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SOCIO-ECONOMIC FACTORS AS PREDICTORS OF SELF-MEDICATION AMONG AUTOMOBILE TECHNICIANS IN IBADAN NORTH LOCAL GOVERNMENT AREA OF OYO STATE, NIGERIA

J.O. Odelola, Ph.D¹

Abstract

The study examined socio-economic factors as predictors of self-medication among automobile technicians in Ibadan North Local Government Area of Oyo State, Nigeria. Descriptive survey research design was employed in the study. A sample of 123 respondents was selected using simple random sampling technique. Two research hypotheses were tested. Self developed, validated questionnaire with reliability co-efficient of 0.65 was used to collect data. Data were analysed with the use of percentage and inferential statistics of multiple regression at 0.05 level of significance. The result showed that, joint effect of socio-economic variables (poverty, ignorance of negative effect of self medication and weak government hospital health care service) on self medication was significant ($F_{(3,118)} = 13.755$; $R = 0.509$; $R^2 = 0.259$; $Adj. R^2 = 0.240$; $P < 0.05$). Self medication constitutes public health problem. Therefore health education, effective poverty alleviation programme, public drug education and thorough supervision of government health facilities were finally recommended.

Keywords: (i) Self medication (ii) Automobile technician (iii) Health seeking behaviour (iv) Health care service (v) Drug education (vi) Patent medicine, shop.

INTRODUCTION

The use of selected medicine to treat self-recognized illness condition, otherwise called self-medication, can be beneficial or harmful. It is beneficial when it is responsibly done. Responsible self-medication is the practice whereby an individual treats ailment conditions with medicine which are approved and available without prescriptions. The medicine can be effective when used as directed. World Health Organisation (WHO) (2000) defined responsible self-medication as the use of a registered medicine legally available without a physicians' prescription, either on an individual's own initiative or following the advice of health care professionals. In responsible self-medication, the symptoms

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of diseases being treated must be known. Also, the suitability of the ill health condition to self medication must be established. Responsible self-medication allows for self-care which Primary Health Care promotes. Several benefits have been attributed to responsible self-medication, among them are; easy accessibility to medication, immediate relief to patient, affordability, and reduced government expenditure on treatment of minor illness. Harmful self-medication represents the use of medicine prescriptions without a physicians' medical advice. Generally, self-medication is not safe, especially in Nigeria where large populations have poor health knowledge.

Self-medication involves the use of medicinal products by the consumers, to treat self-recognized disorders or symptoms, or the intermittent or continued use of a medication prescribed by a physician for chronic or recurring diseases or symptoms (WHO, 2014). The practice of self-medication include: obtaining medicine without prescriptions by medical practitioner, buying drugs by re-utilizing a previous prescription, using medicine on advice of friends or relatives or drugs that are leftover. Self-medication especially when it is non-responsible, has potential risks which include: wrong self-diagnosis, seeking medical advice late, after illness must have done damage, unnoticed drug-drug interaction, incorrect administration of dosage and also the individuals run the risk of drug dependence and abuse.

Increased production of drugs of various types by pharmaceutical industries has contributed largely to the widespread use of over-counter medication. In over-the-counter medication, the individual buys drugs from nearby patent medicine shop to treat a self-diagnosed illness conditions. People continue to use recreational drug, herbal medicine as well as psycho-active drugs to treat perceived mental illness. It should however be pointed out that, the use of mind-altering drug may provide immediate relief of the associated symptoms of anxiety, but they will eventually lead to addiction and drug dependence which will present a grave consequence latter. Suffice it to say that, the common practice in our society nowadays, in which vitamins and other over-the-counter supplements are used without the advice and supervision of licensed medical practitioner, constitutes self-medication.

Automobile technicians repair faulty motor engines. The work predisposes them to such hazards as injuries, pains, stresses and backaches. The workshop environments of automobile technicians are unhealthy and often expose them to infectious diseases such as: malaria, cholera, typhoid fever and environmental smoke of great magnitude. According to Anthony (2010) and Oklahoma Tobacco Research (2010), common health hazards, associated with environmental smoke

are asthma, pneumonia, bronchitis, emphysema, wheezing, chest tightness and coughing, irritation to the eyes, ear, nose and throat, and cancer of the lungs. Automobile technicians are largely patronized by individual car owners, educational institutions, private establishments and government agencies. They contribute to the nation's economy; therefore, their health must be of great concern.

Man always seeks medical help to get relieved of real or perceived health problems. This is done within the limit of his knowledge, economy and accessibility to health care facilities. It follows then that, health seeking behaviour can be predicted by knowledge, cost, accessibility and attitude of health workers. Therefore, this study was designed to find out whether socio-economic factors will predict self-medication among automobile technicians in Ibadan North Local Government Area of Oyo State, Nigeria.

STATEMENT OF THE PROBLEM

Automobile technicians are exposed to health hazards of various forms during the process of repairing faulty motor engines. Health seeking at government recognized hospitals has continued to be constrained by high cost of treatment, poor accessibility, poor attitude to work by health care professionals and time wasting. In this way, the technicians are encouraged to practice self-medication as means of health care. Meanwhile, Osemene and Lamikanra (2012) reported in a study, masked diagnosis, use of excessive drugs dosage, prolonged duration of use, drug interaction, polypharmacy and super infections as problems associated with self-medication. Previous studies focused on formal sector of the population (Fadara and Tamuno, (2011) and Kayaluizhi and Senapathi (2010). This study examined socio-economic factors as predictors of self-medication among automobile technicians who are informal sector of the Nigerian population.

OBJECTIVES OF THE STUDY

The objective of the study was to investigate socio-economic factors as predictors of self medication among automobile technicians in Ibadan North Local Government Area of Oyo State, Nigeria. It also aimed at finding the extent to which identified variables influence self-medication as a means of health care among automobile technicians.

RESEARCH HYPOTHESES

1. The joint effect of socio-Economic factors of poverty, ignorance of negative effect of self medication and weak government hospital health care service will not significantly predict self medication among automobile technicians in Ibadan North Local Government Area of Oyo State, Nigeria.
2. There will be no significant relative contribution of poverty, ignorance of negative effect of self-medication and weak government hospital health care service to self-medication among automobile technicians in Ibadan North Local Government Area of Oyo State, Nigeria.

METHODOLOGY

Research design

The descriptive survey research design was used for this study. This was considered appropriate because it enabled the researchers to carefully describe and explain factual and detailed information about the variables under study. Thomas and Nelson (2001) asserted that, the design has wide range of scopes: to collect information, help to identify problems, make comparison and systematic evaluation.

Population

The population for the study comprised all automobile technicians in Ibadan North Local Government Area of Oyo State.

Sample and sampling technique

The respondents for the study were made up of automobile technicians who were all males. Three mechanic villages namely: Bodija, Samonda and University of Ibadan were selected based on their large size. 41 automobile technicians were purposely selected from each of the three mechanic villages: This is because, there were other artisans working in a mechanic village.

Research instrument

The main instrument used was a questionnaire which was subjected to content and item validation and had reliability co-efficient of 0.65. The questionnaire was drawn on a modified Likert format of a 4-point rating scale, to collect respondents' opinion on socio-economic variables as predictors of self-medication.

Data Collection

The administration of the questionnaire was done with the assistance of five research assistants. The interpretation was made for respondents with no formal education and low level of formal education. Copies of questionnaire forms distributed were collected on the spot, hence, high rate of return was recorded.

Data analysis

The descriptive statistics of frequency counts and percentages were employed for demographic information of the respondents. Regression was used to analyse the stated hypotheses at 0.05 alpha level.

RESULT AND DISCUSSION

Demographic Characteristics of Respondents

Table 1: Frequency and percentage distribution according to age, tribe, religion, educational background and years of experience.

Age		
	Frequency	Percentage
Less than 20 years	23	18.7
20 – 40 years	74	60.2
41 – 60 years	25	20.3
Above 60 years	1	0.8
	123	100
Tribe		
Hausa	2	1.6
Igbo	3	2.4
Yoruba	113	91.9
Others	5	4.7
	123	100
Religion		
Christianity	57	46.3
Islam	64	52.0
Traditional	2	1.6
	123	100
Educational background		
Formal Education	4	3.3

Primary Education	30	24.4
Secondary Education	87	70.7
Tertiary Education	2	1.6
	123	100
Years of experience		
Less than 5 years	35	28.5
6 – 10 years	24	19.5
More than 10 years	64	52.0
	123	100

Table 1 above shows that twenty-three (18.7%) were less than twenty years of age. Seventy-four (60.2%) were between ages 20-40 years. Twenty-five (20.3%) were within the age bracket 41– 60 years. One (0.8%) respondent was above the age of sixty. Also in the table 1, two (1.6%) respondents were Hausas, three (2.4%) were Igbos, one hundred and thirteen (91.9%) were Yorubas, while other tribes were five (4.7%). Furthermore in the table, fifty-seven (46.3%) respondents were Christians, sixty-four (52.0%) were Muslims while traditional religion adherents were two (1.6%). The educational background of the respondents as shown in the table indicates that, four (3.3%) had no formal education, thirty (24.4%) had primary education, eighty-seven (70.7%) had secondary education and two (1.6%) had tertiary education. In the table, experiences of respondents with years less than five were thirty-five (28.5%), those with six to ten years were twenty-four (19.5%) and those with more than ten years of experience were sixty-four (52.0%).

Table 2: Joint effect of independent variables on dependent variable

R	.509				
R. Square	.259				
Adjusted R square	.240				
Standard Error of the estimate	2.851				
Analysis of Variance (ANOVA)					
Model	Sum of square	DF	Mean Square	F	Sig
Regression	335.384	3	111.795		
Residual	959.083	118	8.128	13.755	.000
Total	1294.467	121			

- a. Predictors: (constant) poverty, ignorance of negative effect of self-medication and weak government hospital health care service

b. Dependent variable: self medication

Table 2 above shows that, there was, joint significant effect of the independent variables of poverty: ignorance of negative effect of self-medication and weak government hospital health care service, on self-medication among automobile technicians. $R = .509$, $p < .05$). The table further reveals that 24% ($Adj R^2 = .240$) of the variance in the self-medication of automobile technicians are accountable for by the linear combination of independent variables. The ANOVA result from the regression analysis shows that, there was significant effect of the independent variables on the dependent variable; ($F_{(3,118)} = 13.755$, $P < 0.05$)

Table 3: Relative effect of the independent variables on the dependent variable

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig
	B	Std. Error	Beta β		
Constant	5.380	1.304		4.127	.000
Poverty	.222	.091	.217	2.450	.016
Ignorance of negative effects of self medication	.251	.092	.250	2.724	.007
Weak government hospital health care service	.155	.069	.196	2.234	.027

Table 3 above shows the relative contribution of the three independent variables to self-medication among automobile technicians. The variables are: poverty ($\beta = 0.217$; $P < 0.05$), ignorance of negative effects of self-medication ($\beta = 0.250$; $P < 0.05$) and weak government hospital health care service ($\beta = .196$; $P < 0.05$).

DISCUSSION

The three factors that predicted self medication is identified as; poverty, ignorance of negative effects of self medication and weak government hospital health care service. This implied that, the identified factors have very strong affinities with the dependent variable to the extent of predicting it. Their affinity is evidenced as a result of enormity of their contributions to self medication. This study reveals that, poverty significantly contributed to self medication among automobile technicians. The result of the study is in agreement with the findings of Shah, Parmar, Kumkisman and Mehta (2011) and Abrahams, Jewkes and Mvo (2001) which stated that poverty, cultural perception of certain diseases, entity

and perceived responses to indigenous medications, account for self-medication practices. This attests to the fact that, financial difficulty contributes to the practice of self-medication. Most people in developing countries are low income earners who cannot afford the high cost of seeking medical assistance from government recognized public and private hospitals. Also, financial assistance from government to automobile technicians is non-existence; hence they depend on credit investments and co-operative societies and banks for loan on high interest rates.

The study identified ignorance of negative effects of self-medication on health as significant contributor to self-medication. In most cases, drug sold can be expired, fake or lack information concerning pharmacological properties. Therefore, the buyer is denied important knowledge about the drug purchased for use. Irvine, Flynn, Libby, Crombie and Evan (2010), found in a study that, people involved in self medication acquired knowledge of the practice from relatives, neighbours, medicine dealers and sometimes media. These sources are not in any way reliable. People continue to use drugs, herbal medicine and food supplements they procure from untrained patent medicine sellers, including medical quacks.

Those who patronize medical quacks are certainly unaware of the fact that, some of the substances used to prepare the drugs they buy, may be locally formulated mixture with ingredients capable of resulting in serious health hazards (Abasiubong, Basse, Udobang, Akinbami, Udoh and Idung, 2012). The dangers in getting medication of others who told them that, their health condition had improved after taking a particular drug and advice that, they repeat the previous prescriptions are that, the appropriate dose for a person may be overdose for another. Also, gender, age and the weight of the users are indices for determining appropriate dose of medicine for an individual.

In this study, weak government hospital health care service, contributed significantly to self medication. Nigerian National Health Conference Communique (2009) noted that, health system remains weak as evidenced by lack of co-ordination, fragmentation of services, dearth of resources including drug and supplies, inadequate and decaying infrastructure, inequity in resource distribution and access to care and very deplorable quality of care. Also, Martins, Miranda, Mendes, Soares, Ferreira and Noguera (2002) identified the length of waiting time, for medical consultation as one of the predictive factors of self-medication.

CONCLUSION

Self-medication is a common practice among automobile technicians in Nigeria. This is because, it is considered more accessible, cost effective and time saving. WHO (2000) said that, responsible self-medication can help prevent and treat ailments that do not require medical consultation and provide a cheaper alternative for treating common illnesses. It is therefore important that education on non-prescriptive medicine should be provided by health educators.

RECOMMENDATIONS

The following recommendations, based on the findings of the study, can be of immense benefits:

1. Massive drug education should be embarked upon by relevant government agencies.
2. Governments at all levels in the country should embark on poverty alleviation programme. This should include giving loans to automobile technicians.
3. Government must provide necessary equipment and facilities in public hospitals and ensure thorough supervision of the activities of the employed health professionals.
4. Government should put in place; toilet facilities, source of drinkable water electricity and sanitary disposal equipment and facilities. This is to ensure health promoting work environment for automobile technicians.
5. The law guiding the establishment of patent medicine shops should be strictly followed. This is to ensure that, only qualified and registered sellers are allowed to sell over-the-counter drugs. Those who are registered should be well monitored. Also, their knowledge regarding usage of drugs they are licensed to sell must be upgraded regularly.

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