

## SELF MEDICATION PRACTICES AMONG PREGNANT WOMEN ATTENDING THE STATE HOSPITAL, OSOGBO NIGERIA

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### ABSTRACT

The study was carried out to assess the practice of self medication among pregnant women attending the State Hospital Osogbo, Osun State Nigeria. Through the use of purposive sampling method, 95 respondents were selected as sample for the study. A self designed questionnaire was used as instrument for data gathering. It comprised 25 questions which were in four sections. The psychometric property of the instrument using the Cronbach's Alpha co-efficient was 0.760. At the end of questionnaire administration, only 80 questionnaires were retrieved and analyzed. The results shows that the ages of the respondents ranged from 19 to 49 with a mean 28.5. Their occupation were farm produce selling (13.5%), trading (58.8%), and civil servants (16.3%). Also, full housewives among them were 11.3%. Only 62.2% of respondents had secondary education, the rest 35% and 2.5% were primary school holders and illiterates respectively. The religious believe of the respondents revealed that 63.8% were Christians and 36.3% Muslims. Also, 28.8% of the respondents were primigravid women. Questions on self medication practices revealed various views expressed by respondents. All (100%) of the respondents have heard about self medication while as much as 69 (86.3%) of them engage in it. When asked for reasons for engaging in self medication, 48% of them said it saves cost of health care, 23% believed valuable time in waiting in hospital are saved for other important endeavour while 33% believed drugs to buy were readily available. On the source of getting drugs in self medication, 20% said they got drugs from patent medicine sellers, another 20% got theirs from other non medical people while 30% got drug information from their fellow pregnant women and 10% got drugs from other unnamed sources. On the type of Over-the-counter (OTC) drugs they usually buy, 58% of respondent bought antimalarial, 35% bought anti typhoid and sulphonamides, while 45 bought sedatives. Other OTC drugs they bought include antihistamine(45%), antibiotics(46%). Even 67% bought injectable OTC whenever they desire it. Among the injectable bought were: chloroquine - 33%, analgin - 56%, pentazolin - 35%, morphine - 45%, gentamicin - 45%, heparin - 33%, iron dextran - 12%. Three hypotheses were tested and the results revealed that none of the age, religious and socio economic factors of the respondents has influence on the practice of self medication. In view of these findings, the researcher recommends that the regulations governing the use of drugs, especially antibiotics and teratogens, should be strictly enforced among pharmacists and patent medicine dealers to address indiscriminate administration of drugs to pregnant women.

**KEYWORDS:** Self Medication, Over- The-Counter Drugs, Antibiotics, Injectable

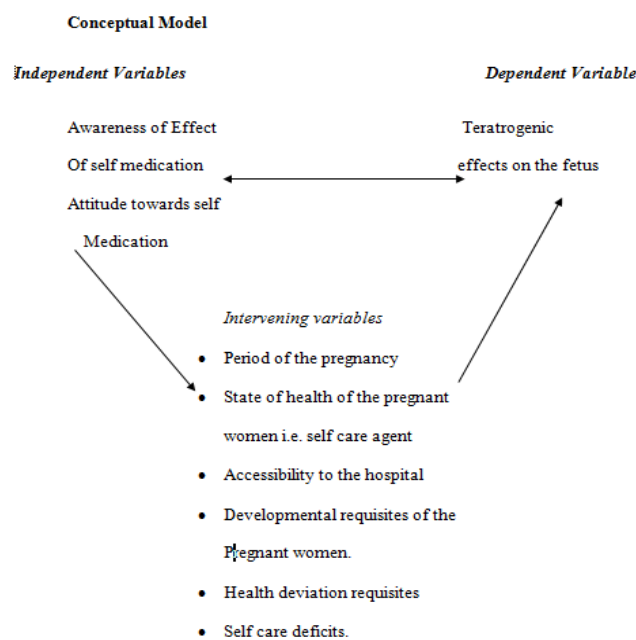
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### INTRODUCTION

Thousands of babies are born deformed and mentally retarded every year as a result of events that occur in the mother's life as early as 3 months after conception. Studies shows that in year 2001, the leading causes of

infant mortality were congenital malformations, deformations and chromosomal abnormalities, which accounted for 20.2% of infants' death (Abosedo, O.A (2004). The study was of the view that some expectant mothers have the belief that everything they do and feel has direct effect on their unborn child. Others, however behave casually assuming that their experiences will have little or no effect on the unborn children. The truth actually lies somewhere between these two extremes. Taylor, Stein and Jongeling (2004) believe that most women are exposed to different types of drug during pregnancy. A study in India has it that a total of 700, 1086 and 686 drugs with a respective average of 1.73, 2.89 and 2.49 drugs per pregnant women were used during first, second and third trimester of pregnancy respectively. These drugs might have been prescribed or bought over the counter for self medication purposes. Homedes and Vgailde (2003) also found out from their studies that there is a risk of gestational hypertension in pregnant women when folic acid supplementation is not adequately complied with. In pregnancy, even drug treatment prevents a special concern due to the danger of potential teratogenic effects of drugs and physiological adjustments in the mother in response to pregnancy. In another study, Damase-Michael, Lapeyre-Metre, Moly, Fourine, and Montastruc(2005) showed that 36%, 19% and 10% of the respondents respectively used common over the counter (OTC) drugs during pregnancy. Fetal deformation is even a small risk when one compares it with the risk to fetal life and that of themother. Klesges, Johnson, Ward and Barnard (2003) observed that infant mortality rate is majorly caused by congenital malformations and drugs. It was accounted that 20.2% of infant death in the United States was caused by congenital malfunctions as compared with 15.1% in 1970. In California alone, the scourge accounts for an average death of 1.3 per 1000 children in the region. The authors further identified the teratogenic effects of drugs as also one of the main causes of malformations (10%) ranking after genetic effects (15%). The high incidence of infant mortality can be assumed to be caused by many factors such as low socio economic status of the populace, recent bombardment of the drug market with herbs and allopathic drugs, poor state of the primary health care institution services and inadequacy in controlling sales of OTC drugs (Obot, (2003). Self medication has been part of Nigerian system and has become a kind of custom among the people. The practices have had series of negative consequences on the health of the people among which are poor pregnancy outcome, prolongation of period of invalid and premature death. When a pregnant woman engages in self medication, the risks to her are double in that at least two lives are involved. Reeves (2009) reported that 70% to 95% of all illnesses are managed by self-care, without the intervention of a doctor because most patients could not afford to wait for non specific time cueing for doctors' consultation. Some patients have even quarried the necessity of taking the trouble of enduring the doctor's diagnostic procedure only to be refer to chemist shops outside the hospital for the purchase of relevant drugs for their ailments. This, they see as unnecessary since they could easily approach the chemist shop to purchase the drugs without the doctor's prescription. The researcher further observed that self-medication is a popular preference as *first response* of individual to illness. During an illness episode, individuals commonly seek information and advice from lay referral or therapy management group. Members of this group engage in self-diagnosis and treatment; they then use their own experience to advise others who seek their help during illness. Maintaining wide and active network becomes especially important for low income and uninsured individuals whose access to formal medical care is limited by financial constraints. In these cases, information about '*effective*' self-care measures, sources of free or reduced cost of professional care form the pattern of uninsured individual response to illness. Family / parents, friends and neighbours usually give their love ones old prescriptions they have tried and seem workable for themselves (Henery and Crother, (2003). Medications are usually prescribed by medicine retailers, traditional herbal practitioners, friends and associates (Vilarino, soares, dasilveria, Rodel, Bartoli and Lemos, 2008). There exists general misconceptions that since OTC drugs are readily available; they can be viewed as safe to use by adults. Ingestion of OTC preparations during pregnancy results in placental transfer and accumulation of these drugs in

the fetus. The fetus lacks the ability to handle pharmaceutical agents since its renal function and metabolic pathway are yet to be fully developed, drug exposure in uterus may produce deleterious effects in the fetus (Kacew, 2009). The predictability of therapeutic effectiveness and safety of drugs during pregnancy using the adults as a model for pharmacokinetics can result in grave consequences in the fetus. Drug toxicity related to the advancement of somatic development of the embryo or fetus can appear at variable stages during pregnancy (Gomes, Maron, Silva, and Siqueira, 2009). Drugs use during pregnancy included those prescribed by health care provider and self prescribed products. Among the most frequently used products identified by the different studies were; analgesics, vitamins/mineral supplements, antacids, antispasmodics, Anti emetics, benzodiazepines and antibiotics (Heney & crother, 2003, Damase-Michael, Lapeyre-Metre, Moly, Fourine and Montastruc (2005). Women need to be made aware of the potential risk they expose their fetus to when engaging in self medication during pregnancy. Health care providers need to explain the risks to health and the specific features of diseases associated with pregnancy that pregnant women should watch and contact doctors for (Bouvoier, Trenque, Gabriel, Quereux and Millart (2003). According to Guyton and Hall (2005), Laueresen (2008), and Wood, Cameron and Fitzgerald (2008), normal physiological changes in pregnancy might mask the deleterious effect of self medication, and irreversible damage might have occur before help could be made available to her. It was based on this premise that the study was conducted. This study investigated the self medication practices among pregnant women attending the State hospital, Asubiaro, Osogbo Nigeria.



### Research Hypothesis

- There is no significant difference between age of pregnant women and knowledge on self medication.
- There is no significant difference between socio economic factor of pregnant women and self medication.
- There is no significant difference between religious belief of pregnant and self medication.

### MATERIALS AND METHODS

The study was conducted among pregnant women attending antenatal unit of the Osun State Hospital, Asubiaro,

Osogbo. Through the use of purposive sampling method, 95 respondents were selected as sample for the study. A self designed questionnaire was used as instrument for data gathering. It comprised 25 questions which were in four sections namely: A which ask questions on demographic data; B consisted of questions on the respondents knowledge about self medication; C was on the respondents’ practices of self medication; and D which consisted of the respondents’ awareness of health consequences of self medication during pregnancy. The psychometric property of the instrument using the cronbach’s Alpha co-efficient was 0.760. At the end, 80 questionnaires were retrieved and analyzed. The findings were presented in simple statistical methods using frequencies, tables, figures and Chi- square test.

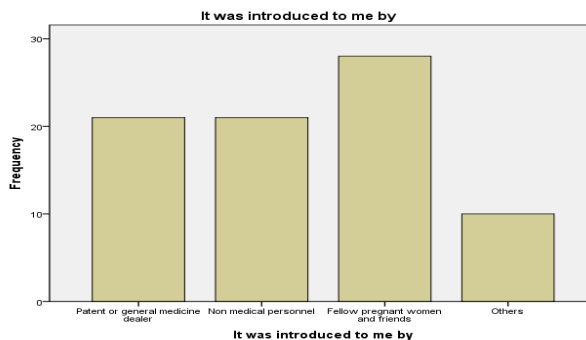
**RESULTS**

The ages of the respondents ranged from 19 to 49 with a mean 28.5. Their occupation were farm produce selling (13.5%), trading (58.8%), and civil servants (16.3%). Also, full housewives among them were 11.3%. Only 62.2% of respondents had secondary education, the rest 35% and 2.5% were primary school holders and illiterates respectively. The religious believe of the respondents revealed that 63.8% were Christians and 36.3% Muslims. Also, 28.8% of the respondents were primigravid women. Questions on self medication practices reveled various views expressed by respondents. This is represented in table 1.

**Table 1: Self Medication Practices of Respondents**

Self Medication Practices	FREQUENCY	
	Yes	No
Have you heard about self-medication?	80 (100%)	-
Self-medication is the use of drugs or medication which are not prescribed or without the knowledge of a qualified health practitioner.	80 (100%)	-
Self-medication is an habitual way of life	69 (63%)	11(13.8%)
Does self-medication have any benefit?	68 (85%)	12 (15%)
Is self-medication more economical?	71 (88.8%)	9 (11.3%)
Do you engage in self medication?	69 (86.3%)	11 (13.8%)

When asked for reasons for engaging in self medication, 48% of them said it saves cost of health care, 23% believed valuable time in waiting in hospital are saved for other important endeavour while 33% believed drugs to buy were readily available. On the source of getting drugs in self medication, 20% said they got drugs from patent medicine sellers, another 20% got theirs from other non medical people while 30% got drug information from their fellow pregnant women and 10% got drugs from other sources. See figure 2



**Figure 1: It was Introduced to me by**

On the type of OTC drugs they usually buy, 58% of respondent bought antimalarial like amatem, artemeter lumefantrine, fansidar, 35% bought anti typhoid and sulphonamides like ciprofloxacin, flagyl, septrin, while 45 bought sedatives like valium, phenobarbitone, phenegan. Other OTC drugs they bought include piriton 45%, ampiclox 46%, ampicillin, codein 34%. Even injectables were bought OTC. Among the injectable bought were: chloroquine 33%, analgin 56%, pentazozin 35%, morphine 45%, gentamicin 45%, heparin 33%, iron dextran 12%. When asked how these doctor's prescription based drugs were gotten, the respondents have various means of circumventing the law and getting the drugs from *uncooperative* pharmacists. Their responses are represented in table 2.

**Table 2: Respondents' Ways of Buying Antibiotics and Other Drugs without Presenting Prescription Sheets**

Ways of Getting Drugs without Prescription	Percentage
I usually buy the drugs from medicine sellers who stock them but hid them away from police	67
I usually buy from chemists, but told the attending pharmacist I forget to bring prescription sheet	44
I usually give extra money as gift to attending pharmacist whenever ask for prescription sheet.	23
I do feign urgency of the drug need whenever the attending pharmacist ask for prescription sheet	55
I do write prescription for myself, using the doctor's language I have mastered	34

### Testing of Hypothesis

**Hypothesis 1.** There is no significant difference between the ages of pregnant women and their knowledge on self-medication.

**Table 3: Age of Pregnant Women and Knowledge of Self Medication**

Crosstabulation Count				
	Age (Year)	Self-medication is an Habitual Way of Life		Total
		Yes	No	
Age	21-30	51	9	60
	31-40	13	2	15
	40& above	5	0	5
<b>Total</b>		<b>69</b>	<b>11</b>	<b>80</b>

**Table 4**

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	0.878 <sup>a</sup>	2	.645
Likelihood Ratio	1.559	2	.459
Linear-by-Linear Association	.633	1	.426
N of Valid Cases	80		

$X^2$  calculated = 0.878,  $\chi^2$  table = 5.991, df = 2, p = 0.05.

Since the t- value (5.991) is greater than  $X^2$  (0.878) at 0.05 significance level, therefore the hypothesis is accepted, meaning that there is no significant difference between age of pregnant women and their knowledge on self medication.

**Hypothesis 2:** There is no significant difference between the socio-economic factors of pregnant women and self-medication.

**Table 5: There is no Significant difference between the Socio Economic Factor of Pregnant Women and Self Medication Practices**

Cross Tabulation				
Count				
		Is Self-Medication More Economical?		Total
		Yes	No	
Occupation	Farming	9	2	11
	Civil Servant	40	7	47
	Full House Wife	22	0	22
<b>Total</b>		<b>71</b>	<b>9</b>	<b>80</b>

**Table 6**

Chi-Square Test			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.943 <sup>a</sup>	3	.268
Likelihood Ratio	6.282	3	.099
Linear-by-Linear Association	3.248	1	.072
N of Valid Cases	80		

$X^2$  calculated = 3.943,  $\chi^2$  table = 7.815, df = 3, p = 0.05

Since the t- value (7.815) is greater than the  $X^2$  (3.943) at 0.05 significance level, therefore the hypothesis is accepted, meaning there is no significant difference between the socio economic factor of pregnant women and self medication.

**Table 7: There is no Significant Relationship between the Religious Belief of Pregnant Women and Their Practice of Self Medication**

Cross-Tabulation				
Count				
		Have you ever Reacted to any of these Drugs?		Total
		Yes	No	
Religion	Christianity	20	31	51
	Islam	7	22	29
<b>Total</b>		<b>27</b>	<b>53</b>	<b>80</b>

**Table 8**

Chi-Square Test					
	Value	Df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	1.880 <sup>a</sup>	1	.170		
Continuity Correction <sup>b</sup>	1.266	1	.261		
Likelihood Ratio	1.934	1	.164		
Fisher's Exact Test				.221	.130
Linear-by-Linear Association	1.856	1	.173		
N of Valid Cases	80				

$X^2$  calculated = 1.880,  $\chi^2$  table = 3.841, df = 1, p = 0.05

Since the t- value (3.841) is greater than  $X^2$  (1.880) at 0.05 significance level, therefore the research hypothesis is accepted, meaning that there is no significant relationship between the religious belief of pregnant women and their knowledge on self medication.

## **DISCUSSIONS**

According to Taylor, Stein and Jongeling (2004), most women are exposed to different types of drug during pregnancy. The results of the present study is in line with this observation as majority of respondents engage in self medication. Though they knew it is illegal to buy antibiotics and other prescription based drugs on over-the-counter basis, yet they devised various means of getting their required drugs at all cost. This showed that self medication is a serious problem in Nigerian society that something drastic need to be done to curb. Poverty could be another major factor for engaging in self medication as majority of the respondents saw it as being economical than going to hospital since all payment for consultation, diagnostic investigations, therapeutic procedures are avoided. According to Reeves (2009), self medication has been part of Nigerian system from time immemorial and has become part of custom among the people. The practices have had series of negative consequences on the health of the people among which are poor pregnancy outcome, prolongation of period of invalid and premature death. The results of the present study is in line with this discovery as majority of the respondents affirmed they could not do without self medication. Many of them said they would first think of drug to buy, rather than reporting in the hospital whenever they have any ailment. The thought of self medication as the first line of management is usually spontaneous in the people. However, the respondents have viable reasons for engaging in self medication when considering valuable time being wasted in waiting for doctor's consultation. In many occasions too, necessary drugs for patients' ailment are not available and they would have to be referred to chemist shops outside the hospital for the purchase of such drugs. These lapses were discovered to be the main reasons why of the respondents engage in self medication. Even the teaching and specialist hospitals do refer their patient to buy drugs from outside the hospital. In such situations, the respondents could not be blamed for finding self medication as quicker alternative of attending to their health needs. This discovery is in line with the observation of Reeves (2009). The three hypotheses tested revealed that none of the age, religious and socio economic factors of the respondents has influence on the practice of self medication. In view of these findings, the researcher recommends that more awareness should be raised among pregnant women on the use of medications no matter the nature or gravity of the ailment to ensure the safety of the mother and child. Also, the regulations governing the use of drugs, especially antibiotics and teratogens, should be strictly enforced among pharmacists and patent medicine dealers to address indiscriminate administration of drugs to pregnant women.

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