SOCIODEMOGRAPHIC PREDICTORS OF SELF-MEDICATION PRACTICES AMONG PREGNANT WOMEN IN ISOKO SOUTH LOCAL GOVERNMENT AREA, DELTA STATE

Lawrence Adhowhoarie Oboma
Department of Sociology and Anthropology
University of Uyo, Nigeria
itxlawsobo@gmail.com

Victor Effiong Ben
Department of Sociology and Anthropology
University of Uyo, Nigeria
victorben@uniuyo.edu.ng

Abstract

Every day, all over the world, pregnant women act on their health conditions without consulting qualified health personnel. Thus, this study sought to examine the relationship between sociodemographic predictors and self-medication among pregnant women in Isoko South Local Government Area, Delta State. A cross-sectional descriptive survey was conducted among 248 pregnant women attending antenatal clinics in selected communities utilizing multiple sampling procedures. Quantitative data were collected through structured self-administered questionnaire and analysed using both descriptive and inferential statistics. Among the respondents 56.5% (n=140) were single, with a mean age of 30.6 years, indicating that majority of the respondents were young women in their active reproductive age, and a notable 61.7% (n=153) engaged in self-medication practices. Results of the Chi-square (χ^2) tests at 0.05 significance threshold, revealed a significant relationship between age, education level and self-medication practices and no significant relationship between marital status and self-medication practices among pregnant women in Isoko South Local Government Area. Based on the findings, actionable recommendations such as health education and awareness campaigns, and community support systems strengthening are made to address the underlying sociodemographic predictors of self-medication to promote safe maternal healthcare practices for pregnant women in the study area.

Keywords: **Self-medication, Pregnancy, Sociodemographic Predictors, Maternal health, Nigeria, Public health**

Introduction

Self-medication is a widely practiced method of health seeking, and the first option in most illness episodes (Martins *et al.*, 2002), particularly among the middle class and low income families in developing countries. According to WHO (2000), self-medication can be defined as the use of non-prescribed medicines to treat self-diagnosed disorders or symptoms, or the intermittent or continued use of a prescribed medication for chronic or recurrent disease or symptoms. Azami-Aghdash *et al.* (2015) defined self-medication as the act of using medications by patients or individuals to treat self-diagnosed disorders or symptoms on their own initiative. While some authors define self-medication as the use of any medication not prescribed by a licensed health practitioner, others widen their definition to include any alteration to the recommended dose guidelines undertaken by the patient (Aljoher *et al.,* 2018). It is also the practice of obtaining and consuming medicines without the advice of a physician either for diagnosis, prescription or surveillance of treatment (Lacroix *et al.*, 2000).

Self-medication is a global health phenomenon, this implies that as a health seeking behaviour, it is not limited to a particular group of people but rather transcends race, age, occupational status, gender, culture, and other such categorisations (Afolabi, 2008). To Sleath *et al.* (2001), patient's personal health practice is becoming an increasingly important component of health care in both developing and developed countries. The phenomenon is common in the developing countries of Asia, Latin America and Africa particularly in the sub-Saharan region where nearly 80 percent of their population depend on its use as the first basis of health care (Boateng, 2015; Aljoher *et al.*, 2018). In most developing countries such as Nigeria where the healthcare system is not efficient (Emmanuel *et al.,* 2014), the likelihood of self-medication in the population is high, and very alarming particularly among pregnant women.

Pregnancy is a normal biological process that is usually accompanied by many interrelated physiological changes that need distinct care and attention (Asfaw *et al.*, 2016). For most women, pregnancy period is often characterized by irregular intake of pain killers. Mbarambara *et al.* (2016) describe the period as one that a pregnant woman takes medication to alleviate pregnancy related symptoms. It is a physiological condition capable of influencing the pharmacokinetic and pharmacodynamics disposition of drugs (Joseph *et al.*, 2017). Evidently, many drugs are contraindicated in pregnancy and not many women know which drug is dangerous to them and their unborn child (Emmanuel *et al.*, 2014). Therefore, drug treatment and prescriptions require special attention to take care of the health of mother and unborn child.

Although, existing literature examined patterns of self-medication and its prevalence in some parts of Nigeria, there is a paucity of empirical research exploring the predictive role of sociodemographic factors in shaping self-medication practices among pregnant women in Isoko South Local Government Area, Delta State. This sociological study, therefore, sought to address this gap by examining the relationship between sociodemographic predictors such as age, educational attainment, socioeconomic status, marital status, parity, and self-medication practices among pregnant women in the context of Isoko South Local Government Area, Delta State.

Review of Related Literature

In a World Health Organization (WHO) survey from 38 countries (25 developing and 13 developed countries), it was reported that in many parts of the world up to 80% of illness episodes are self-medicated with modern medicines and even when formal health care channels are used, it is often the consumer not the prescriber who determines whether and how the medicines are used (WHO, 2000). Self-medication is a serious problem in sub-Saharan Africa, with reports of high prevalence of the practice in studies conducted in many countries across the continent, Ghana 70 percent (Donkor *et al.,* 2012); Sudan 73.9 percent; Burkina-Faso 71.9 percent (Quedraogo *et al.,* 2015). In Nigeria, similar to the situation across the continent, 85 percent (Omolase *et al.,* 2007); high self-medication prevalence rates were also obtained in studies conducted in many cities across the country, including Ibadan 63.8 percent (Yusuf and Omarushe, 2011); Uyo 72.4 percent (Abasiubong *et al.,* 2012) and Jos 75.4 percent (Auta *et al.,* 2012).

According to Attahiru *et al.* (2018), a striking feature of the epidemiology of self-medication in Nigeria is the alarmingly high prevalence of the practice in the rural populations in the country. In a study conducted among rural residents in Lagos State, Nigeria. Ayanwale *et al.* (2017) reported 92.3 percent prevalence of self-medication, while another study Arikpo *et al.* (2009), conducted in rural communities of selected Local Government Areas (LGAs) of Cross River and Akwa Ibom States of Nigeria reported that self-medication was the only treatment option available for 99.4 percent of the population studied. Globally, self-medication practice during pregnancy has been increasing and is found to be high in many regions of the world. Studies have found that self-medication practice is high during pregnancy in Europe (Western, Northern, and Eastern); North and South America and Australia (Kureshee and Dhande, 2013; Beyene and Beza, 2018); Yazd, Iran (Baghianimoghadam, 2013); Hyderabad, Pakistan (Bohio *et al.,* 2016).

However, low prevalence rates of self-medication were reported in Peru (Miní *et al.,* 2012); Brazil (16.4%), and Arak city, Iran (Shamsi and Bayati, 2010). A study conducted by Mbarambara *et al.* (2016) in the Democratic Republic of Congo found that majority, 59.9 percent of pregnant women used self-medication. Studies conducted in different parts of Nigeria revealed that pregnant women self-medicate. Abasiubong *et al*. (2012) revealed that 72.4 percent of pregnant women in Uyo self-medicate, findings from Adanikin and Awoleke (2016) revealed that 31.5 pregnant women attending antenatal in Ado-Ekiti practice self-medication, Yusuf and Omarusehe (2011) revealed that in Ibadan 63.8 percent of pregnant women are involved in self-medication practices, and Emmanuel *et al.* (2014) revealed that 85 percent of pregnant women in Jos practiced self-medication. Similarly, in Ethiopia, an institution-based study conducted by Abeje *et al.* (2015) in government health centres in Bahirdar showed that pregnant women reported involvement in self-medication practices.

Mbarambara *et al.* (2016) revealed that there was no significant relationship between age and use of self-medication practice. The study revealed that respondents aged between 25years and above, have reported the highest self-medication practice. Also, findings from the study differ from the study conducted by Befekadu *et al.* (2014), which revealed that significant association was observed between self-medication practices with age. Emmanuel *et al.* (2014) revealed that the practice of self-medication is different across ages. The younger a person is, the higher the propensity of self-medication.

There have been attempts to suggest a relationship between self-medication and people's employment status. For instance, Figueiras *et al.* (1999) posit that self-employed people are often independent and are used to making autonomous decisions about their lives including their health. This independence, in addition to the fact that self-employed people may be unwilling to leave their businesses unattended and visit the hospitals, especially when the disease condition is considered as not so serious might also have contributed to the high incidence of self-medication within this sample of respondents. Moreover, Emmanuel *et al.* (2014) revealed that majority of respondents in their study who self-medicate were self-employed or unemployed, Boateng (2015) revealed that self-employed and unemployed respondents were more likely to self-medicate than their employed counterparts.

Searches of literature have shown attempts to establish a relationship between marital status and self-medication. Boateng (2015) revealed that majority (74.3%) of the respondents who practice self-medications were married. Gebremedhin and Gomathi (2014) reported that 95.5% of the respondents who took part in their study were married and a bivariate logistic regression shows that respondent's marital status was significantly associated with self-medication. Attempts have also been made to study the association between educational statuses and self-medication. Befekadu, *et al.,* (2014), mentioned that low maternal education increases respondent's chances of practicing self-medication. Afolabi (2008) conducted a study to determine the factors influencing the pattern of self-medication in adult Nigerian population. The study revealed that, majority of the market women who self-medicated were with low level of education or has no formal education.

Similarly, in Porandokht *et al.* (2015), educational status was found to be associated with self-medication; high prevalence was seen in people with a university education. Findings from the study revealed that respondents with higher educational level are more likely to self-medicate compared to respondents with low level of education. In the same vein, some research results such as Figueiras *et al.* (2000) show that the prevalence of self- medication in educated people is more because of their access to information about drugs. However, similar studies revealed no association between educational status and self-medication. Okumura *et al.* (2002) argues that higher education increases self-confidence about accurate drug use and with-it probability of self- medication. In the views of Afolabi (2008), the high rate of peoples' inability to read labels on drugs and poor access to medical information in most developing countries could be a major contributing factor to high prevalence of self–medication.

Moreover, Aishwaryalakshmi *et al.* (2012) stressed that the educational level of a pregnant woman can influence practice of self-medication both positively and negatively. The ability to read drug labels and have basic knowledge on the pharmacological properties of drugs, makes one better informed on the harmful effects of drugs and hence will appreciate the need to see a physician before taking any medicine. However, a pregnant woman with no formal education or low level of education cannot read drug labels, to know the composition of drugs, whether it is safe for consumption, is most likely to practice self-medication. Also, findings of Aishwaryalakshmi *et al.* (2012) further indicated that more than 65 percent of the information of disease or illness symptoms and conditions; instructions on drug therapy given by physicians will be forgotten immediately by patients with lower educational level. Lack of communication and lack of patient uptake of information may account for up to 55 percent of patient's deviation from prescribed drugs. In explaining this phenomenon, Abasiubong *et al.* (2012) suggests that the level of education of a person may also influence whether that person will self-medicate conventional drugs or unconventional drugs. People with low levels of education are argued to be more likely to abuse unconventional medications than those with high levels of education.

Research Methods

This study adopted a cross-sectional descriptive survey design. The design employed quantitative research approach to ensure objective measurement and statistical analysis of data collected from the respondents. It focused on an area interspersed with streams, lakes, canals and rivers, and it is made up of eleven (11) communities namely; Aviara, Emede, Enhwe, Erohwah, Igbide, Irri, Okpolo, Oleh, Olomoro, Umeh and Uzere. Predominantly, the people undertake much of farming, fishing, trading, while some others are found in civil service and other subsistence activities. The target population comprises pregnant women attending antenatal clinics in selected healthcare facilities across the area. Ensuring statistical power and representativeness, the Cochran's formula was used to estimate the sample size using the following criteria: an assumed pregnancy rate of 23% (0.23) of the total population of women of childbearing age in the area (NDHS, 2013), a desired precision or margin of error of +/-5% (0.05), a confidence level of 95% (1.96), thus, producing a sample size of 272.

The primary data collection instrument was a structured questionnaire, developed based on expert consultations and review by maternal health specialists, pharmacists, and public health researchers. A multiple sampling procedure was employed to ensure representativeness. The area was stratified into the two existing geo-political constituencies; Constituency I comprised of Emede, Irri and Oleh communities and Constituency II comprised of Aviara, Enhwe, Erohwah, Igbide, Okpolo, Olomoro, Umeh and Uzere communities. Purposive sampling was used to select the three communities in Constituency I while the Fish bowl method was used to select three communities from constituency II, the selected communities were: Uzere, Olomoro and Enwhe. Thus, six (6) communities out of the eleven communities in the area participated in the study. Cluster and snowball sampling techniques were used to select the 272 pregnant women (respondents) from Hospitals, clinics, primary health centres and maternity/Traditional Birth delivery homes in the selected communities.

The questionnaire was administered in-person by a team comprising five members at selected antenatal clinics. A letter introducing the research team, topic/objective and proposed respondents was presented to the administrative heads of selected facilities and verbal consent was obtained from respondents before data collection. To ensure a high response rate, the respondents were allowed ample time to complete the questionnaire, and anonymity was maintained. The retrieved questionnaires were adequately checked for data quality and coded using coding manual. Descriptive statistics (frequencies and percentages) were used to summarize the data and the formulated hypotheses were subjected to Chi-square (χ^2) statistical test at p-value of 0.05.

Data Presentation

Table 1: Administration of the Research Instrument

Community	Administered Questionnaires	Retrieved Questionnaires	Voided Questionnaires	Valid Questionnaire
Emede	34	33	1	32
Enwhe	28	27	0	27
Irri	43	40	2	38
Oleh	64	59	3	56
Olomoro	47	45	1	44
Uzere	56	53	2	51
Total	**272**	**257**	**9**	**248**
Response Rate	**91.2%**			

Source: Fieldwork (2019).

Table 1 gives a detailed distribution of the questionnaire based on the calculated sample size. The table indicates that a total of Two Hundred and Seventy-Two (272) copies of the self-administered questionnaires, were distributed to pregnant women in the selected communities. Two Hundred and Fifty-Seven (257) copies were retrieved. Nine (9) copies of those retrieved were voided because they were not

properly filled by respondents, probably due to inadequate guidance, lack of interest in the study and/or time constraint. Consequently, the voided questionnaires were not used for the study. Two Hundred and Forty-Eight (248) copies were adequately completed and found valid and suitable for presentation and analysis, giving a response rate of 91.2%.

Table 2: Socio-demographic Characteristics of the Respondents (N = 248)

Characteristics	Frequency	Percentage (%)
Age		
15 – 19	16	6.5
20 – 24	43	17.3
25 – 29	61	24.6
30 – 34	53	21.4
35 – 39	39	15.7
40 – 44	23	9.3
45 – 49	13	5.2
Mean Age = 30.6 SD±7.8		
Marital status		
Single	140	56.5
Married	105	42.3
Divorced/Separated	0	0
Widowed	3	1.2
Religion		
Christianity	219	88.3
Islam	4	1.6
Traditional Religion	18	7.3
Others	7	2.8
Educational level		
No formal Education	11	4.4
Primary	73	29.4
Secondary	113	45.6
Tertiary	51	20.6
Employment Status		
Unemployed	92	37.1
Self-employed	103	41.5
Employed	53	21.4

Source: Fieldwork (2019).

Table 2 gives a detailed description of the socio-demographic characteristics of the respondents. **Age:** The table indicates that respondents between the ages of 15-19 years, constituted 5.6 % (n= 16), 20-24 years, constituted 17.3 % (n= 43), 25-29 years, constituted 24.6 % (n= 61), 30-34 years, constituted 21.4 % (n= 53), 35-39 years constituted 15.7 % (n= 39), respondents between the age bracket of 40-44 years constituted 9.3 % (n= 23), while 45-49 years constituted 5.2 % (n= 13). **Marital Status:** The table indicates that 42.3% (n= 105) of the respondents were married, 56.5% (n= 140) were single, 1.2% (n= 3) were widowed while divorced/separated had no response. **Religion:** The table indicates that 88.3% (n= 219) of the respondents were Christians, 7.3% (n= 18) practiced African Traditional Religion, 1.6% (n= 4) were Muslims and 2.8% (n=7) practiced other forms of religion. **Level of Education:** The table indicates that 20.6% (n=51) of the respondents had attained tertiary level education, 45.6% (n=113) had completed secondary education, 29.4% (n= 73) had completed primary education while 4.4% (n= 11) were with no formal education at all. **Employment Status:** The table indicates that 41.5% (n= 103) of the respondents were self-employed, 21.4% (n= 53) were employed while 37.1% (n= 92) were unemployed.

Table 3: Distribution of respondents that took drugs without a doctor's prescription

Category	Frequency	Percentage (%)
Yes	153	61.7
No	95	38.3
Total	**248**	**100**

Source: Fieldwork (2019).

Table 3 shows the responses of respondents on Item 19 of the questionnaire. The table indicates that 61.7% (n=153) have taken drugs\medicine without a doctor's prescription since they became pregnant, while 38.3% (n=95) have not taken drugs\medicine without a doctor's prescription since they became pregnant.

Table 4: Distribution of respondents' frequency of taking drugs\medicine without a doctor's prescription

Category	Frequency	Percentage (%)
Once	43	28.1
Twice	56	36.6
3 Times	30	19.4
More than 3 Times	24	15.7
Total	**153**	**100**

(This calculation excludes women who have not taken drugs/medicine without a doctor's prescription since they became pregnant)
Source: Fieldwork (2019).

Table 4 shows the responses of respondents on Item 20 of the questionnaire. The table indicates that 28.1% (n=43) had taken drugs at least once without a doctor's prescription, 36.6% (n=56) took drugs/medicine at least twice without a doctor's prescription, 19.4% (n=30) took drugs/medicine at least 3 times without a doctor's prescription while 15.7% (n=24) took drugs/medicine more than 3 times without a doctor's prescription since they became pregnant.

Test of Hypothesis

The formulated hypotheses were tested using the Chi-square (χ^2) statistical technique $\chi^2 = \sum \left(\frac{fo-fe}{fe}\right)^2$ where Σ = summation, *Fo* =Frequency Observe and *Fe* = Frequency Expected. Calculating the Frequency Expected $Fe = \frac{CT \times RT}{GT}$ Where *CT* = Column Total for each cell, *RT* = Row Total for each cell, *GT* = Grand Total, and to compare calculated χ^2 value with table value at 0.05 level of significance, Degree of Freedom (*DF*) was ascertained thus: $DF = (R-1)(C-1)$ where *R* = Number of Rows and *C* = Number of Columns.

Hypothesis One: There is no significant relationship between age and self-medication practices among pregnant women in Isoko South Local Government Area.

Table 5: Contingency Table Showing Observed Frequency for Hypothesis One (Age)

Age	Yes	No	Row Total (RT)
15 – 19 years	10 (A)	6 (B)	16
20 – 24 years	32 (C)	11 (D)	43
25 – 29 years	42 (E)	19 (F)	61
30 – 34 years	23 (G)	30(H)	53
35 – 39 years	26 (I)	13 (J)	39
40 – 44 years	15 (K)	8 (L)	23
45 – 49 years	5 (M)	8 (N)	13
Column Total (CT)	**153**	**95**	**248 Grand Total (GT)**

χ^2=15.26 df = 6 χ^2Table value = 12.59 P-value = 0.018328
Source: Fieldwork (2019).

Hypothesis Two: There is no significant relationship between marital status and self-medication practices among pregnant women in Isoko South Local Government Area.

Table 6: Contingency table showing data on marital status

Marital Status	**Yes**	**No**	**Row Total (RT)**	
Single	84 (A)	56 (B)	140	
Married	68 (C)	37 (D)	43	
Widowed	1 (E)	2 (F)	61	
Column Total (CT)	**153**	**95**	**248**	**Grand Total (GT)**

χ^2=1.76 df = 2 χ^2 Table value = 5.99 P-value = 0.414783

Source: Fieldwork (2019).

Hypothesis Three: There is no significant relationship between educational level and self-medication practices among pregnant women in Isoko South Local Government Area.

Table 7: Contingency Table Showing Frequency for Hypothesis Three (Educational Level)

Level of Education	**Yes**	**No**	**Row Total (RT)**	
No formal Education	9 (A)	2 (B)	11	
Primary Education	58 (C)	15 (D)	73	
Secondary Education	67 (E)	46 (F)	113	
Tertiary Education	19 (G)	32 (H)	51	
Column Total (CT)	**153**	**95**	**248**	**Grand Total (GT)**

χ^2= 24.9 df = 3 χ^2Table value = 7.815 P-value = 0.000016

Source: Fieldwork (2019).

Results and Findings

This section discussed the findings from the study in relation to the socio-demographic features of the respondents, the objective of the study and the formulated hypotheses that guided the study. Out of the 272 questionnaires administered to respondents based on the estimated sample size, 248 questionnaires were retrieved and completed for analysis. This represented a response rate of 91.2% (Table 1) and was considered adequate for analysis and reporting. The response rate (91.2%) in this study was comparatively high as compared to some other studies conducted previously on the same subject. This discrepancy in result could be due to socio- economic characteristics of the respondents and difference in the methodologies adopted in these studies. The results obtained from this survey show that most of the respondents were between the ages of 25 and 29 years (24.6%) with a mean age of 30.6 (SD±7.8). This shows that the respondents are in their active reproductive age. Most of the respondents (45.6%) had secondary education with (41.5%) self-employed and (56.5%) were single. Majority of the respondents were Christians (Table 2). These findings suggest that, respondents cut across various socio-demographic characteristics, therefore findings could be generalized for all pregnant women in the study area.

The study focused on age, marital status and the educational level as variables of interest to achieve its objective. Majority of the respondents who were engaged in self-medication practices belong to the age group of 20-29 years (Table 5). There is high prevalence of self-medication practices among the respondents in this age group because, most of the respondents from this age group were primigravida and have never experienced the discomfort associated with pregnancy. This inexperience of most pregnant women propels them to treat any illness/symptoms, pain and discomfort they might have considered unbearable or perceived as minor with drugs by purchasing drugs from patent medicine shops/pharmacies, friends, relatives, traditional healers, other pregnant women as well as taking left over drugs without prescription. This result is in line with a study conducted by Mbarambara *et al.* (2016) which revealed that, respondents aged between 25 and 35 years reported the highest prevalence of self-medication. The finding is also consistent with that of Emmanuel *et al.* (2014), which revealed that the younger a person is, the higher the propensity of self-medication.

The relationship between age and self-medication practices among pregnant women in the study area was investigated. The calculated χ^2 value (15.26) was greater than the table value (12.59) at 0.05 level of significance and degree of freedom of 6 (Table 5), therefore, the null hypothesis which states that there is no significant relationship between age and self-medication practices among pregnant women in Isoko South Local Government Area was rejected. The study thus, concluded that age is a strong determinant of self-medication among pregnant women, as younger and first-time pregnant women exhibited higher self-medication tendencies in the study area, often influenced by misinformation and peer recommendations. This finding is consistent with those of Kulkarni *et al.* (2012); Baig (2012); Befekadu *et al.* (2014) and Emmanuel *et al.* (2014) which revealed a significant relationship between age and self-medication practice. However, this finding differs from that of Mbarambara *et al.* (2016), which revealed that there was no significant relationship between age and self-medication practice. The differences of study results could be due to an unequal age distribution of respondents enrolled in various studies as well as differences in age categorisation.

The study found a high prevalence of self-medication practices among the respondents (most of whom were single) (Table 6). This means that pregnant women who are single are more likely to self-medicate, and this is largely due to the fact that, most single women in the study area were first time in pregnancy, and most were unplanned. This made them treat any illness/symptoms they experienced and in most cases without a physician or health worker prescription. Conversely, the relationship between marital status and self-medication practices among pregnant women was not significant in the study. The calculated χ^2 value (1.76) was less than the table value (5.99) at 0.05 level of significance and degree of freedom of 2 (Table 6), thus, justifying the formulated null hypothesis which states that marital status is not a strong determinant of self-medication among pregnant women in Isoko South Local Government Area. This finding is consistent with that of Gebremedhin and Gomathi (2014) and inconsistent with the findings of Agyei-Boateng (2015).

Regarding educational status, majority of the respondents that were engaged in self-medication attained secondary education (Table 7). The findings from the study revealed that the respondents who attained secondary and tertiary levels of education were found to have engaged more in self-medication practices, when compared to those who attained primary education level or with no formal education. From the data collected, it was observed that most of the respondents with lower educational level had more trust in the health workers advice about the risk of using drugs without consulting health personnel during pregnancy. The prevalence of self-medication among the educated respondents were more because of their access to information about drugs. This finding is consistent with that of Porandokht *et al.* (2015), which revealed that self-medication practices were more among respondents with a university education Okumura *et al.* (2002) revealed that higher education increases self-confidence about accurate drug use and with it the probability of self-medication. Similarly, Figueiras *et al.* (2000) explain that higher education is related with more knowledge of medicine and drugs, less confidence in the doctor, and a greater desire for autonomy or independence over "health decisions. The findings from this study revealed that people with high educational level are more likely to self-medicate compared to people with low educational status.

However, this finding is contrary to that of Abasiubong *et al.* (2012) which suggests that people with low levels of education are more likely to abuse conventional or unconventional drugs than those with high levels of education. Also, the findings contradict those of Afolabi (2008) and Befekadu, *et al.* (2014), which argue that low maternal education increases chances of practicing self-medication. The relationship between educational level and self-medication practices among pregnant women in the study area was investigated. The calculated χ^2 value (24.9) was greater than the table value (7.815) at 0.05 level of significance and degree of freedom of 3 (Table 7), leading to the rejection of the formulated null hypothesis. Therefore, educational level was found as strong predictor of self-medication among pregnant women in Isoko South Local Government Area. This finding differs from that of Emmanuel *et al.* (2014), which revealed that there was no significant relationship between educational level and self-medication practice. This finding however, corroborates those of Porandokht *et al. (*2015); Abasiubong *et al.* (2012) and Aishwaryalakshmi *et al.* (2012) which indicate a significant relationship between educational level and

self-medication practices among pregnant women. Although, Abasiubong *et al.* (2012) have revealed a significant relationship between educational level and self-medication practices among pregnant women, this relationship was only significant for the respondents with lower levels of education.

Conclusion and Recommendations

The study investigated the predictive capacities of socio-demographic factors on self-medication practices among pregnant women in Isoko South Local Government Area. Three hypotheses were formulated and tested with Chi-square (χ^2) statistical technique at 0.05 level of significance and appropriate degrees of freedom. The study revealed a statistical significant relationship between age, education level and no significant relationship between marital status and self-medication practices among pregnant women in the study area. On the basis of the findings the following recommendations are made to address the sociodemographic predictors of self-medication among pregnant women in the study area:

i. **Health Education and Awareness Campaigns Strengthening**: In order to mitigate the risks associated with self-medication during pregnancy, government health agencies, Non-Governmental Organizations (NGOs), and healthcare providers should implement targeted maternal health education programs for women of reproductive age, irrespective of their age, educational attainment and marital status. Antenatal clinics should incorporate structured health talks focusing on the dangers of self-medication and the importance of professional medical consultation, and literacy-friendly health education materials should be developed in local languages to educate pregnant women, especially those with low or no formal education.

ii. **Family and Community Support Systems Strengthening for Pregnant Women:** Faith-based and community organizations should be involved in providing family-centred education campaigns and maternal care assistance to reduce stigma against unmarried pregnant women, encouraging families to provide necessary healthcare support rather than forcing them to rely on self-medication. Community-based interventions should be designed to educate pregnant women, especially for young/first-time pregnant women and those with lower educational attainment, on the importance of seeking professional medical advice before using any medication.

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