Factors Influencing Self-Medication Practice among Pregnant Women Attending Antenatal Clinic in Primary Health Facilities in Akure South Local Government, Ondo State

Ibironke C. Ojo¹, Ngozi A. Okafor², Oluwakemi E. Adeola³, Modupe M. Adamolekun⁴, Rukayat F. Adewoyin⁵

¹School of Nursing, Babacock University Ilishan Remo Ogun State ²School of Nursing, Babcock University Ilishan Remo Ogun State ³Department of Nursing, University of Medical Science Ondo State ⁴Department of Nursing, University of Medical Science Ondo State ⁵Department of Nursing, University of Medical Science Ondo State

Abstract

Background: Self-medication is one of the global problems that threaten the life of pregnant women and that of the fetus. Despite health education at antenatal clinics to create awareness on its negative effects pregnant women still self-medicate. This study was aimed at determining the factors influencing self-medication practice among pregnant women attending antenatal clinics in Akure South Local Government area, Ondo State, Nigeria.

Methods: A cross-sectional descriptive research design was adopted; simple random sampling technique was used to select 343 pregnant women from a total of 1678 pregnant women in selected primary health care facilities. An adapted standardized questionnaire was used to collect data whose reliability ascertained using cronbachs alpha coefficient ranges from 0.838-0.947. Data were analyzed using descriptive statistics of frequency and percentages while inferential statistics of chi-square was used to analyze study hypothesis.

Results: respondents had good knowledge of self-medication with a mean score of 17.8 However, perceived non-seriousness of disease conditions (65.0%), expensive drug prescription in the health facility (53.9%), and availability of old prescription (47.8%), were the main factorss for self-medication practice. There is a significant influence between level of knowledge and self -medication practice with a p value of (0.014).

Conclusion: previous knowledge; level of education; mildness of illness; high cost of drug prescription in the hospital were the major factors leading to self-medication practice among respondents. It is therefore recommended that nurses should intensify efforts on educating the pregnant women during antenatal clinic visits.

Key words: Antenatal clinics, Drugs, Factors, Pregnant women, Self- medication.

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I. Introduction

Self-medication is the use of drugs to treat self-identify illness or disorders without the medical prescription, it also a continued used of un-prescribed drugs for recurrent diseases.^{1,2} The practice of self-medication is a universal threats that requires prompt attention because of the potential threat to the woman and also to that of the unborn child. In most developing countries where the health system is not well-structured.^{3,4} the likelihood that women will self-medicate is high; as many drugs are teratogenic in pregnancy and women may not know which drugs that are harmful to them and their unborn child.^{5,6}

The practice of self-medication has gotten to a serious situation, as people use drugs they believe have medicinal content without the knowledge on their harmful effect in connection with those specific medicines; thus, poor knowledge on the negative effect of self-medication is adding significantly to the practice of self-medication. As a result, people have developed serious side effects from the drugs and have also led to delay in seeking for medical care at the health facilities, thereby worsening their situations.⁷

Globally, drugs use without the prescription during pregnancy has been found to be high in many parts of the world, especially in developing countries such as Nigeria, 59.3% of the pregnant women take non-prescribed drugs during pregnancy. Similarly self-medications as a principal practice of health care are very common among the population in developing countries such as Africa and Asia.⁸

Many pregnant mothers abuse drugs in attempt to relieve most signs and symptoms that they experience as a result of physiological changes in pregnancy such as nausea /vomiting, fever and acute pain.⁹ There are major reasons for self-medication practice among pregnant women in different countries. It is associated with factors such as monthly income, level of education, previous knowledge of treating familiar ailment, accessibility to drugs, time constraint, availability of old prescription and perception towards risk of self-medicationl.^{10,11}

Studies conducted in different parts of Nigeria revealed that 72.4% in Uyo, 31.5% in Ado-Ekiti, 63.8% in Ibadan, and 85% in Jos of pregnant women practiced self-medication.⁵ There is evidence that, people involved in self-medication tend to acquire understanding of the practice from the family, friend, through mass media and sometimes from their inlaws.^{12,13}

Similarly, medication that can only be obtained upon physician prescription could easily be procured without prescriptions in developing countries like Nigeria and Zambia.⁵ This practice in the developing countries may be due to different types of factors including high cost of seeking professional care in health facilities. Self-medication may cause many adverse effects that need specific treatment and may results to numerous complications for pregnant women.¹⁵ People with low socioeconomic status may use medications because they have been recommended by a relative who has previously taken the same medication. Others do not believe that physicians correctly diagnose their conditions. Therefore self-medication continued to be practiced among pregnant women.

Several scholars had conducted studies on factors influencing self - medication practice among the pregnant women attending Antenatal clinic in Nigeria, however, there is gap on factors influencing self-medication practice. Therefore, there is need to assess the level of knowledge of self-medication and identify the reasons for self-medication among pregnant women in Akure South Local government.

II. Methods

Study setting

The study was conducted among pregnant women in selected health facilities in Akure South Local Government Ondo State. Its headquarters is in the town of Akure. It has an area of 331 km2 and a population of 353, 211 at the 2006 census. The number of males in Akure South is approximately 178, 672 and females of 181,596. There are a total of 11 wards in Akure south local Government area. There are a total of 16 health facilities with antenatal clinic service in Akure South Local Government area, which are: Ago Ireti, Arakare, Isolo, OkeAro, Itaniyan, Shagari, Adofure, Ilere, Iloro, obale, Danjuma, Oda, Orita Obele, Esure, Akure, Ipinsa,Akure South LGA is the trade centre for a farming region where different crops are grown. The inhabitants of the area are mainly public servants and other engage in trading or business.

Study population

The population of this study includes the pregnant women attending antenatal clinic services in health facilities, Akure South Ondo State. These facilities are as follow with average monthly attendance of 1678 which formed the population of the study: arakalr-245, okearo-240, shagari-205, ilere-180, obale-227, oda-240, esure-180, ipinsa-163.

Inclusion Criteria

All pregnant women attending antenatal clinic within the data collection period

Exclusion criteria

All pregnant women that did not give consent

Sample size determinant and sampling technique

The sample size was determined using a Cochran's formula (1977) by assuming 50% proportion (0.5), with 95% confidence desired (1.96) and 5% margin of error, level of precession of 0.05. The formula was chosen because the population is more than 1000.

i.e
$$Z^2 = 1.95$$
, $P = 0.5$, $N = 1678$ $n_0 = 384$ $e^2 = 0.05$ $q = 0.05$
 $n_{0=} \frac{Z^2 P q}{e^2}$

10% of the calculated sample was added to the sample size to cater for refusals and non-respondents. Therefore the total sample size was 343 pregnant women.

Multistage sampling technique was used in the following order: Simple random sampling technique was used to select eight health facilities from 16 health facilities representing fifty percent (50%) of the health facilities in the Akure South Local Government Area. The health facilities randomly selected are Arakale, Oke-Aro,

Shagari, Ilere, Oba Ile, Oda, Esure and Ipinsa health facilities. A proportionate sampling was used to determine the number of pregnant women would participate in the study in each of the selected heath facilities.

Study design and instruments

The study design was a descriptive cross sectional design. A quantitative method of data collection was utilized to determine the level of knowledge on self- medication practice and reason for self-medication practice among pregnant women in Akure South Local government, Ondo State.

The instrument used for data collection in this study was an adapted questionnaire from previous study.¹¹ some changes were effected to the adapted questionnaire to suit my own study. The questionnaires consisted of three sections section A, B and C.

Section A: Include 7 items related to socio-demographic data of the respondents such as age, marital status, religion, ethnicity, educational status.

Section B: This section with 10 items examined the level of knowledge of pregnant women on selfmedication practice. The mean score was calculated and ranged into two levels: poor and good. Those that scored below the mean score were ranged as poor level of knowledge of self- medication practice and those who scored above mean score were ranged as having good level of knowledge of self-medication practice.

Section C: This section contains 8 items that identify the reasons for self-medication practice among pregnant women.

Data Collection

Letter of introduction was obtained from Ethical Review committee of thr Akure South Local Government Ondo State. Approval letters were taken to each head of the health facility; the objective, significant of the study; the benefits and method of data collection were discussed with them. The data was collected by the Researcher and Research Assistants. The Research Assistant was trained on issues related to privacy and confidentiality, consent seeking before and how to administer the questionnaire. The questionnaire was distributed to the respondents at the ANC after informing them of the purpose of the study and they were also retrieved on the spot in each health facility and checked for completeness

Data Analysis

Data were analyzed by descriptive statistics in form of frequency, percentage, mean and ^{standard} deviation. Chisquare was used to analyze study hypothesis at 0.05 level of significance with computer software Statistical Package for the Social Science (SPSS) version 23.

Ethical Consideration

The research proposal was submitted toBabcock University Heath Research Ethics committee BUHREC and to Akure South Local Government Ondo State for ethical clearance. The respondents were given informed consent form to fill before the data collection to signify the willingness to participate in the study: and the respondents were free to ask question regarding the study. Information provided by the respondents during data collection was not divulged to others, no name or any form of identity was required so as to protect privacy of the respondents. The respondent was assured that information will be used for this research study only.

III. Results

Table 1: Demographic Data of the Respondents			
Variables	Frequency	Percentage (%)	
	(f)		
Age			
15-20	11	3.2	
21-26	102	29.7	
27-32	149	43.4	
33 and above	81	23.6	
Total	343	100	
Marital Status			
Single	3	0.9	
Married	333	97.1	
Divorced	4	1.2	
Widowed	3	0.9	
Total	343	100	
Religion			
Christian	294	85.7	
Muslim	44	12.8	
Traditional	2	0.6	
Others	3	0.9	
Total	343	100	

Education		
Primary	28	8.2
Secondary	145	42.3
Tertiary	170	49.6
Total	343	100
Ethnicity		
Yoruba	277	80.8
Igbo	35	10.2
Hausa	9	2.6
Others	22	6.4
Total	343	100

Table 1 out of 343 respondents, shows that majority of the respondents 149 (43.4%) are between the age range of 27-32 years. A greater percentage of the respondents 333 (97.1%) were married. The religious distribution of respondents, showed that majority of the respondents 294 (85.7%) were Christians. The level of education of respondent reveals that majority of them 170 (49.6%) attained tertiary education. The ethnicity of the respondents showed that majority 277 (80.8%) are Yoruba's.

Table 2: Level of Knowledge of Self-medication Practice				
Category	Criteria	Frequency(f)	Percentage (%)	
0-17.7	Poor	118	34.4	
17.8-22	Good	225	65.6	
Total		343	100	
Mean		17.8		
Standard deviation		2.08		
Maximum		21		

Table 2 shows the overall knowledge of pregnant women of self- medication the findings revealed that majority of the respondents 225 (65.6%) had good knowledge of self-medication.

Table 3: factors Responsible for Self-Medication practice among Respondents			
Statement	Frequency (F)	Percentage (%)	
Drugs prescribed in hospital are expensive			
Yes			
No	185	53.9	
	158	46.1	
The illness is not serious/minor			
Yes	223	65.0	
No	120	35.0	
There is no time to go to the health facility			
Yes			
No	137	39.9	
	206	60.1	
Going to hospital for treatment waste time			
Yes			
No	108	31.5	
	235	68.5	
The cost of the health practitioner treatment is			
high			
Yes	155	45.2	
No	188	54.8	
Availability of an old prescription			
Yes			
No	164	47.8	
	179	52.2	
Total	343	100	

 Table 3: factors Responsible for Self-Medication practice among Respondents

Table 3, the findings revealed that majority of the respondents 223 (65.0%) perceived minor of the disease condition as the common factor responsible for practicing self-medication, followed by Expansive prescription of drugs in the hospitals 185 (53.9%), as well as availability of old prescription at home 164 (47.8%), as second leading cause of self - medication practice among the pregnant women, others were the cost of health practitioner treatment is high 155 (45.2%), no time to visit the health facilities 137 (39.9%) while 108 (31.5%) of respondents cited that going to hospitals for treatment is a waste of time.

Variables	Knowledge	Total Good N (%)	N=343	x2	P value
	Poor N (%)				
Self-medication practice					
No					
	71 (20.9)	104 (30.3)	175	6.025	0.014
Yes					
	47 (13.7)	121 (35.2)	168		

Table 4: Influence of knowledge on self-medication and self-medication practice among pregnant women	

**Level of significance is 0.05

Table 4 shows that the p value is 0.014 are less than 0.05; hence there is significant influence between the level of knowledge and self-medication. Therefore, the null hypothesis is rejected.

IV. Discussion

Most of the respondents were between the ages of 27-32 years representing about (43.4%). The proportion of the pregnant women that participated in this study. Because it is at this age range that most women are ripe for marriage and get pregnant after studying and had never experienced the discomfort associated with pregnancy. When unbearable it may lead to self –medication practice. This result is in line with a study conducted in Ethiopia on assessment of drug use and effect in pregnant women revealed that, out of 400 pregnant women who had participated in the study, majority 49.8% (199) of the women were in the age group of 26-36 years with the mean age of 1.66 ± 0.64 years.¹⁶ Majority 294 (85.7%) of the study respondents were Christian because the city was dominated by Christian. This was found to be consistent with a study conducted in Ejisu-Jauben Municipality which revealed that 79.3% of respondents were Christians while Muslims constituted 19.7%.¹⁷ The different in result might be due to the fact that these studies were done at different locations and setting. Majority of the respondents (80.8%) in this study revealed their ethnicity as Yoruba, this is because the study is conducted in part of south west which majorly dominated by Yoruba people while the least region of the respondents (2.6%) was Hausa.

The findings on level of knowledge on self-medication among respondents were good with majority (65.6%) having above average score. This is because majority of the women had good knowledge about self-medication from previous experience and previous prescriptions. This may lead to irrational self-medication practice. This is consistent with the study conducted in India on knowledge, attitude and practice of self-medication among medical students which revealed that more than half of the respondents are found to have a good knowledge about self-medication regarding definition, adverse effect and different types of drugs.^{13,17} This is in contrast with the study conducted in Ethiopia on prevalence and determinants of self-medication practice among selected households in Addis Ababa community which revealed that participants who had poor knowledge about self-medication practiced were 2.04 times more likely to practice SM than those who had good knowledge.⁷

There are many factors responsible for self-medication practice among the pregnant women. Majority of the respondents pointed perception of mildness of illness(65.0%) followed by higher cost of prescribed drugs in the hospital(53.9%), availability of old prescription(47.8%) and high cost of practitioner treatment(45.2%). This report is logical in that, respondents that see illness as minor will definitely not worry themselves to visit the health facility for professional care and will therefore prefer to buy non-prescribed drug from the patent medicine shop to treat their ailments. This finding is consistent with a similar study conducted among pregnant women attending antenatal care at health centers in Bukavu, Eastern Congo to find out the prevalent rate and its associated factors revealed that, perceived illness was one of the major factors associated with self-medication.¹⁸⁻²² Also findings from this study agree with findings of a similar study conducted among pregnant women in Wa municipality on self-medication perception and practice of self-medication among these respondents. Findings from the study revealed that 68.5% of respondents revealed that illness was major factors for practicing self -medication.⁵ Also the findings is consistent with study conducted in Addis Ababa community, revealed major reasons for practicing self-medication as mildness of illness followed by knowledge about medication.⁷

It shows that the *p*-value is 0.014 which is less than 0.05; hence there is significant influence between the level of knowledge and self-medication. Therefore, the null hypothesis is rejected. Which is similar to the study carried out on self-medication practice among the pregnant women attending ANC in Bukavu, Eastern Congo revealed that respondents' level of knowledge is statistically significantly associated with self-medication practice.¹⁸ The finding of this study is also in consistent with a study conducted in city of Zabol revealed that, there is a significant relationship between knowledge and practice of self-medication (p < 0.05).²³

V. Conclusion

In spite of the pregnant women had good knowledge of self-medication practice, the practice of selfmedication among the pregnant women in Akure South Local Government Area was still high. Therefore, the main factors responsible for practicing self-medication were minor ailment and high cost of drugs dispensed in the hospital, presence of medication at home, previous experience of practicing self-medication and level of education were the determinants of self-medication practice. Therefore self -medication practice is based on individual perception. Thus, integrated efforts of individuals, communities, nurses, midwives, and the regulatory bodies are highly important.

VI. Recommendations

In line with the findings of this study,

- 1. The effect of self-medication practice in pregnancy should be intensified during health education by health professionals
- 2. The federal, state and local government should find means of making health services care more affordable for people within their locality.
- 3. The dangers on complication of self-medication practice should be available in chat or pictorial forms at the health facilities for reminder during ANC.
- 4. The cost of health care services should be reduced so that health care will becomes easily accessible and affordable

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