fistulae conducted in Nepal by Schol Z (1989), the average age of the women was 31 years; the youngest was 15, while the oldest was 55 years though the highest percentage was primiparae. Also of the 26 cases of genital fistulae treated at the medical college, India by Mukerji (1989) between January 1984 to December 1988, 83% of the women were of parity 2- 4, while only one woman was primiparae with the average age being 28 years, and 25- 30 year age group had the highest percentage. Furthermore, Nnatu (1986) noted in his study of 71 Nigerian VVF patients at the Lagos University Teaching Hospital that " patients were relatively older and more parlous than those in studies from northern Nigeria", with the highest percentage of 37% between age 25- 29, 19% under 25, and 33% over 30.

It should be noted that not many studies supported this assertion. It can therefore be said that Vesico vaginal is closely associated with age as found out by many studies highlighted above.

EDUCATION

Research and observations have shown that majority of the people in the northern part of Nigeria are rather backward educationally. In this part of Nigeria, women are not expected to be seen and heard, they are supposed to remain confined within the compounds of their husbands and even not to be seen uncovered by male visitors to that compound. As a result of this, little or no value is placed on the education of the girl child. Despite the institution of universal primary education in Nigeria, its impact on the girl child in the northern part is very minimal (Wall, 1998). Preference though not a serious one is given to the education of the baby boy child than that of girls.

In a study carried out by (Murphy 1981), she reported that VVF patients are a particularly disadvantaged group in respect to education, and that illiteracy is very dominant in the rural areas, and added that it is only 15% of the husbands of new VVF patients and 8% of long – term VVF patients had any form of education not to talk of the patients themselves. Their story was 'ba'- education (no education). Another study carried out by Murphy andTukur (1981) showed that only boys attend school in Zaria while girls were always on the street hawking goods prepared by their mothers who were in total seclusion in their "husbands" compound. Corroborating this view is Haile (1983) in a study of VVF patients that all the patients were illiterate, not a single of them had any form of education. Harrison (1985) also reported that most of his 79 VVF patients were staked illiterate.

These findings are substantiated by other studies. Pendse (1989) reported that out of 50 cases of VVF patients he treated, 45 were from the rural areas and were almost illiterate: Mukerji (1989) reported that 48% of the VVF patient he attended to had no education: Adetoro (1989) further confirmed that 69% of the 29 VVF patients treated at the University of Ilorin Teaching Hospital had no formal education, and 52% of the husbands too. He reported that

none of the other women and husbands had education beyond the primary school level. Falandry, Dumurgier, Scham, Ivoulson and Picand (1989) concluded that the widespread illiteracy is one of the factors influencing the spread of Vesico- vaginal fistula.

Illiteracy seems to be a major determinant factor in the incidence of Vesico vaginal fistula. Education determines the kind of health assistance to seek after when the need arises (Mustafa and Rushwan 1971). Education reduces the incidence of high – risk pregnancies and unwanted pregnancies (Royston and Armstrong, 1989, Edstrom, 1992). With education, you can rightly distinguish between what is good and bad, right or wrong, and it can always be applied to one's utmost benefits. With education no woman will want to remain at home during delivery and being attended to by a stark illiterate birth attendant with all sorts of unsterilized, crude instruments. Harrison (1985) reported that in his VVF group, illiteracy was universal and 2 out of the 97 patients who were literate had not been to school when they had Vesico vaginal fistula.

MALNUTRITION

According to Bello (1996), “ women have been noted to be more acutely malnourished than men due to differential feeding practices for boys and girls from birth”. Observation has shown that if a woman is malnourished in pregnancy, it will have adverse effect on both the woman and the baby to be delivered. Mtimavaiye (1989) noted that “inadequate nutrition, and heavy physical labour, leads to high reproductive morbidity. Monsieur (1980) in a study of 100 cases of extensive Uro- genital necrosis reported that labour lasted for several days because of the fact that the women were malnourished. Also Abbo (1975) reported that most of his VVF patients were extremely poor and malnourished.

Obstructed labour is made more likely by malnutrition, which invariably leads to the stunting of the pelvis (safe motherhood newsletter, 1999), and will not allow easy passage of the baby to be delivered. Malnutrition therefore stunts the growth of future mothers (Lawson, 1989).

HEIGHT

Women who are malnourished from childhood have a great risk of being stunted (WHO, 1989). Studies in this area have indicated height to be a contributing factor. The effects of malnutrition are aid to have contributed greatly to the underdevelopment of women's physiology, which eventually leads to the physical causes of vesico vaginal fistula (Royston and Armstrong 1989 Bello, 1996).

According to Kwankune, Ghosh, and Wilson (1993), a height of less than 154cm is a good predictor of cephalopelvic disproportion, which is an obstetric complication that may lead to obstructed labour, this came about in a study of the relationship between maternal height and vaginal delivery. Harrison (200), in a tudy of VVF group reported that the patients were very short in stature; growth stunting was common to all them “ because they were not having enough to eat, and had little or no protection against childhood and endemic diseases”. He concluded that they have not finished growing when they became pregnant.

Several studies have confirmed the association of height with vesico vaginal. In an analysis of 40 VVF patients, Klefstad (1973) showed that 23 of the patients were small in stature, and less than 20 years old. Also, Bal (1975) reported that the average height of his 40 VVF patients was 147cm, Bhasker (1975) corroborated the earlier findings when he reported that the vast majority of the 302 VVF / URF patient in his study were young short statured

women of less than 140cm in height. Docquier and Sako (1983) concluded in their study that height was closely linked with the occurrence of fistula. Another study of 79 VVF cases by Harrison (1985) showed that most of the 79 VVF patients were short in stature with a likely pelvic contraction, which put them at the risk of cephalo –pelvic disproportion.

Martey (1988) found out in the study carried out at Ghana, that the young short girl is actually physically immature unlike the elderly multipara who is likely to have wider pelvic. Also, Massoudnia (1972) identified small or deformed pelvises in women as one of the contributing factors to Vesico vaginal fistula. Shah (1989) reported that in the region of India, half of the women with VVF in his study had an average height of 135- 150cm. Height was also found to be significantly associated with fistulae in a study carried out by Ampofo, Omotara, Otu and Uchebo (1990); 51.9% of cases had a height measurement below 150cm while only 37.1% of controls had the same height measurement. And Ghatak (1992) in a retrospective study of 361 urinary fistulae found out that primipara women between 15- 19 years had a height of less than 150cm, and were more frequently affected.

Nnatu (1986) however differs from the above findings. In his study of 71 Nigerian women with VVF between 1978- 1982 at the Lagos University Teaching Hospital, he found out that 32% of the women were overweight, and concluded that overweight is one of the contributing factors to vesico vaginal fistula. His study seems to be the only one in this category. A careful look at his study however shows that his patients were relatively older and more parlous than the other ones earlier mentioned in this review.

CONCLUSION

Based on the review of literature, it can be concluded that early marriage, refusal to give education to the girl child and should also be noted that women who are malnourished from childhood have a great risk of being stunted. All these are capable of causing Vesico-Vaginal Fistula in Women.

RECOMMENDATIONS

The following are recommended to prevent the occurrence of Vesico-Vaginal Fistula among Women in Northern Nigeria.

1. Women should not be given out in marriage before they reach age of maturity.
2. Parents and other stake holders should prioritise girl-child education to eradicate high level of ignorance.
3. Adequate food and balance diet should be provided for women to prevent nutritional disaster.

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