

# Self medication practice among pregnant women attending antenatal clinic in selected hospitals in Jos, Nigeria

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## Abstract

A considerable proportion of pregnant women are exposed to drugs that have potential harm to their fetus. The aim of this study was to evaluate self-medication among pregnant women attending antenatal clinics in Jos. A convenience sampling was used to draw 120 participants from three selected hospital. Results reveal a high prevalence of self medication (85%) among the study group. Reasons for self medication were that, doctors are scarce and expensive to see, prior experience about the drug and illness is minor. The most frequently used category of drugs in this study was analgesic followed by antimalarials, vitamins, antacid, antibiotics and herbal remedies. It was concluded that dangers of using drugs in pregnancy should be emphasized during antenatal classes and women should not be allowed to have access to prescriptions.

## Keywords

Self-Medication, Drugs, Pregnant Women, Antenatal Clinic, Jos

## **1. Introduction**

Self-medication is a universal challenge that requires attention because of the potential threat not only to the woman but also to her unborn child. In most developing countries such as Nigeria where the health system is not efficient, the likelihood that women will self medicate is high. There is increasing evidence that self-medication among pregnant women is common in many developing nations(Abasuibong et al, 2012). Self medication can be defined as the use of medication by a patient on his own initiative or on the advice of pharmacists or lay person instead of consulting a medical practitioner (WHO 2008). Many drugs are contraindicated in pregnancy and not many women know which drug is dangerous to them and their unborn child. Scarcity of Medical personnel and difficulty in seeing the available once has been identified as one of the reasons for self-medication in Nigeria. (Emmanuel et al,

2011). Achieving the millennium development goal 4 and 5 means that maternal and child health must be given the attention it deserves. Controlling self-medication among pregnant women could go a long way to reduce incidence of drug related abortion, congenital malformation and maternal and child mortality related to drug misuse.

Evaluation of self medication and understanding the determinants of self-medication will be useful in planning an effective program for controlling it.

#### **1.1. Statement of the Problem**

Every day, about 2,300 under-five and 145 women of child bearing age are lost in Nigeria, making the country the second largest contributor to the under-five and maternal mortality rates in the globe. (UNICEF, 2013). There are very few programs for the control of self medication despite its adverse impact on pregnancy (Aasiubong et al 2012). Although self-medication is not a direct cause of maternal and child mortality, consequences of self-medication could lead to abortion and subsequently death. If this high maternal and child mortality most be significantly reduced, more attention must be focused on health promotion activities of women and children such as control of self-medication. There are several Studies on self-medication in Nigeria but very scanty studies were conducted among pregnant women in this area. Therefore, this study attempted to evaluate selfmedication practice among pregnant women in Jos with a view to establishing baseline information that may be useful to midwives and other health workers in health educating pregnant women.

#### **1.2. Specific Objectives**

- 1 To determine the prevalence of self medication among pregnant women.
- 2 To reveal reasons for self medication among pregnant women.
- 3 To identify the common cause and illness/symptoms that necessitates self medication.
- 4 To identify drugs commonly used in self medication.
- 5 To describe the relationship between age, educational level and self-medication.

#### **1.3. Significance of Study**

The findings from this study provide baseline information about the current prevalence of self-medication and related factors. This is useful in planning a health education program that can be implemented during antenatal sessions and public enlightenment.

#### **1.4. Research Hypothesis**

 $H_{01}$ : There is no significant relationship between age and self medication among pregnant women.

 $H_{02}$ : There is no significant relationship between educational level and self medication among pregnant women.

#### **1.5. Literature Review**

Self-medication is a global phenomenon that occur in "people of all socio-demographic categories" (Sachan et al, 2012). Self medication can be define as the selection and used of medicines by individuals to treat self-recognized conditions or symptoms (Ruiz, 2010). The prevalence rate is high all over the world, up to 68% in European countries (Bretagne et al., 2006). The prevalence rates are higher in some countries. For example, Klemen et al (2010) reported a prevalence of 93% in Slovenia among students. Rohit et al (2010) reported a prevalence of 87% in north India, while Emmanuel et al (2011) reported an incidence of 76.2% Nigerian students. Furthermore, a study of pregnant women in Ibadan Nigeria revealed that 63.8% of women self medicate.( Yusuf, & Omarusehe, 2011). These figures suggest that prevalence of self-medication is high in many regions of the globe. However, low prevalence rates of selfmedication were reported among pregnant women in Uyo,

Nigeria (27.6%), Southern India (30.5) and addis ababa, Ethiopia (12.4%) by Abasuibong et al (2012), Kulkarni et al (2012) and kebede et al (2009) respectively.

Reasons for self medication by pregnant women have been identified by many studies. Some of which include prevention of abortion, treatment of insomnia, nausea and vomiting, infection and prevention of anaemia (Abasuibong et al, 2012). Others include high cost of consultation of private Doctors (Kalkarni et al, 2012), non seriousness of illness, emergency use and prior experience about illness (Sachan, 2012).

Conditions associated with self medication includes include fever, pain, infection, insomnia (Abasuibong et al, 2012) and malaria (Emmanuel et al, 2011).

Drugs commonly used for self-medication includes analgesics, vitamins antibiotics and herbs (Yusuf & Omarusehe, 2011., Abasuibong et al, 2012 and Emmanuel et al, 2011).

Self medication could be good when properly done because it increase access to medication and relief for patients, the active role of the patient in his or her own health care, reduce burden of governments due to health expenditure linked to the treatment of minor health conditions (Ruiz, 2010). However, self medication could be risky because of incorrect diagnosis, delay in seeking medical advice when needed, infrequent but severe reaction, dangerous drug reaction, incorrect manner of administration, incorrect dosage, incorrect choice of therapy, masking of a severe disease and risk of dependence and abuse (Ruiz, 2010).

# 2. Methodology

A cross-sectional descriptive study was adopted for the study. The population of study was women that attended antenatal clinic at the time of study. A total of one hundred and twenty volunteers participated in the study. They were drawn from the three facilities based on convenience sampling. A questionnaire that was tested for reliability (coefficient of reliability was 75%) and pilot tested was used to collect data. The questionnaire was used as an interview guide for the women who cannot read and write.

Data was analyzed using frequency tables and percentages, descriptive statistics and chi-squared analysis.

Ethical clearance was obtained from the three facilities where the participants were drawn. Verbal informed consent was obtained. Participation was on a voluntary basis and respondents were assured of anonymity and confidentiality.

## 3. Results

Table 1 shows the sociodemographic characteristics of respondents. Majority of the respondents (37.5%) were between the age of 21-25, 22 respondents (18.3%) are between 26-30 years old, 20 respondents (16.6%) are younger in age between 15-20years, 18 respondents (15.0%) were between 31-35, 11 respondents (9.16%) falls between 36-40 years of age while 4 respondents (3.33%) are >40

years and they are the oldest of all the respondents. It was also reveal that 41.6% of respondent have tertiary education, 24.2% have secondary education 23.3% have primary education while 10.8% of the respondent are illiterate or can only read and write but did not go to primary or secondary school. More so, table 1shows that 20.8% of the pregnant women are government employee, 23.3% are employed by private business, 12.5% of the pregnant women are students, 25.0% are self employed by private business, 12.5% of the pregnant women are students, 25.0% are self employed.

Table 1. Sociodemographic characteristics of respondents.

Age	Frequency (N=120)	Percentage (100%)
15-20	20	16.6
21-25	45	37.5
26-30	22	18.3
31-35	18	15.0
36-40	11	9.16
>40	4	3.33
Educational Level		
Tertiary education	50	41.6
Secondary education	29	24.2
Primary education	28	23.3
Others	13	10.8
Occupation		
Government employee	25	20.8
Employed by private business	28	23.3
Student	15	12.5
Self employed	30	25.0
Unemployed	22	18.3
Unemployed	22	18.3

Table 2. Practice of Self Medication by Pregnant Women

Practice	Frequency	Percentage
practice	102	85.0%
Do not practice	18	15.0%
Total	120	100%

Table 2 shows that 85% of the pregnant women practice self medication while 15% do not practice self medication.

Table 3. Illnesses	in which re	spondents seek selj	f medication to treat.
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Illnesses	Frequency	Percentage
Headache/fever	60	33.3%
Malaria	58	32.2%
Gastrointestinal disorders	18	10.0%
Infections	12	6.6%
Common cold and cough	25	13.8%
Others	7	3.8%

Table 3 above shows the Common illnesses (multiple responses were made) in which respondents self medicate; this include 60 (33.3%) of respondents self medicate when they have headache/fever, 58 (32.2%) of respondents self medicate when they have malaria, 18 (10%) of respondents self medicate when they have gastrointestinal disorders, 12 (6.6%) respondents self medicate when they have infections while 25 (13.8%)self medicate when they have common cold and cough and the rest of the respondents 7(3.8%) self medicate with other disease e.g wound and pile.

Table 4. Drugs Commonly Used in Self Medication

Drugs	Frequency	Percentage
Analgesics	70	24.1%
Antimalarals	68	23.4%
Vitamins	50	17.2%
Antacid	42	14.5%
Antibiotics	48	16.5%
Herbal remedies	12	4.1%

Table 4 shows that among the drugs commonly used in self medication, 24.1% (70) used analgesics, 23.4% (68) used anti-malarial, 17.2% (50) used vitamins,14.5%(42) used antacid, 16.5% (48) used antibiotics and 4.1% (12) used herbal remedies (multiple responses were made)

 Table 5. Reasons for practicing or not practicing Self Medication by

 Pregnant Women.

Response	Frequency	Percentage
Doctors are scarce and expensive to see	22	18.3%
Prior experience about the drug	27	22.5%
Illnesses are minor	42	35.0%
No response	16	13.3%
It is dangerous	5	4.1%
It is not good	8	6.6%
Total	120	100%

Table 5 shows reasons for self medication by pregnant women 42 (35.0%) said illnesses are minor 271 (22.5%) says the self medicate because of prior experience about the drug, 22 (18.3) says doctors are scarce and expensive to see, 5 (4.1%) says it is dangerous, 6.6% says it is not good while 16 (13.3%) did not respond.

Table 6. Number of times pregnant women visited a physician

Response	Frequency	Percentage
I see a doctor whenever I am sick	49	40.8
I see a doctor occasionally	53	44.1
I don't see a doctor at all	18	15.0
Total	120	100

Table 7. Cross tabulation of age against self medication.

Age ( years)	Practice	Do not practice	Total
15-20	19	1	20
21-25	42	3	45
26-30	16	6	22
31-35	15	3	18
36-40	9	2	11
>40	1	3	4
Total	102	18	120

X<sup>2</sup>= 20.08, d.f=5, critical value= 11.070, p<0.05

Table 8. Cross tabulation of education against self medication.

Education	Practice	Do not practice	Total
Tertiary education	42	8	50
Secondary education	25	4	29
Primary education	25	3	28
Others	10	3	13
Total	102	18	120

X<sup>2</sup>=1.31, d.f=3, critical value=7.815, p>0.05

Table 6 above shows that 49 (40.8%) of the respondents

claim that they see a doctor whenever they are sick, 53 (44.1%) see doctors occasionally while 18 (15.0%) claim they did not see doctors at all.

The chi-square analysis of table 7 indicated that the relationship between age and practice of self medication is statistically significant because calculated chi-square is greater than the critical value. There  $H_{01}$  is rejected.

Analysis in tables 8 reveals that there is no significant relationship between educational level and practice of self medication because the calculated chi-square is less than the table value. Therefore,  $H_{02}$  is accepted.

## 4. Discussion of Findings

Results obtained from this survey shows that most of the respondents are between the ages of 21 and 25 years (37.5%) with a mean age of 23 years (SD $\pm$ 4.5). This shows that these women are in their active reproductive age. Most of the women (89.1%) had formal education with 44.1% employed. These findings suggest that, women cut across various sociodemographic characteristics. Therefore finding could be generalized for all pregnant women in these setting. Findings also revealed that 84.9% see a doctor whenever they are sick or occasionally when sick while the rest (15.0%) do not see a doctor at all. This means that apart from those that will not like to see a doctor; there are some that see a doctor only when they feel it is necessary or convenient for them. This finding is unexpected because the high prevalence of formal education should have translated into high patronage of hospital whenever there is a health problem. The implication for nursing practice is that, midwives and other health workers need to encourage women to always see a doctor when sick and avoid using other alternatives.

The statistical test in table 7 suggested that practice of selfmedication is different across ages. The younger a person is, the higher the tendency of self-medication. This implies that health education about the dangers of self medication should be focused more on younger women in a situation of scarce resources. This finding is consistent with Kulkarni et al (2012) and Baig (2012). On the other hand, self medication was not significantly associated with levels of education among the study group. The practice of self medication by women of various educational levels is the same in this setting. Therefore, educational level is not a strong determinant of self medication among pregnant women in this setting.

Self medication can be dangerous if not proper done. It could lead to substance abuse and even addiction especially if analgesics are involved. Prevalence of self-medication among the study population was high (85%). This agrees with what was reported by Abasuibong et al (2012), Yusuf & Omarusehe (2011) and Emmanuel et al (2011) where they all reported a high prevalence of self-medication. The high prevalence of self medication may be associated with the age of respondents.

Pregnant women in Jos practice self medication because doctors are scarce and expensive to see (18.3%), prior experience about the drug (22.5%), and illness is minor

(35%). This finding is suggesting that if access to doctors is made easier and women have limited access to their prescriptions, self medication might be reduced and controlled in this setting.

The few of respondents who reported not self medicating gave reasons why they did not self medicate during pregnancy. These reasons are that drugs are dangerous (4.1%), and it is not good (6.6%). These findings are consistent with the position of Kulkarni et al (2012), Sachan (2012) and Emmanuel et al (2011). Self-medication can be effectively controlled if women are given proper education about the danger of taking a drug that is not prescribed by a Doctor. Further, women should not be allowed to access prescription sheet because if they do, they are likely to self-medicate with the previous prescription.

Common illnesses in which respondents self medicate include headache/fever malaria gastrointestinal disorders, common cold and cough. A few self medicate with other disease like wound and pile. The most frequently used category of drugs in this study was analgesic. This could mean that the major health concern of these women could be pain management and this has implication for nursing care during antenatal care. The nurse and other health care personnel should assist these women in managing pain. Other drugs involved in self-medication are anti malarial, vitamins, antacid, antibiotics and herbal remedies. These findings are consistent with most findings highlighted in the literature review. The use of herbal drugs is dangerous because of potential over dosage and risk to the foetus. Further study is warranted to understand the used of herbal remedies by pregnant women in this setting. Self medication with antibiotics is one of the major causes of resistance to antibiotics (Bennadi, 2013).

# 5. Conclusion

Prevalence of self medication among pregnant women attending antenatal clinic in Jos is high. Reasons for self medication were that, doctors are scarce and expensive to see, prior experience about the drug, illness is minor, drugs commonly involved in self medication are analgesic, anti malarial, vitamins, antacid, antibiotics and herbal remedies. Common illnesses in which respondents self medicate include, headache/fever, malaria, gastrointestinal disorders, infections, common cold and cough and other disease like wound and pile.

## Recommendation

- 1 Midwives and other health workers need to encourage women to always see a doctor when sick and avoid using other alternatives.
- 2 Health education about the dangers of self medication should be focused more on younger women in a situation of scarce resources.
- 3 Access to Doctors should be made easier by pregnant women

- 4 Pregnant women should have limited access to their prescriptions.
- 5 Women need to be urgently informed and reminded during antenatal classes not to indulge in self medication but rather see a Doctor whenever they have any health concern no matter how minor it is. The effects of drugs in pregnancy should be taught during antenatal visits.
- 6 Further study

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