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RESEARCH ARTICLE

A COMPARATIVE STUDY OF THE PREVALENCE OF SELF-MEDICATION AMONG NIGERIAN UNDERGRADUATES

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Abstract

The current study's objective was to investigate the prevalence of self-medication among university undergraduates and compare the practice of self-medication between school residents and home residents. Three hundred and twenty-six ($n=326$) undergraduates pooled from three tertiary institutions in Nigeria participated in the study. The participants completed a self-report measure assessing their engagement in self-medication. The result showed that 64.4% of the participants had practiced self-medication, while 34.6% did not participate in self-medication. Also, an independent t-test analysis revealed that self-medication is prevalent among school residents.

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Introduction: -

Access to medicines is an essential factor in the provision of efficient health care service of any Nation. Perhaps the primary healthcare delivery performance's major indices remain improved access to essential drugs (Chukwuani, Olugboji, & Ugbene, 2006). However, it is all humans' right to access quality and effective medicines (Ekeigwe, 2019). Access to drugs without a prescription is a major contributing factor for self-medication practices (Aziz, et al., 2008). There is a growing concern about the persistent act of self-medication, especially among young persons. The trend could have a negative implication on the health and well-being of an individual. It could lead to several problems such as an increase in drug resistance, rise in drug use per capita, and side effects (Karimy et al, 2019), serious health hazards, missed diagnosis, delayed appropriate treatment (Zeru et al, 2020).

Self-medication practice denotes taking drugs without the prescription of health care professionals (Kassie et al, 2018). Accordingly, Fasoro et al., (2018) referred to self-medication as using drugs to treat self-diagnosed disorders, intermittent or continued use of previously prescribed medication for chronic or recurrent disease or symptoms. People use it to treat any disease symptoms or minor ailments by their self-initiative (Jain, Malvi, & Purviya, 2011). People rely on past prescription methods, advice from relevant others, personal feelings, and thoughts to prescribe drugs for themselves without consulting medical experts for measures. Bennadi (2013) included the pharmacist and suggestions from advertisements in newspapers or popular magazines among the common self-medication source. Interestingly, people are practicing self-medication all the time in the form of taken care of their health (Vizhi & Senapathi, 2010). However, the concept of self-medication entails not only the self-administration of pharmaceutical drugs. However, it includes the consumption of herbal medicines (Papia, 2005). Equally, the appropriate practice of self-medication could be beneficial to consumers in terms of self-reliance and decreased expense (Shafie et al, 2018). Also, reduce the risk of non-treatment of certain illnesses and limit overcrowding in health institutions.

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Previous studies suggest that the practice of self-medication is common in developing countries (Auta et al, 2012; Islam & Hossain, 2019; Araia, Gebregziabher, & Mesfun, 2019; Gras et al, 2020), including Nigeria (Oyediran, Ayandiran, Olatubi, & Olabode, 2019). The behavior of prescribing drugs to one's self assumes a normal stance to most individuals. The trend is pervasive in Nigerian society to the extent that some mothers administer unprescribed medicine to their children, especially infants and under-five children (Salami & Adesanwo, 2015), and this action contributes to infant/child mortality in Nigeria. The common belief among some mothers is that babies often develop a fever. Consequently, this belief motivates the self-drug prescription attitudes of some women. Adolescents have been rated high in self-medication behaviors. Research indicates a high rate of adolescent participation in self-medication in Nigeria (e.g., Ojeleye, Oyeleye, & Ofi, 2016). The involvement of young people in the practice of self-medication constitutes a significant health care challenge. This young person depends on their assessment of their health and the application of peer references to suggest prescription, probably due to self-esteem and other psychosocial variables. However, the present study is concerned with self-medication among students at the tertiary education level.

Over the years, several studies have been dedicated to investigating the prevalence, patterns, and determinants of self-medication among university students especially, in developing countries (see Hussain & Khanum, 2008; Malakeh & Andaleeb, 2018; Sulayman et al., 2020; Mustafa & Rohra, 2017; Helal & Abou-ElWafa, 2017; Waqar, Al-Khayat, & Khan, 2019; Haroun & Al-kayali, 2017; Núñez, Tresierra-Ayalab, & Gil-Olivares, 2016; Hertz et al., 2019; AlRaddadi et al., 2017). A common feature among the literature is that they implicated university students in self-medicating behaviors, suggesting that they are common among university students (Alves, Precioso, & Becona, 2020). For example, the trend has been widely explored in Nigerian universities. The findings confirm the widespread phenomenon among undergraduates. For instance, Osemene and Lamikanra (2012) found age, gender, and student's level in the university as factors influencing students' self-medication practices.

Similarly, research indicates that most Nigerian students attributed the cause of their self-medication practice to cost, prior knowledge about the illness and its treatment procedure, the mildness of the illness, previous self-medication outcome, and the attitude of health care practitioners (Idoko et al., 2018; Auta et al., 2012). Additionally, Amusa, Badaki, and Sanusi (2015) revealed that university students engage in self-medication due to negative perception, while Ansam (2007) reported that university students engage in self-medicating behavior due to scarcity of medical practitioners, cost, and knowledge about drugs. Equally, Khalid et al. (2019), Awosusi and Konwea (2015), and Fadare and Tamuno (2011) noted that amoxicillin, Ampicillin/Cloxacillin, Ciprofloxacin, malaria drugs, and painkillers were the most commonly over the counter drugs self-prescribed mainly by the students.

The present study

The incidence of self-medication has been well explored in various aspects, and literature indicates that the phenomenon is pervasive in tertiary institutions. The decline in seeking medical advice from professionals constitutes health risky behavior capable of compromising well-being and leading to psychological dysfunction. Also, a self-medicating attitude contributes to drug addiction observed among university students. This study's primary purpose is to investigate the student's residency as a variable capable of influencing a student's self-medicating behavior. It is assumed that the students who reside in the hostels/lodge engage in self-medication compared to their counterparts who come from their homes. In this study, students who reside in the campus hostels, including those living in private lodges around the institutions, were classified as school residents. Students commuting from their homes were regarded as home residents. In other words, the present study is aimed to compare these groups of students in relation to self-medication behaviors. It is hypothesized that self-medication practice will be more pervasive among the school residents than their home residents' counterparts.

Method: -

The present study adopted cross-sectional survey design. The study population comprised students from three higher learning institutions in Nigeria (namely: Enugu State University of Science and Technology, Kogi State University, and the University of Nigeria). Three hundred and twenty-seven students comprising males and females ($n=326$), were randomly selected as participants for the study. The participants included the students who reside in the school hostels/lodges (school residents) and those who live with their parents/guardians (home residents).

Measure: -

Self-medication was measured using a self-developed instrument following a review of relevant literature. The 10-item Linkert type instrument is scored in a 5-point response format with high scores indicating self-medication practice. The reliability of the scale was ascertained following a pilot study. Observation of the Cronbach's alpha coefficients revealed acceptable levels of internal consistency reliabilities of the instrument, which exceeded the cutoff rules-of-the thumb of .70 as recommended for study purposes (Kaplan & Saccuzzo, 2013).

Result: -**Table 1:** - Table showing the percentage score of the prevalence of self-medication practice among the participants.

Self-medication score	N	%
Self-medication	210	64.4
No self-medication	116	35.6
Total	326	100

From the above table, it is observed that 64.4% of the participants have engaged in self-medication practice. In comparison, 35.6% have not been involved in self-medication practice.

Table 2: - Mean, standard deviation, and t-test comparison of school residents and home residents on self-medication practice.

Source of variation	N	M	SD	MD	df	t	Sig
School resident	186	0.83	0.38	0.44			
Home resident	140	0.39	0.49		324	8.869	.000

A t-test analysis was conducted to compare any significant difference between the school residents and the home residents on the practice of self-medication. There was a significant difference in the scores for school residents ($M=0.83$, $SD=0.38$), and home residents ($M=0.39$, $SD=0.49$). $t(324) = 8.869$, $p = .000$. Meaning that students who reside in the institution's hostel or lodges within the institution practice self-medication more than their counterpart that comes from their home.

Discussion: -

The current study focused on investigating the prevalence of self-medication among university undergraduates and comparing self-medication between students who live in the school hostels or stay in a rented lodge around the school the students who come to class from their respective homes. Firstly, the result found that most of the participants have practiced or still practicing self-medication. This finding appears to be in line with previous literature (e.g., Fasoro et al., 2018; Idoko et al., 2018; Osemene & Lamikanra, 2012; Khalid et al., 2019), suggesting that the practice of self-medication is persistent among university undergraduates in Nigeria. As such, it could be said that undergraduates are more exposed to the dangers of non-prescribed drugs.

As expected, the t-test conducted to determine the difference between the school residents and the home residents on the practice of self-medication showed that self-medication is prevalent among the school residents and in the hypothesized directions. The finding suggests that staying in a school hosteler the lodge as a student increases the chance of engaging in self-medication. Whereas, staying with parents/ guardians while been a university student seems not to favor self-medication. This probable cause of the high rate of self-medication among the school residents could be attributed to the findings of (Auta, et al., 2012), which posits that the prevalence of medicine storage in students' rooms leads to the practice of self-medication. Indeed, having leftover drugs, probably remains of the previous prescription, could motivate a person to continue with the drugs in response to health symptoms.

Nevertheless, the onset of symptoms requires a medical test or expert consultation and not the other way round. However, students who have had a successful cure following a self-medication practice are mainly preoccupied with assessing symptoms and possible over-the-counter drugs. In the absence of parents/guardians, school residents take absolute control of treatment, especially when the illness is perceived as mild.

Limitations, strengths, and future directions

This study encountered a particular limitation that needed to be reported. For instance, data for the research was collected based on only self-report measures, thereby raising the issue of common method variance. This study contributes to the literature by extending the risk factors associated with the prevalence of self-medication to school

residence. The study also adds to the area of health psychology by providing further support to the idea that self-medication is prevalent among university undergraduates. Besides, to our knowledge, this is the first study that has attempted to synthesize the gap between school residents and home residents in relation to self-medication practice in Nigeria's university context. Future researchers are encouraged to utilize data from other sources such as the students' friends, family relations, and neighbors.

Conclusion:-

This study is meant to study the prevalence of self-medication among university undergraduates and to determine whether there is a difference between school residents and home residents relating to the practice of self-medication. Indeed, the results support the existing literature, which suggests that self-medication is persistent among university students, thus broadening our understanding of the difference between school residents and home residents relating to self-medication. However, the current study recommends that future research investigate other possible influencing variables, such as health beliefs, health self-efficacy, in a more representative sample of university undergraduates and non-educated youth.

Ethical considerations

The researchers tried to abide by every ethical standard in the process of the study. The participants were fully aware of the study's purpose, and their involvement was made voluntary. Most importantly, their personal information was never requested.

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Informed consent

The research participants were informed of the study's purpose and were advised to withdraw from the study whenever they wish to, no matter the level of the study since the participation was voluntary.

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