

# **African Journal of Nursing and Health Issues**

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## **African Journal of Nursing and Health Issues**

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**AWARENESS AND PRACTICE MEASURES OF OBSTETRIC FISTULA AMONG  
PREGNANT WOMEN ATTENDING ANTENATAL CLINIC AT ADEOYO  
MATERNITY TEACHING HOSPITAL IN IBADAN.**

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**Abstract**

**Background:** Obstetric fistula is a direct abnormal communication between the vagina and the bladder (VVF) and /or between the vaginal and the rectum (RVF). It is usually associated with obstructed or prolonged labour. Of all the morbid conditions that can affect a woman in labour, obstetric fistula is the most devitalizing and devastating. Prevention of obstetric fistula through safe motherhood practices, emergency obstetric care, referral are essential steps in making a difference in the condition in Nigeria. Hence, this study assessed the awareness of risk factors, prevention and practice of preventive measures of obstetric fistula among pregnant women attending antenatal clinic at Adeoyo Maternity Teaching Hospital, Ibadan.

**Methods:** A descriptive cross-sectional research design was adopted for the study. A simple random sampling technique by balloting was used to select the sample size of 200. A validated questionnaire ( $r=0.8$ ) was used to collect data on awareness and practice measures of prevention of obstetric fistula among pregnant women attending Antenatal Clinic at Adeoyo Maternity Teaching Hospital in Ibadan. Descriptive statistics of frequency, percentage, mean, S.D were used to analyze data.

**Results:** The mean age of the women was  $32.05 \pm 1.87$ . Most (98.5%) were married, Yoruba (96.5%). Many (53%) of the respondents were not aware of obstetric fistula, there was moderate level of awareness on risk factors of Obstetric fistula ( $\bar{x}=15.23$ ), high level of awareness of prevention of obstetric fistula ( $\bar{x}=15.73$ ) and moderate level of practice of preventive measures against obstetric fistula ( $\bar{x}=14.01$ ) among the women.

**Conclusion:** Findings from the study have shown that there is low level of awareness of obstetric fistula, moderate level of awareness of its risk factors, and moderate practice of preventive measures of obstetric fistula. Hence, there is need for emphasis on education on obstetric fistula which should be implemented by health care professionals during ANC visit and to the public.

**Word count:** 300

**Key words:** Awareness; Risk factors; Prevention; Practice; Obstetric; Fistula

## **Introduction**

Obstetric Fistula is a direct communication between the vagina and the bladder (Vesico-Vaginal Fistula - VVF) and /or between the vagina and the rectum (Recto-Vagina Fistula - RVF)<sup>1</sup>. It is usually associated with obstructed or prolonged labor, leading to physiological anomalies; continuous leakage of urine or faeces through the vagina, accompanied by „Obstructed Labour Injury Complex“ (cervical damage, foot drop, genital lacerations etc.)<sup>1</sup>. It is also associated with persistent offensive odour, leading to social stigmatization and ostracization of the affected women<sup>2</sup>.

Over 585,000 women worldwide die annually from childbirth complications with 99% of such deaths occurring in the developing countries<sup>3</sup>. One out of every nine maternal deaths occur in Nigeria with obstetric fistula as the major threat to women’s reproductive health<sup>4</sup>. Of all the morbid conditions that can affect a woman in labour, Obstetric Fistula is the most devitalizing and devastating<sup>5</sup>. It affects more than 2 million women in low resource countries and the most remote parts of the world, while at the same time is totally absent in high-income countries. The overall rate of obstetric fistula in Africa is three to five cases per 1,000 deliveries. If only 2% of prolonged or obstructed labour results in obstetric fistula, 130,000 new cases would be added each year. More than 75% of women with obstetric fistula have endured a labour that lasted 3 days or more. The baby likely dies and she’s often left with obstetric fistula<sup>6</sup>. Hence, it is important to identify the level of awareness of obstetric fistula, its risk factors, its prevention and assess women’s practice of the preventive measures.

Studies have revealed that the level of awareness and practice of prevention is low. In a study conducted among pregnant women in a rural area, the level of awareness of obstetric VVF and its risk factors was 57.8%, which although is above average, was still considered low<sup>5</sup>. Another study conducted in Ghana, reported that only 29% of the respondents knew of obstetric fistula and 37.2% of them had poor knowledge<sup>7</sup>. Also, a qualitative study conducted among members of a community showed that the respondents had low awareness of obstetric fistula and its risk factors<sup>8</sup>. A study revealed that 63.7% of the respondents did not know the risk factors of obstetric fistula<sup>9</sup>. Similarly, a study conducted among young women in Burkina-Faso also reported that only a third of the participants were aware of the existence of obstetric fistula<sup>1</sup>. Some respondents had misconceptions about the condition and attributed it to superstitious causes<sup>7,8</sup>.

While prevention of obstetric fistula through safe motherhood practices, emergency obstetric care, and referral are essential steps in making a difference, previous researchers reported that women in their study had less knowledge about preventive measures than about the risk factors, signs and symptom<sup>10</sup>. Also, another study revealed that most women did not take up preventive measures due to various reasons, such as not attending health outreaches that would enlighten them, agreeing to be mutilated in order to save their marriages, getting married at an early age, as well as receiving poor surgical procedures<sup>9</sup>. Some studies showed that health education on obstetric fistula and its preventive measures in antenatal clinics and communities have been low and should be

made priority. If pregnant women are aware of the risk factors of obstetric fistula, and high level of morbidity and mortality associated with it, they would probably start requesting for emergency obstetric care like emergency caesarian section and prompt referral to better health facilities when they feel their labor is becoming longer than expected hence preventing it<sup>6</sup>. Detailed Information about obstetric fistula will prepare the health professionals and support organizations about the need for primary prevention through sensitization of the society about the condition<sup>5</sup>.

Nurses and midwives play important roles in reducing maternal and infant mortality and morbidity. In the same vein, they can take critical steps to prevent the condition, as they are essential team members in the treatment of fistula<sup>12</sup>. The solution to the fistulas will ultimately come from the provision of essential obstetric care services. More so, the calamities young girls and mothers face must push nurses and midwives into this enormous task of preventing injury; treating the affected and searching for the best approaches to both prevention and treatment<sup>13</sup>. Hence, this study sought to examine the awareness about risk factors and prevention of obstetric fistula as well as the practice measures of prevention of obstetric among pregnant women attending antenatal clinic at Adeoyo Maternity Teaching Hospital, Ibadan.

## **METHODS**

### **Study design**

A descriptive research design was adopted for the study.

### **Study setting**

The study was conducted in Adeoyo Maternity Teaching Hospital (AMTH), Yemetu, Ibadan, Oyo State. Adeoyo Maternity Teaching Hospital (AMTH) is situated at Ibadan-North Local Government Area of Oyo State in the South Western part of Nigeria. The hospital was established in 1928 by the Colonial Master, now under the Oyo State Hospital Management Board headed by Commissioner of Health in Oyo State. It draws its clients from within and outside the hospital and the catchment states of the western region of Nigeria. The hospital facilities include 13 departments which Nursing department is one. Generally, there are six wards in Adeoyo Maternity Teaching Hospital including the labour ward, two lying-in-wards, gynaecological ward, the children's ward and premature unit (special care baby unit), Antenatal ward, Antenatal clinic, Immunization clinic, Children's Outpatient Clinic, Family Planning Clinic, Laboratory Section, two Operating theatres (one main and other mini theatre), Sexually transmitted infections/PEPFAR Clinic, Casualty Department, the Pharmacy, kitchen department, mortuary and the administrative block. The hospital staff strength is 567, out of which 208 are trained nurses. Experts in antenatal care management, modern facilities for diagnosis and treatment such as fistula repair surgery and medication are available in the hospital. It admits all type of ill patients (referred and non-referred), quite often with additional solution to treatment and management of obstetric fistula.

### **Study population**

The study population consisted of the pregnant women who attended ANC at

Adeoyo teaching hospital, Yemetu Oyo state as at the period of this study.

### **Sample size and sampling technique**

A sample size of 200 respondents was obtained using Yamane (1967) formula. A simple random sampling technique by balloting was used to select the calculated sample size.

### **Validity and reliability**

A face and content validity were done for the instrument. A reliability of 0.8 was obtained using Cronbach's alpha coefficient analysis.

### **Instrument for data collection**

A structured questionnaire which was made up of four sections was used for data collection. Section A obtained information about the Socio-demographic characteristics of the participants, Section B collected information on awareness of risk factors of Obstetric fistula, Section C collected data about awareness of prevention of Obstetric fistula, while Section D collected information about the extent of Practice of Preventive Measures.

### **Data analysis procedure**

Data entry and coding and analysis were done using SPSS (Statistical Package for Social Sciences) (version 21). Descriptive statistics of frequency, percentage, mean and S.D were used to analyze data on socio-demographic variables and research questions.

### **Ethical considerations**

Ethical approval was obtained from Babcock University Research Ethical

Committee with IRB number BUHREC420/18. Informed consent was obtained from the respondents and confidentiality of collected information was guaranteed. No risk of any kind was envisaged. Respondents were provided with no incentive and no money was expected or demanded by the researchers or their assistants over respondents' participation.

**Table 1a: Socio-demographic characteristics and obstetric data of the respondents**

<b>VARIABLES</b>	<b>FREQUENCY</b>	<b>PERCENTAGE</b>
<b>Age</b>		
15-24	13	6.5
25-34	119	59.5
35-44	67	33.5
45and above	1	0.5
<b>Mean age±SD= 32.05±1.87</b>		
<b>Marital status</b>		
Single	3	1.5
Married	197	98.5
<b>Level of education</b>		
Primary	16	8
Secondary	123	61.5
Tertiary	61	30.5
<b>Occupation</b>		
House wife	11	5.5
Business	129	64.5
Civil servant	25	12.5
Artisan	26	13
Others	9	4.5
<b>Mode of delivery</b>		
Vagina	182	91
Caesarean section	18	9
<b>Number of children</b>		
Below 2	16	8
2-4	123	61.9
5-7	61	30.1
<b>Age at marriage</b>		
16-19	20	10
20-24	95	47.5
25 and above	85	42.5
<b>Average income/month (in naira)</b>		
10,000-20,000	114	57
30,000-50,000	49	24.5
60,000-100,000	33	16.5
Others	4	2

**Table 1b: Socio-demographic characteristics and obstetric data of the respondents**

<b>Age at first delivery(years)</b>		
16-19	14	7
20-24	91	45.5
25 and above	80	40
None	15	7.5
<b>Duration of labour (hours)</b>		
2-8	71	35.5
8-12	34	17
13-16	31	15.5
17 and above	49	24.5
None	15	7.5
<b>Baby's birth weight(kg)</b>		
Below 2.5	14	7
2.6-3.5	113	56.5
3.6-4	49	24.5
Above 4	9	4.5
Not applicable	15	7.5
<b>How many times did you attend ANC?</b>		
2-4 times	80	40
5-6 times	104	52
Below 2 times	1	0.5
None	15	7.5
<b>What is the distance of your home to the nearest clinic?</b>		
Less than 30 mins	62	31
1-2 hours	137	68.5
3-5 hours	1	0.5
<b>Place of delivery</b>		
Home	8	4
Public hospital	157	78.5
Private hospital	16	8
Others	19	9.5



Table 1 above shows the socio-demographic and obstetric data of respondents. The mean age of the women was  $32.05 \pm 1.87$ . Most (98.5%) were married, and 96.5% were Yoruba.

**Table 2: Awareness about risk factors of obstetric fistula**

Statements	Yes		No		Don't know	
	Freq	%	Freq	%	Freq	%
I am aware of obstetric fistula	94	47.0	100	50.0	6	3.0
Prolonged labour can lead to obstetric fistula	131	65.5	8	4.0	61	30.5
Poverty is a contributory factor to obstetric fistula	145	72.5	6	3.0	49	24.5
Early marriage can lead to fistula	137	68.5	25	12.5	38	19.0
Caesarean Section can lead to fistula	22	11.0	122	61.0	56	28.0
Failure to do family planning can cause obstetric fistula	60	30.0	74	37.0	66	33.0
Short stature is a predisposing factor to fistula	56	28.0	101	50.5	43	21.5
Delivering in any other place other than hospital can lead someone to having fistula	182	91.0	9	4.5	9	4.5
Female genital Mutilation can cause fistula	45	22.5	87	43.5	68	34.0
Rape / sexual trauma can lead to fistula	97	48.5	29	14.5	74	37.0
Delay in seeking adequate medical care can cause fistula	183	91.5	8	4.0	9	4.5
Obstetric fistula is caused by evil spirits	120	60.0	53	26.5	27	13.5
My husband takes decision on what to do when am in labour or on all matters concerning me.	121	60.5	75	37.5	4	2.0

Table 2 above reveals the responses on awareness about risk factors of obstetric fistula. Many (53%) have never heard of obstetric fistula risk factors identified

include: delay in seeking adequate medical care can cause fistula (91.5%), prolonged labour 65.5%, poverty, 72.5%, early marriage, 68.5%.

**Table 3: Awareness about prevention of obstetric fistula**

Statements	True		False		Don't know	
	Freq	%	Freq	%	Freq	%
Good antenatal care is essential/ compulsory for every pregnant woman.	198	99.0	1	0.5	1	0.5
It is important to deliver with skilled birth attendants in-order to prevent obstetrical fistula (Hospital)	197	98.5	2	1.0	1	0.5
Formal Education of female children is compulsory	199	99.5	0	0	1	0.5
Age of first marriage/ first pregnancy does not have anything to do with the development of fistula	29	14.5	133	66.5	38	19.0
There is no harm in rejecting Caesarean Section	10	5.0	187	93.5	3	1.5
Women should learn how to take decision without their husbands/ when he's not around	184	92.0	9	4.5	7	3.5
Family planning is essential in preventing obstetric fistula	64	32.0	71	35.5	65	32.5
I have heard about how to prevent obstetric fistula before now	38	19.0	149	74.5	13	6.5
Pregnancy can lead to complications that will require emergency	198	99.0	1	0.5	1	0.5

Table 3 above reveals the responses on awareness about prevention of Obstetric Fistula. Most (99%) agreed that good antenatal care is essential/ compulsory for every pregnant woman, 98.5% agreed that it is important to deliver with skilled birth attendants (Hospital).

**Table 4: Practice of preventive measures of obstetric fistula**

Statements	Yes		No		Don't know	
	Freq	%	Freq	%	Freq	%
<b>Change</b>						
I book and deliver in the hospital	196	98.0	3	1.5	1	0.5
I deliver at home, never delivered in the hospital	2	1.0	196	98.0	2	1.0
I take herbs very often during pregnancy to make the baby healthy and prevent complications	27	13.5	172	86.0	1	0.5
I book in the hospital but does not attend antenatal clinic regularly	3	1.5	196	98.0	1	0.5
Good nutrition is very important in pregnancy	198	99.0	1	0.5	1	0.5
I can never deliver with caesarean section; it is against my belief	54	27.0	124	62.0	22	11.0
All my female children are in school/ will go to school	198	99.0	0	0	2	1.0
It is compulsory for female children to go to school	197	98.5	2	1.0	1	0.5
I practice female genital mutilation/ we practice it in our family	35	17.5	144	72.0	21	10.5

Table 4 above reveals the extent of practice of preventive measures of obstetric fistula. It was observed that 98% of the respondents booked and delivered in the hospital, 13.5% took herbs very often during pregnancy to make the baby healthy and prevent complications. More so, 99% indicated that good nutrition is very important in pregnancy, 99% asserted that all their female children are in school/ will go to

school while 22% indicated that delivering through CS is against their belief. It was observed that 10.5% of the respondents did not know whether they practice female genital mutilation in their families.

**Table5 Level of awareness about risk factors and prevention and practice of obstetric fistula**

Variables		N	%	Descriptive Statistics
Level of awareness on risk factors of Obstetric fistula	Low (0 -13)	25	12.5	Mean = 15.23
	Moderate (14 - 20)	150	77	SD = 1.043
	High (21 -26)	25	10	
Level of awareness on prevention of Obstetric fistula	Low (0 -9)	20	10.0	Mean = 15. 73
	Moderate (10 -14)	70	35.0	SD = 2.679
	High (15 - 18)	110	55.0	
Extent of practice of preventive measures of obstetric fistula.	Low (0 - 9)	12	6.0	Mean = 14.01
	Moderate (10 - 14)	60	30.0	SD = 3.587
	High (15 -18)	128	64.0	

Table 5 revealed the level of awareness about risk factors and prevention and practice of obstetrical fistula. Majority (77%) had moderate level of awareness about risk factors of obstetric fistula, many (55%) had high level of awareness about prevention of obstetric fistula and Practice preventive measures of Obstetric fistula (64%).

**Discussion**

Findings from this study indicate that many of the women were mostly Yoruba. This is not far-fetched as the study was carried out in a Yoruba community. Also, many of the women are between the age group of 25-34 years. Similar study reported that their respondents were between 20-30 year<sup>14</sup>.

This is expected as this is the marriageable age in our society.

Findings from the study revealed that more than half of the respondents were not aware of what obstetric fistula is. Also, the level of awareness of the risk factors of obstetric fistula was moderate. Similar study showed low awareness of the obstetric fistula and its risk factors<sup>1,5,7,8,15</sup>. The low awareness of obstetric fistula and moderate level of awareness of the risk factors of obstetric fistula could be implicated to the fact that most of the respondents from this study had secondary education and they might not have been exposed to this condition at this level of education and this can predispose them into having this condition especially during child birth.

This is supported by similar studies which reported that the risk factors to obstetric fistula are seen among those with low or no education<sup>16,17</sup>. Hence, there is need for focused teaching especially for those with low level of education during ANC visit. Furthermore, obstetric fistula, its risk factors and prevention as a condition is a topic that is rarely discussed in most health care facilities. This could be implicated on why there is low awareness of the condition. Hence, the low level of awareness among the women, especially pregnant women will make it nearly impossible for them to seek medical help when the need arises in order to prevent the condition. In a community where misconceptions about obstetric fistula are rampant, women who have the problem, instead of being allowed to seek medical help will only be stigmatized and ostracized. Some of them will develop infections and end up losing their lives. Thus, it is important that steps are taken to dispel all misconceptions about the disease, and provide the correct and adequate information about the disease to the general public, especially in the rural areas.

This study has also revealed a high level of awareness of prevention of Obstetric fistula and some of the preventive measures identified were formal education of a girl child, skilled birth attendant delivery, good antenatal care. This corroborates with the findings of a similar study which showed that the respondents have good knowledge on the preventive measures of obstetric fistula and these include careful operations, discouragement of early marriage, health education campaigns, early seeking of medical attention during labour, easy access

to health units and safety of young girls<sup>8</sup>. However, similar studies revealed that the respondents interviewed had low knowledge and did not know that obstetric fistula could be prevented as they thought it was bad luck that was natural and could not be averted by human beings<sup>20,21</sup>. Findings from this study further showed that the women had good attendance of antenatal clinic as majority of them attended antenatal clinic for 4 to 6 times during pregnancy. This is contrary to a similar study which revealed that the respondents did not attend antenatal clinics or health outreaches<sup>9</sup>. The good ANC visit was made possible because of easy access to health care facilities as a greater number of the women could reach the clinic in less than 2 hours. Access to health care facilities is one of the ways of preventing obstetric fistula as the women will be taught what the condition is, how to prevent its occurrence especially opting for emergency obstetric care in-case of prolonged labour in these health care facilities. However, if the women had poor access there are higher possibilities that they might not be able to access the health care facilities talk more of being educated on the condition. This is supported by a study which reported that fistula are most prevalent in remote communities far from educational and health facilities<sup>18,19</sup>. Thus, it is important that health care facilities be made more accessible to the women and they should also be encouraged to attend antenatal clinics, and health outreaches where they will have access to accurate information. Also, health care workers should ensure to include teachings about obstetric fistula, its risk factors, and its preventive measures in the antenatal

educational programme, to make the women's visit to antenatal clinics worthwhile.

This study also revealed that the practice of preventive measures of obstetric fistula among the respondents was moderate. Some of the preventive practices engaged by the women in this study are booking and hospital delivery, good ANC attendance, good nutrition during pregnancy. This is different from findings from a similar study on practice of obstetric fistula which showed that the respondents had low practice of the preventive measures of obstetric fistula<sup>25</sup>. Misconceptions about the risk factors and its prevention could be a major factor to the practice measures of prevention of obstetric fistula. Studies have shown that women had misconceptions to the cause and prevention of obstetric fistula. Some of the misconceptions are misuse of family planning, having sex during menstrual period, curses by relatives, sexually transmitted infections, rape and gender-based violence<sup>8</sup>. Furthermore, studies have also shown poor practices that women engage in that predispose them to the development of obstetric fistula, such as Female genital Mutilation<sup>22</sup>, lack of involvement in community health outreaches that are intended to raise women's awareness about obstetric complications that led to obstetric fistula<sup>23</sup>. Poor practices of these preventive measures to obstetric fistula will predispose the women to obstetric fistula. This is supported by a report from WHO, where it was reported of the poor practices that predisposed the women to obstetric fistula<sup>24</sup>. Hence, the importance of taking preventive

measures should be included regularly in mother craft at antenatal clinics. The health care workers should also provide home care services and follow up when necessary.

### **Conclusion**

Findings from the study have shown that there is low level of awareness of obstetric fistula and moderate level of awareness of its risk factors, high level of awareness of the prevention of obstetric fistula and moderate practice of preventive measures of obstetric fistula. Hence, there is need for more emphasis on education on obstetric fistula which should be implemented by health care professionals during ANC visit and to the public. The public should also be encouraged to practice preventive measures to obstetric fistula. Misconceptions to obstetric fistula should be dispelled by means of awareness campaign organized by health care professionals especially nurses.

### **Recommendations**

Based on the findings, the recommendations are therefore:

1. There is need for more awareness of obstetric fistula and its risk factors among these women. Hence, health care professionals especially nurses should create more awareness of the risk factors and prevention of obstetrical fistula to the public especially during ANC visit.
2. All pregnant women should be encouraged to seek health care during pregnancy especially in good hospitals and also to practice preventive measures of obstetrical fistula

3. Prompt referral should be made by health professionals for at risk mothers in-order to prevent obstetrical fistula.
4. Government should make health care services affordable and accessible to the population in-order to promote good health care services to the people.
5. Religious leaders should encourage their members to opt for caesarean section when need arises as some participants reported it's against their faith

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