

## DETERMINANTS OF CHOICE OF HEALTH FACILITY FOR REPRODUCTIVE MORBIDITY BY FEMALE TRADERS IN A NIGERIAN CITY

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### ABSTRACT

**Background:** Reproductive health (RH) services are important to reduce reproductive morbidity and mortality. This is only possible if such services are used. Knowledge of the determinants of choice health facility for reproductive morbidity is useful to design interventions aimed at increasing utilization of RH services.

**Objective:** This study therefore explored the determinants of choice of health facility for reproductive morbidity among female traders within Ibadan metropolis.

**Methods:** This was a cross-sectional study using interviewer-administered questionnaire among 410 female traders aged 15-49 years selected by systematic random sampling in Aleshinloye market in the city of Ibadan, Nigeria. Government and private hospitals were classified as orthodox health facilities. Data was analysed using logistic regression at 5% significance level.

**Results:** Mean age was  $34.6 \pm 7.8$ , 78.2% were married and 58.7% had secondary education. Above half (52.9%) used orthodox health facilities. Perceived quality of care influenced the use of orthodox facilities and likelihood of using the same facility in the future. Factors predicting the use of orthodox health services were social economic status (OR 2.77 95%CI 1.06-6.73), delay in attaining conception (OR 2.70 95%CI 1.39-5.22), menstrual problems (OR 2.15 95%CI 1.19-3.90) and complications in previous pregnancy (OR 2.11 95%CI 1.21-3.78).

**Conclusion:** The use of orthodox health facilities was affected by respondents' past experience of reproductive morbidity and socioeconomic status. These factors should be borne in mind in planning interventions for improvement in reproductive health service utilisation.

**Keywords:** Reproductive morbidity, Orthodox healthcare services, Healthcare seeking behaviour, Female traders, Nigeria

### INTRODUCTION

The need to improve health service utilization for the reduction of reproductive morbidity and mortality has been documented and has prompted interest in the choices people make with respect to seeking care when morbidities occur<sup>1-6</sup>. MacKian proposed that individuals make decisions in relation to their health after weighing the potential risks and benefits of the particular behaviour in a way that is mediated by their practical environment, their social rootedness and their whole outlook on life generally<sup>7</sup>. The choice of healthcare facility for any health problem will therefore be determined by a person's current situation vis-a-vis financial status, social standing and previous experiences.

With respect to reproductive morbidity and healthcare seeking behaviour among women, the factors affecting choice of healthcare include beliefs about the cause

of the symptom being experienced, the perceived consequences of the symptom, financial capacity at the time of illness and the constraints faced in situations where they decide to seek help but are unable to<sup>6,8-10</sup>. The educational and economic status,<sup>6,11,12</sup> decision making capacity<sup>2,6</sup> as well as control over household income is positively associated with an individual's ability to seek healthcare<sup>1,12,13</sup>. Other factors that have been shown to affect choice of healthcare provider for reproductive morbidity include wealth status<sup>6,11,14</sup>, perceived severity of illness<sup>11,15</sup>, cost of care<sup>11,15</sup>, proximity to the healthcare facility<sup>6,16</sup>, type of illness reported.<sup>8,17</sup> The use of orthodox health facilities for reproductive morbidity may also be affected by sociocultural values and beliefs where the perception that the illness will resolve without intervention prevents women from seeking care early. Feelings of shame associated with symptoms such as vaginal discharge

or genital sores may prevent the use of health facilities.<sup>2</sup> On the other hand, confidence and friendliness of the health staff, encouraging staff attitudes, a sense of privacy and belief in the confidentiality of information provided may encourage the use of health facilities.<sup>4,14,18</sup>

Global economic and social changes have led to more women working outside the home especially in the informal sector. In an environment where a high premium is placed on reproduction, the effect of strenuous work in the informal sector has implications both for general and reproductive health. While choices of healthcare for general illness has been assessed in different areas of the country,<sup>14,18,19</sup> there is paucity of information about choice of healthcare facilities in the event of reproductive health problems among women. This study was carried out to examine the utilization of healthcare services in the event of reproductive illness among female traders within the Ibadan metropolis.

## **METHODOLOGY**

### ***Study area***

The study was carried out in Aleshinloye market, a major market in Ibadan metropolis. Located in Ibadan South-West Local Government Area (LGA) of Ibadan, Aleshinloye market was established by the Oyo State Government in 1990. The market consists of 4,926 shops ranging in size between 5 × 10 feet and 10 × 10 feet, laid out in sections arranged by the wares sold ranging from clothing to household utilities and foodstuff. The facilities available in the market include parking lots, toilets, a fire station and motorable roads. There is also a Primary Health Care facility within the market under the supervision of the Medical Officer of Health of the Ibadan Southwest LGA.

### ***Study design***

A descriptive, cross-sectional study was carried out among female traders in Aleshinloye market to explore the determinants of healthcare seeking behaviour for prevalent reproductive health problems.

### ***Sampling***

The study population was female traders between ages 15 and 49 years in Aleshinloye market. The sample size was determined using the Leslie Kish formula<sup>20</sup> for calculating sample size for single proportion for descriptive studies. Using an assumed prevalence of 50% at 95% confidence interval and giving a 10% allowance for non-response, a minimum sample size of 410 was calculated for the study. Assuming one female trader would be selected from each shop, the number of shops in the market was used as a proxy for the number of female traders. A systematic random sampling method was used to select the study

participants. The sampling interval of 12 (410/4926 ~ 1/12) was used to select shops after selecting the first shop by balloting. In shops where there was more than one female trader, the study participant was selected by balloting.

### ***Data collection***

The data collection tool was a semi-structured, interviewer administered questionnaire developed by drawing on relevant literature including the Nigerian Demographic and Health Survey (NDHS). The questionnaire was translated to Yoruba, the local dialect for easier administration and pre-tested in Mokola Market located in Ibadan North Local Government Area then modified based on the results generated prior to the survey. Five female research assistants with post-secondary education were recruited and trained to conduct the data collection. The training which was conducted over a two-day period in May 2010, involved a review of the instruments in both English and Yoruba. Pre-test of the instrument was done on the second day of the training with the research assistants administering the questionnaires in preparation for actual data collection. All problems identified with the sampling process, phrasing of questions in the instrument and conduct of the interviews were addressed during a debriefing session. Data collection was between May and June 2010.

## **Definition of variables**

### ***Independent variables***

#### ***Socioeconomic status***

Respondent's socioeconomic status was defined using the wealth index as defined in the Nigerian Demographic and Health Survey (NDHS). Ownership of some household effects (electric fan, mobile phone and electric iron), means of transportation (bicycle, motorbike or a car) and ownership of agricultural land, farm animals and bank/savings were assessed. Principal Component Analysis (PCA) was used to assign indicator weights to the items and the first factor produced was used to represent the wealth index. A weighted frequency distribution of households was obtained and used to generate quintiles classified into the lowest, second, middle, fourth and highest socioeconomic classes. The midpoint of the weighted frequencies was used to classify the groups into two (poorer and richer) for the multivariate analysis.

#### ***Level of education***

The highest level of education completed by each respondent was classified as no formal/primary education only, secondary (including junior and senior secondary) and tertiary education. These categories were grouped into basic education or less (no formal/

primary education up to junior secondary education) and more than basic education (senior secondary and above) for the multivariate analysis.

### **Reproductive morbidities:**

The respondents experience of reproductive morbidity in the three months preceding the survey was assessed by providing a list of symptoms consistent with menstrual disorders, sexually transmitted infections, intimate partner violence, delay of more than one year in achieving conception, pregnancy and delivery complications.

### **Dependent variable**

#### *Choice of health facility*

Respondents were asked “where would you usually go to seek care if you have reproductive health problems?”. The choices provided were government hospital, private hospital, chemist shops or drug stores, traditional healers or nowhere<sup>19</sup>. Those who presented at government or private hospitals were classified as using orthodox healthcare services while those who used traditional health services or chemist shops were classified as using alternative health care services.

### **Data management**

The data collected were entered and analysed using Statistical Package for the Social Sciences (SPSS) for windows version 22<sup>21</sup>. Frequencies, proportions and means were generated for the sociodemographic variables, experience of reproductive morbidity and choice of health facility. Odds of using orthodox health facilities were generated using bivariate analysis at 5% level of significance. Independent variables found to be significant were then fitted into a logistics model to identify predictors of choice of health facility for reproductive morbidity.

### **Ethical considerations**

Ethical approval was obtained from the UI/UCH Institution Review Board. Permission for the study was also obtained from the market chairman and the leader of the female traders. Respondents completed informed consent forms before participating in the survey.

## **RESULTS**

Among the 410 consenting female traders, inconsistencies were found in the data for 30 respondents and these were removed from the analysis. The 380 questionnaires (92.7% of the study sample) with complete data were analysed.

### **Sociodemographic characteristics**

The mean age of the respondents was 34.6 ± 7.8 years. As shown in Table 1, 297 (78.2%) were married, 261

(68.7%) were Christians, 330 (86.8%) were Yoruba, 314 (82.6%) had at least a secondary education, 100 (26.2%) were in the middle wealth quintile. Many 138 (36.3%) of the traders sold clothing and accessories.

### **Reported reproductive morbidity**

The study participants were asked if they had experienced any reproductive morbidity in the six months preceding the study. The most commonly reported reproductive health problem were menstrual problems followed by pregnancy complications (Table 2). Less than a third of the respondents also reported delay in attaining conception.

**Table 1:** Sociodemographic characteristics

<b>Characteristic</b>	<b>Frequency N=380 (%)</b>
<b>Age</b>	
20 – 29	110 (28.9)
30 – 39	151 (39.7)
> 40	119 (31.3)
<b>Marital status</b>	
Single, never married	49 (12.9)
Separated/Divorced	24 (6.3)
Married	297 (78.2)
Widowed	10 (2.6)
<b>Religion</b>	
Christianity	261 (68.7)
Islam	119 (31.3)
<b>Tribe</b>	
Yoruba	330 (86.8)
Igbo	40 (10.5)
Hausa	3 (0.8)
Others (Ebira 2, Edo 5)	7 (1.8)
<b>Level of Education</b>	
No formal education	19 (5.0)
Primary	47 (12.4)
Secondary	223 (58.7)
Tertiary	91 (23.9)
<b>Socioeconomic status</b>	
Highest	44 (11.6)
Fourth	84 (22.1)
Middle	100 (26.3)
Second	88 (23.2)
Lowest	64 (16.8)

### **Choice of healthcare facilities for reproductive morbidity**

In response to the question on where they would usually seek health care in the event of reproductive health problems, 132 (34.7%) of the study participants had no particular facility of choice (Table 2) whereas 201 (52.9%) would visit an orthodox healthcare facility (government-owned or private). Perceived quality of care provided at the facility had the greatest influence

**Table 2:** Reported reproductive morbidities

Reproductive Health Problem N=380	Yes (%)	No (%)
Menstrual problems	273 (71.8)	107 (28.2)
Pregnancy complications	221 (58.2)	159 (41.8)
Intimate partner violence	185 (48.7)	195 (51.3)
Delivery complications	118 (31.1)	262 (68.9)
Sexually transmitted infections	114 (30)	266 (70)
Delayed conception	63 (16.6)	276 (72.6)

(72.9%) on the choice of healthcare provider while family members had the least (7.6%). Three hundred and one respondents (79.2%) would still use the same facility in the future and this was most often attributed to the quality of care received at the facility of choice.

### ***Determinants of care seeking at orthodox facilities***

Findings from bivariate analysis showed that the use of orthodox healthcare facilities following experience of reproductive morbidity was significantly higher among respondents with tertiary education (67.0%) compared with those with no formal/primary education (52.2%) and those with secondary education (47.3%)  $p = 0.006$ . Those in the high socioeconomic group also had a significantly higher proportion using orthodox healthcare services (71.7%) than those in the

low (43.6%) and middle socioeconomic groups (43.4%)  $p < 0.001$ . Menstrual problems, pregnancy related problems and delayed conception were significantly associated with use of orthodox healthcare services on bivariate analysis ( $p < 0.005$ ).

Multivariate analysis revealed that respondents who had experienced delayed conception, menstrual problems and complications in pregnancy were more than twice as likely as those without a similar experience to have orthodox health services seeking behaviour ( $p < 0.005$ ). Those who were in the wealthier socioeconomic group were almost thrice as likely as those of poorer status to demonstrate orthodox health services seeking behaviour ( $p < 0.001$ ). The respondents' level of education was not significantly associated with their healthcare seeking behaviour.

**Table 3:** Preferred reproductive healthcare provider

Item	Frequency (%)
<b>Preferred service provider*</b>	
None	132 (34.7)
Private health facility	116 (30.5)
Public health facility	92 (24.2)
Patent medicine vendors	23 (6.1)
Traditional healer	12 (3.2)
Other	12 (3.2)
<b>Use of orthodox healthcare facility</b>	
Yes	201 (52.9)
No	179 (47.1)
<b>Reported reasons for choice of health facility*</b>	
Perceived quality of care	277 (72.9)
Proximity	139 (36.6)
Severity of the problem	110 (28.9)
Cost of treatment	108 (28.4)
Suggestions from friends and neighbours	84 (22.1)
Family members	29 (7.6)
Others	6 (1.6)
<b>Willingness to use the same facility in future</b>	
Yes	301 (79.2)
No	79 (20.8)

\*Multiple responses

**Table 4:** Predictors of use of orthodox health facilities

	Use of orthodox health facilities			Odds Ratio (95% CI)			
	Yes	No	Total	Unadjusted	p value	Adjusted	p value
<b>Level of Education</b>							
Basic Education (ref)	50 (51.5)	47 (48.5)	97 (100)		1		
More than Basic Education	151 (53.4)	132 (46.6)	283 (100)	0.97 (0.77-1.21)	0.814	na	na
<b>Socioeconomic status</b>							
Poorer (ref)	120 (63.2)	70 (36.8)	190 (100)		1		
Richer	81 (42.6)	109 (57.4)	190 (100)	1.48 (1.22-1.81)	<0.001*	2.77 (1.06-6.73)	0.037
<b>Experienced intimate partner violence</b>							
No (ref)	104 (53.3)	91 (46.7)	195 (100)		1		
Yes	97 (52.4)	88 (47.6)	185 (100)	1.02 (0.84-1.23)	0.471	na	na
<b>Delayed conception</b>							
No(ref)	136 (49.3)	140 (50.7)	276 (100)		1		
Yes	46 (73.0)	17 (27.0)	63 (100)	1.48 (1.22-1.80)	0.001*	2.70 (1.39-5.22)	0.003*
<b>Menstrual problems</b>							
No (ref)	44 (41.1)	63 (58.9)	107 (100)		1		1
Yes	157 (57.5)	116 (42.5)	273 (100)	1.40 (1.09-1.79)	0.003*	2.15 (1.19-3.90)	0.011*
<b>Complications in pregnancy</b>							
No (ref)	68 (42.8)	91 (57.2)	159 (100)		1		1
Yes	133 (60.2)	88 (39.8)	221 (100)	1.41 (1.14-1.74)	0.001*	2.11 (1.21-3.78)	0.008*
<b>Delivery complications</b>							
No (ref)	140 (53.4)	122 (46.6)	262 (100)		1		
Yes	61 (51.7)	57 (48.3)	118 (100)	1.03 (0.84-1.27)	0.824	na	na
<b>STIs</b>							
No (ref)	146 (54.9)	120 (45.1)	266 (100)				
Yes	55 (48.2)	59 (51.8)	114 (100)	1.13 (0.91-1.42)	0.263	na	na

\*Significant

## DISCUSSION

This study examined the choice of health facility used by female traders in the event of reproductive morbidity. Experience of some morbidities such as delay in achieving conception, complications in pregnancy and menstrual problems were positively associated with the use of orthodox health services among the participants. This stands to reason given to the cultural context of the study in an environment that places a high premium on reproduction. The desire to bear children in as safe a circumstance as possible is expected to be a priority. Thus, women with delay in attaining conception desire children and as such would seek orthodox care while those who had complications in previous pregnancies would want to prevent future occurrence of such problems. Previous studies among female traders in Ibarapa LGA<sup>19</sup> and within Ibadan metropolis<sup>22</sup> reported a lower proportion of women with a preference for orthodox health care services when they experienced morbidity. While the Ibarapa study assessed general morbidity, the other study within the metropolis examined health care seeking for breast examination<sup>19,22</sup>. The difference in proportions may thus be due to the importance placed on reproductive well-being compared with general health. Changes in care seeking patterns may also be due to the improvement in access and information about health services over time.

Similar to the findings of this study, wealth status had an impact on the likelihood of seeking health care from orthodox health facilities for reproductive morbidity as has been reported also in other studies conducted in Pakistan<sup>8</sup>, Beirut<sup>15</sup>, Ghana<sup>11</sup> and Cambodia<sup>23</sup>. These studies support that financial constraints, lack of insurance coverage and cost of care were major limitations to seeking healthcare services. On the other hand women from a high wealth index group were more likely to seek and receive healthcare services<sup>8,11,15,23</sup> a finding similar to that from this study. The effect of wealth status on health seeking behaviour can however be modified by other factors such as sociocultural beliefs, travel time to health facility, the perceived quality of care and staff attitude as shown in studies from Eritrea and Bangladesh where the effect of socioeconomic status on health seeking was low<sup>16,24</sup>. The distance to health facility did not affect choice of health facility unlike findings from other developing countries like Pakistan, Beirut and Cambodia<sup>8,15,23</sup>.

The quality of care provided or anticipated in the healthcare facility was the most commonly reported factor influencing the choice of majority of the respondents both for current and future use of a particular healthcare facility. This is similar to findings from Eritrea where perceived quality of care determined the choice of healthcare provider among

the highest proportion of respondents<sup>16</sup>. Previous studies have also reported the perceived quality of care and attitude of health workers as deterrents to the utilisation of orthodox health services among workers in the informal sector<sup>19</sup>. This finding implies a need for improvement in the quality of care provided by government owned facilities where services are usually more affordable particularly for those in the lower socioeconomic groups. The attitude of health workers needs to be positive; improvement in their skills should not be overlooked as these were stated as important by some of the respondents.

About a third of the study participants reported proximity to the health facility as a factor influencing their choice. However, there appeared to be a lack of awareness of the presence of a facility within the market as none of them mentioned it as their facility of choice. Ease of access to the health facilities within the communities will be ensured through good road networks and adequate transportation systems. The presence of a functional primary healthcare system with an efficient two-way referral system and inclusion of both privately owned and public facilities will go a long way in addressing this issue of accessibility of reproductive healthcare services. Women with higher socioeconomic status and higher level of education are known to be better able to access healthcare for themselves and their family members.

## CONCLUSION

Socioeconomic status, experience of delay in attaining conception, menstrual problems and complications in previous pregnancies were positive predictors of the use of orthodox health facilities among the participants in this study. The fact that these reproductive health problems may affect future childbearing abilities could have played a role in this behaviour. Interventions to improve health service utilisation may be more successful if the planning takes into consideration the importance placed on certain symptoms over others among the target population. Consideration should also be given to the socioeconomic status of the target population to ensure equity in distribution of health services.

## LIMITATION

This study was based on self-report of reproductive morbidity among the female traders. The choice of health facility in the event of morbidity was not linked with specific reproductive morbidity therefore only a global comparison of choices can be made.

## REFERENCES

1. **Ahmed S**, Creanga AA, Gillespie DG, Tsui AO. Economic Status, Education and Empowerment: Implications for Maternal Health Service Utilization in Developing Countries. Shearman & Sterling, editor. PLoS One. 2010 Jun 23;5(6):e11190.
2. **Shastri VD**, Ram F. Health Seeking Behaviour and Utilisation of Reproductive Health Services for Gynaecological Problems - A Study Among Rural Women in Central India. Soc Sci Res Netw. 2015 Mar 16;March 16:1–26.
3. **Okeke TA**, Okeibunor JC. Rural-urban differences in health-seeking for the treatment of childhood malaria in south-east Nigeria. Health Policy (New York). 2010;95(1):62–68.
4. **Kabir H**, Saha NC, Wirtz AL, Gazi R. Treatment-seeking for selected reproductive health problems: behaviours of unmarried female adolescents in two low-performing areas of Bangladesh. Reprod Health. 2014 Jan 17;11(1):54.
5. **Phrasisombath K**, Thomsen S, Sychareun V, Faxelid E. Care seeking behaviour and barriers to accessing services for sexually transmitted infections among female sex workers in Laos: a cross-sectional study. BMC Health Serv Res. 2012 Jan;12:37.
6. **Warren C**. Care seeking for maternal health: challenges remain for poor women. Ethiop J Heal Dev. 2010 Dec 16;24(1):100–104.
7. **Mackian S**. Health Systems Development Programme A review of health seeking behaviour/: problems and prospects. Health Systems Development. 2003.
8. **Durr-E-Nayab**. Health-seeking Behaviour of Women Reporting Symptoms of Reproductive Tract Infections. Pak Dev Rev. 2005;44(1):1–35.
9. **Sikder SS**, Labrique AB, Ullah B, *et al*. Care-seeking patterns for fatal non-communicable diseases among women of reproductive age in rural northwest Bangladesh. BMC Womens Health. 2012 Jan;12:23.
10. **Belton S**, Myers B, Ngana FR. Maternal deaths in eastern Indonesia: 20 years and still walking: an ethnographic study. BMC Pregnancy Childbirth. 2014;14:39.
11. **Adanu RMK**, Hill AG, Seffah JD, *et al*. Sexually Transmitted Infections and Health Seeking Behaviour among Ghanaian Women in Accra. Afr J Reprod Health. 2008;12(3):151–158.
12. **Wado YD**. Women's Autonomy and Reproductive Healthcare-Seeking Behavior in Ethiopia [WP91]. 2013.
13. **Anwar M**, Green J, Norris P. Health-seeking behaviour in Pakistan: A narrative review of the existing literature. Public Health. 2012;126(6):507–517.
14. **Omotoso D**. Health Seeking Behaviour among the Rural Dwellers in Ekiti State, Nigeria. African Res Rev. 2010;4(2):125–139.

15. **El-kak F**, Khawaja M, Salem M, Zurayk H. Care-seeking behavior of women with reproductive health problems from low-income areas of Beirut. *Int J Gynecol Obstet.* 2009;104:60–63.
16. **Habtom GK**, Ruys P. The choice of a health care provider in Eritrea. *Health Policy (New York).* 2007;80(1):202–217.
17. **Roelens K**, Verstraelen H, Van Egmond K, Temmerman M. Disclosure and health-seeking behaviour following intimate partner violence before and during pregnancy in Flanders, Belgium: A survey surveillance study. *Eur J Obstet Gynecol Reprod Biol.* 2008;137(1):37–42.
18. **Okereke CI**. Unmet reproductive health needs and health-seeking behaviour of adolescents in Owerri, Nigeria. *Afr J Reprod Health.* 2010 Mar;14(1):43–54.
19. **Kehinde IO**, Cynthia NC. Health Care Seeking Behaviour Among Market Traders In Ibarapa Central Local Government, Nigeria. *Internet J Heal.* 2009;9(2).
20. **Kish L**. Survey Sampling. New York: John Wiley and Sons, Inc; 1965.
21. International Business Machines Corp. Statistical Package for the Social Sciences (SPSS). Version 22, 2013.
22. **Balogun MO**, Owoaje ET. Knowledge and practice of breast self-examination among female traders in Ibadan, Nigeria. *Ann Ibadan Postgrad Med.* 2005;3(2):52–56.
23. **Yanagisawa S**, Mey V, Wakai S. Comparison of health-seeking behaviour between poor and better-off people health sector reform in Cambodia. *Public Health.* 2004;118(1):21–30.
24. **Ahmed SM**, Adams AM, Chowdhury M, Bhuiya A. Gender, socioeconomic development and health-seeking behaviour in Bangladesh. *Soc Sci Med.* 2000;51(3):361–371