

IMPACT ASSESSMENT AND FACTORS INFLUENCING SELF-MEDICATION AMONG UNDERGRADUATES OF SELECTED UNIVERSITIES IN ANAMBRA STATE, NIGERIA

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Abstract

This study focuses on investigating impact assessment and factors influencing self-medication behaviours among undergraduates of selected universities in Anambra State, Nigeria. It explores general knowledge of self-medication, major reasons for engaging in self-medication, the prevalence of self-medication among students, its consequences, and possible intervention strategies, as outlined in the research objectives. Four theories were reviewed, namely: the opportunist theory, self-medication theory, differential association theory, and health belief theory. However, the study adopted two theories as its theoretical framework: self-medication theory and opportunist theory. The study employed a mixed-method research design. The target population for Nnamdi Azikiwe University was 24,706 regular undergraduates, while that of Chukwuemeka Odumegwu Ojukwu University was 10,875 undergraduates. A structured questionnaire was administered to 360 students drawn from the two selected public universities. Quantitative data were analysed using the Statistical Package for the Social Sciences (SPSS), version 25, and presented in tables and charts. Qualitative data were analysed using thematic analysis with NVivo software (version 2.0). The hypotheses were tested using the Chi-square (χ^2) inferential statistical method. The study found that prolonged medical procedures before treatment in hospitals and adverse drug reactions resulting from unsupervised drug use are the major factors and effects of self-medication among undergraduates in universities in Anambra State, respectively. The study recommends, among other measures, that efforts should be intensified to discourage self-medication practices among undergraduates in Nigerian universities through awareness campaigns and improved access to healthcare services.

Keywords: Health-seeking behavior, self-medication, socio-economic status, undergraduates.

Introduction

The International Pharmaceutical Federation (IPF, 1999) describes self-medication (SM) as the act of taking medication without a current prescription or without consulting a healthcare professional. The practice of self-medication, whether with over-the-counter drugs or prescribed medications such as antibiotics, is prevalent in many developing nations and, to a lesser extent, in some developed countries (Shaghghi et al, 2014).

The adverse effects of self-medication are particularly pronounced in many developing nations, where limited resources, low literacy rates, and inadequate healthcare infrastructure are prevalent. Additionally, a significant portion of the population lacks access to accurate information or sufficient knowledge about proper treatment, dosage, duration of use, and potential side effects (Chouhan & Prasad, 2016).

According to Adum et al (2016), nearly any adult can visit numerous pharmacies or Patent Medicine Stores (PMS), locally known as “chemists,” and purchase any available drug in any quantity without needing a doctor's prescription. This behavior is not limited to any specific group of Nigerians but spans across all social classes, including the lower, middle, and upper classes.

Critical issue associated with self-medication is the growing problem of antimicrobial resistance (AMR). Antibiotics are among the most commonly misused drugs in self-medication, leading to the development of resistant strains of bacteria. This makes common infections harder to treat and increases the burden on healthcare systems. Olayemi et al, (2010) found that undergraduate students at Ahmadu Bello University frequently engaged in self-medication with antibiotics, significantly contributing to AMR. This underscores the urgent need for stricter regulation on over-the-counter antibiotic sales.

Self-medication also poses the risk of mis-diagnosis and delayed treatment. Individuals who self-diagnose often lack the medical expertise required to accurately identify their condition, leading them to choose inappropriate medications or dosages. This delay in seeking professional medical advice can exacerbate health issues, sometimes resulting in more severe complications or chronic conditions. Afolabi (2008) reported that many Nigerians engage in self-medication due to perceived convenience and cost savings, but this often leads to poor health outcomes.

The psychological effects of self-medication are another area of concern. Many individuals use medications as a coping mechanism for stress, anxiety, or other mental health issues without addressing the root causes of their problems. This can lead to dependency on certain drugs, particularly painkillers or sedatives, which may have long-term mental and physical health consequences. Afolabi(2008) explored this issue among Nigerian university students, noting that self-medication often masks underlying mental health problems rather than resolving them. Misau and Suleiman (2022) argued that, self-medication can result in increased healthcare costs over time. While individuals may initially turn to self-medication as a cost-saving measure, complications arising from improper drug use often require more expensive treatments later on, including hospitalizations or surgeries.

There is also the issue of substandard or counterfeit medications, which are prevalent in many developing countries like Nigeria due to weak regulatory frameworks. Individuals who self-medicate often purchase drugs from unregulated sources such as roadside vendors or informal markets, increasing their risk of consuming ineffective or harmful products. The World Health Organization (WHO) has consistently warned about the dangers of counterfeit medicines, noting that they contribute significantly to poor health outcomes globally (WHO Fact Sheet on Counterfeit Medicines, 2017).

The implications of self-medication extend beyond individual health risks; they pose broader public health challenges. The misuse of antibiotics and other medications can lead to increased rates of drug resistance, complicating treatment options for common infections and threatening public health efforts. Furthermore, the lack of awareness regarding the proper use of medications can result in ineffective treatment regimens and poor health outcomes (Jibo et al, 2021). It is against this background that this study tends to investigate factors influencing self-medication behaviours among undergraduates of Nnamdi Azikiwe University and Chukwuemeka Odumegwu Ojukwu University in Anambra State, Nigeria.

Research Questions

1. What factors influence the decision of self-medication among undergraduates of Nnamdi Azikiwe University and Chukwuemeka Odumegwu Ojukwu Universities in Anambra State?
2. What are the perceived consequences of self-medication among undergraduates of Nnamdi Azikiwe University and Chukwuemeka Odumegwu Ojukwu Universities in Anambra State?

Review of Relevant Empirical Literature

Factors that influence self-medication among undergraduates in Nigeria

A study conducted by Ababneh et al, (2025) titled, Knowledge, attitudes and practice towards self-medication among pharmacy undergraduates in Penang, Malaysia. The study assessed the Knowledge, Attitudes and Practices among undergraduates' pharmacy students in Penang University, Malaysia regarding self-medication. About 203 undergraduates completed a web-based survey and self-administered questionnaire. The study showed that majority of the participants believed that self-medication is a part of their self-care, while attributing the main cause to be accessible to health care information.

Another study conducted by Brian et al (2025) titled; Knowledge, Attitude and Practice towards responsible self-medication among pharmacy students in Uganda. The study made use of cross sectional survey with the aim to assess the pharmacy students' knowledge, attitude and practice about responsible self-medication. A non- probable snowball sampling techniques was used to recruit 203 students as well as questionnaires. The study shows that factors such as gender, residence and type of medical illnesses were significantly associated with rational self-medication practice among pharmacy students.

Yusuf (2017) carried out a study on the topic, "Self-medication among nursing students in Bauchi state" using transversal study type. The aim of the study was to determine the associated factors of self-medication among the nursing students. Questionnaires were written and self-administered. The sample size of the study was 116. It was found out that again majority of the student practiced self-medication at the university. Many of the students claimed that the hectic school curriculum made it difficult for them to visit qualified medical centres. Others

lamented that their financial disposition and country's economy made them to make the decision of self-medication.

In another transversal method of research aimed at assessing the magnitude and the various factors associated with self-medication practices among medical and health sciences students at the School of Health Sciences Oji River, Enugu state, Zeruwa (2020) discovered some major reasons behind the idea of self-medication for most of the students. About 700 questionnaires were served to the sample respondents. Responses showed that majority (415) engaged into self-medication; to some as a quicker means of treating minor ill conditions and to others because certain medications worked for them in past experiences.

Aboiye (2016) conducted a study to identify the consequences of self-medication among undergraduates of nursing at OAUTHC Ile-Ife and school of nursing, Wesley guild hospital Ilesa, Osun State. Two hundred (200) students participated in the study. The socio-demographic distribution of the respondents revealed that their mean age and the standard deviation were 21.57 ± 3.08 . Majority of the respondents were within age range of 20-29 years, almost all were Yoruba and majority was females. About two-third were Christians, while half of the respondents were in 200level, the other half were in 300 level. The study made use of self-structured questionnaire and SPSS for analysis. The study showed that about half of the respondents self-medicate always because of minor ailments and having enough knowledge about drugs. Also some were of the reason that time saving; unavailability of health care services and previous experiences brings about self-medication.

Consequences of self-medication among undergraduates

Sylvester (2020) carried out a study on the topic "Self-Medication and Health Detriments". The aim of this study was to evaluate the behavior of future health of individuals in relation to the use of medications, in particular, the practice of self-medication. The study adopted transversal method and a sample size of 223 undergraduates. The major instrument was data collection was a written questionnaire. Data were analyzed using percentage tables. Most of the responses indicated that after a long while, there are cases of long time untreated underlying ill conditions which would definitely make one to seek professional medical attention. Some other responses indicated that they experience different forms of drug reactions after taking medications which was self-prescribed.

In related development, Kenechukwu (2018) carried out another study on the topic, "Implications of self-medication among medical students – A dilemma" using transversal study type. The aim of the study was to determine the attitude and health related challenges in the practice of self-medication in undergraduates. Questionnaires were self-administered and verbally recorded. The sample size of the study was 300, out of which the majority (297) affirmed to have witnessed buying expired drugs which caused more harm to them after taking them. Others claimed they had no physical drug reactions while some other responded to have felt dizziness after certain self-prescribed medications.

Another study conducted by Nwosu (2015) in Delta state Nigeria on the behavior of self-medication among medical students of Delta state university using a descriptive transversal retrospective study type also adds to this educational material. The study was aimed at determining the behavior of self-medication in medical students of the institution. About 303 respondents were used using simple random sampling. The study revealed that 90% of the medical students practiced self-medication and were carefree about it. They believed it is in line with their discipline but fail to understand the necessity of getting medical prescription from a professional in the field. Some of them end up in the school clinic for proper diagnosis and medication.

Aboiye (2016) conducted a study to identify the consequences of self-medication among undergraduates of nursing at OAUTHC Ile-Ife and School of nursing, Wesley Guild Hospital Ilesa, Osun State. Two hundred students participated in this study. The socio-demographic distribution of the respondents revealed that their mean age and the standard deviation were 21.57 ± 3.08 . Majority of the respondents were within age range of 20-29 years, almost all were Yoruba and majority was females. About two-third were Christians, while half of the respondents were in 200level, the other half were in 300 level. The study made use of self-structured questionnaire and SPSS for analysis. In this study however, almost all the respondents had good knowledge about self-medication. More of the respondents agreed that for a number of times, they took the wrong antibiotics for their ailments. Others agreed to have bought expired drugs as they went on their own to get certain drugs from the store without professional prescription.

Theoretical Framework

The self-medication theory in a broader sense identifies the causes of self-medication practices as a solution to certain challenges that may be associated with getting professional prescriptions (like proximity, urgency and costliness). Obviously, self-medication theory provides better explanation for students' involvement in the practice of self-medication in some universities because individuals may perceive their health issues as minor or manageable without professional help, self-medication is also important because there is a belief that self-medication can provide quick relief, also self-medication theory helps to avoid long wait times, high cost or geographical barriers. People will also resort to self-medication due to poor understanding of symptoms and medication use, Also this theory tries to explain that professional consultation isn't necessary and therefore does not require the stress; also successful past self-treatment reinforces the behavior. The theory added that lack of adequate campaign for prescription medication and therapies has contributed to the prevalence of self-medication practices among students.

The opportunist theory when used as a theoretical framework to this study provides valuable insight into why individuals engage in self-medication: because of its convenience, low cost, ease of access and perception of low risks. It complements other models by focusing on the situational and pragmatic nature of health behavior rather than beliefs or social influence alone. The opportunist theory was also selected as the theoretical framework because it holds the view that when certain conditions are created in the society; people are predisposed to behave in very unpredictable ways. In behavioral sciences, this theory suggests that people may engage in certain actions when they perceive benefits outweigh the risks, especially in the context where knowledge is limited. The theory best explains the topic because, when pharmacists, over the counter medicines or left over prescriptions are available, a lot of persons see it as an opportunity to address health problems. Also if individuals believe their health condition is minor or similar to previous ones they opportunistically choose self-medication based on past experiences and how they navigate through them this is understandable because self-medication provides students with an immediate ease to their health challenges. Many students are drawn to self-medication because of the opportunity at hand. The above perspectives are insightful and made self-medication and opportunities more relevant and suitable for the topic under the study.

Study Hypothesis

1. Students who engage in self-medications have a significant relationship with past experiences about the particular drugs they took for certain circumstances than those who do not engage in self-medication.

RESEARCH DESIGN AND METHODOLOGY

The study adopted a mixed method research design. This involved the use of both the quantitative and qualitative methods of data collection. The population of undergraduates in Nnamdi Azikiwe University (NAU) Awka is 24,706 and Chukwuemeka Odumegwu Ojukwu University Igbaram is 10,875. A sample size of the study was deducted from the population of the study using the Taro Yamane's formula. The formula is given thus, $n = \frac{N}{1+N(e)^2}$

$$n = \frac{35,581}{1+35,581(0.05)^2} = \frac{35,581}{1+35,581(0.0025)} = \frac{35,581}{1+89} = \frac{35,581}{90} = 395$$

The researchers made use of quantitative and qualitative method of data collection, comprising the questionnaire schedule.

The Statistical Package for Social Sciences (SPSS) version 2.5 was used to process the data that was generated through the questionnaire. Specifically, descriptive statistics such as frequency tables, simple percentages and graphical illustrations (charts) were used for the presentation, interpretation and analysis of data. The hypotheses stated in this study were tested using the Chi-square (X^2) inferential statistic. This helped to determine and bring out clearly the relationships between the independent and dependent variables.

Thematic method of data analysis was used to analyze the qualitative data from the In-Depth Interviews using Nvivo (versions 2.0) software. The responses from the interviews will be summarized thematically after thorough editing and the key information highlighted by more than one participant will be identified and presented according to their relevance to the research questions and objectives of the study.

Socio-Demographic Characteristics of Respondents

| Variables | Frequency | Percentage |
|---------------|-----------|------------|
| Gender | | |
| Male | 155 | 43 |
| Female | 205 | 57 |
| Total | 360 | 100 |
| Age | | |

| | | |
|---------------------------------------|-----|------|
| 16 – 21 | 281 | 78 |
| 22 – 27 | 61 | 17 |
| 28 and above | 18 | 5 |
| Total | 360 | 100 |
| Marital Status | | |
| Single | 336 | 93.5 |
| Married | 18 | 5 |
| Divorced | 0 | - |
| Widowed | 2 | 0.5 |
| Separated | 4 | 1 |
| Total | 360 | 100 |
| Religious Affiliation | | |
| Christianity | 352 | 98 |
| African Traditional Religion | 6 | 1.5 |
| Islam | 0 | - |
| Agnostics/ Atheist | 2 | 0.5 |
| Total | 360 | 100 |
| Faculty | | |
| Management Sciences | 90 | 25 |
| Pharmaceutical Sciences | 81 | 22.5 |
| Social Sciences | 81 | 22.5 |
| Faculty of Education | 108 | 30 |
| Total | 360 | 100 |
| Department | | |
| Business Administration | 90 | 25 |
| English Education | 81 | 22.5 |
| Pharmacy | 81 | 22.5 |
| Sociology | 108 | 30 |
| Total | 360 | 100 |
| Level of Study | | |
| 100 Level | 77 | 21.5 |
| 200 Level | 86 | 24 |
| 300 Level | 95 | 26.5 |
| 400 Level | 102 | 28 |
| Total | 360 | 100 |
| Place of Residence | | |
| School hostel | 99 | 27.5 |
| Off campus (alone) | 180 | 50 |
| Off Campus with Parents | 81 | 22.5 |
| Total | 360 | 100 |
| Current CGPA | | |
| Below 1.5 | 18 | 5 |
| 1.5 – 2.5 | 79 | 22 |
| 2.5 – 3.5 | 173 | 48 |
| 3.5 – 4.5 | 52 | 14.5 |
| 4.5 and above | 38 | 10.5 |
| Total | 360 | 100 |
| Estimated Annual family income | | |
| Less than N360,000 | 49 | 13.5 |
| N361,000 – N720,000 | 149 | 41.5 |
| N721,000 – 1,080,000 | 45 | 12.5 |
| N1,081,000 – 1,440,000 | 36 | 10 |
| N1,441,000 – N1,800,000 | 20 | 5.5 |
| N1,801,000 – N2,160,000 | 34 | 9.5 |
| N2,161,000 and above | 27 | 7.5 |
| Total | 360 | 100 |

Field Survey 2025

Data Analysis in table 1 shows that minority (43%) of the respondents are males while the majority (57%) of the respondents are females. With regards to age of the respondents, table 1 indicates that majority (78%) of the respondents are within the ages of 16 – 21 years while minority (5%) of the respondents are within the ages of 28 and above. The marital status of the respondents indicates that majority (93%) of the respondents are single whereas minority (0.5%) of the respondents are widowed. With regards to the religious affiliation of the respondents, table 1 shows that majority (98%) of the respondents are Christians while the minority (1.5%) are Islamic followers. In terms of the faculties of the respondent's majority (27%) of the respondents are from faculties of Education whereas minority (22.5%) of the respondents is from the faculty of social sciences. Major number of the respondents (28%) is from 400 level while the minority (21.5%) are 100 level students of both schools. More so, table 1 shows that majority (48%) of the respondents have academic CGPA ranging between 2.5 – 3.5, while the minority (5%) of the respondents indicated their CGPA is below 1.5. A look at the annual income status of the respondents' families revealed that majority (41.5%) of the respondents indicated between N361,000 – N720,000 while the minority (7.5%) of the respondents supposed that their families fall within the income range of N2,161,000 and above every year.

Research Question 1: What factors influence the decision of self-medication among Undergraduates of Nnamdi Azikiwe University and Chukwuemeka Odumegwu Ojukwu University in Anambra State?

Table 2: Responses of Respondents on Factors that influence the decision of Self-Medication Practices among Undergraduates of Nnamdi Azikiwe University and Chukwuemeka Odumegwu Ojukwu University in Anambra State?

| Item | Yes | | No | | Total |
|--|-------|-----|-------|-----|------------|
| | Freq. | (%) | Freq. | (%) | |
| Have you ever experienced peer pressure as a student of this school? | 284 | 89% | 76 | 21% | 360 (100%) |
| Have you ever associated or rapport with students who prescribe their own drugs before? | 270 | 75% | 90 | 25% | 360 (100%) |
| If yes, does it mean that peer pressure, cumbersome school routine, poor parenting, previous experiences, poverty, etc all contribute to influencing self-medication practices in your school? | 339 | 94% | 21 | 6% | 360 (100%) |

Field Survey, 2025

Table 2 presents the responses from the respondents with regards the research question 1 which seeks to find the factors that influence the decision of self-medication practices among undergraduates of selected universities. Majority of the respondents 284 (89%) of the total respondents agreed to have been influenced by their peers to take a certain medication for certain health challenges they have had whereas 76 students declined the question. Again 270 students, making up the majority (75%) of the total respondents also agreed to rapport with other students who are into self-medication. And this has also contributed to why they decided to join the chorus. However, unanimously, 339 students making up a the majority (94%) of the total respondents agreed that other factors like cumbersome school routine, poor parenting, previous experiences and not having enough money for professional medical attention also contribute to why students engage in self-medication.

These responses however are supported by the response of our interviewee who was asked if he could mention what could be the reasons why students engage in self-medication stated:

“Well, one of the major reasons why students engage in self-medication is that it is cheaper than when you involve professional health care provider. Most students are poor and will always choose a cheaper alternative for a meantime. More so, when they find out it is working for their friends and others. But again, some other students have limited time in their daily routine. And let us not forget that some families already raised their children to take ‘Paracetamol’ when they feel headache. Such up-bringing methods also counts and affects the mentality of certain students whenever they feel any health discomfort, and so, professional consultation is a secondary option.” He went on to say, “to be more specific, I think that to rate these reasons in percentages, Poverty takes 35%, poor parenting 24%, cumbersome school routine takes 7%, peer influence and advice 20% and past experiences 14%.”

(Female, Single, 22 Years, Student, Department of English Education, NAU, Awka)

Another interview participant said:

"The biggest factor is simply convenience and cost. Going to the school clinic can mean long queues, and private hospitals are expensive. It's easier and faster to just walk to a nearby 'chemist' and describe your symptoms. There's also a strong influence of peer recommendation, Obi used this for malaria and it worked, so I'll take it too.' Previous experience with an illness also plays a role; you just repeat what the doctor prescribed last time. Finally, the perception that your illness is too minor to bother a doctor with is a major driver."*(Male, Single, 30Years, Student, Department of Music, NAU, Awka)*

Then, another interviewee opined:

"Beyond convenience, I see a layered set of influences. Firstly, there's a systemic issue: perceived inefficiency and drug stock-outs at the university health centre push students towards external options. Secondly, aggressive pharmaceutical marketing and the easy availability of drugs without strict prescription enforcement create an enabling environment. Psychologically, there's a desire for autonomy and a misplaced confidence in one's own medical knowledge. Socio-culturally, we have a background where herbal and over-the-counter remedies are normalized. Interestingly, gender might play a role, with some studies suggesting female students self-medicate more for certain ailments, possibly due to accessibility or health-seeking behavior patterns."*(Male, Married, 46 Years, Lecturer, Department of Music, NAU, Awka)*

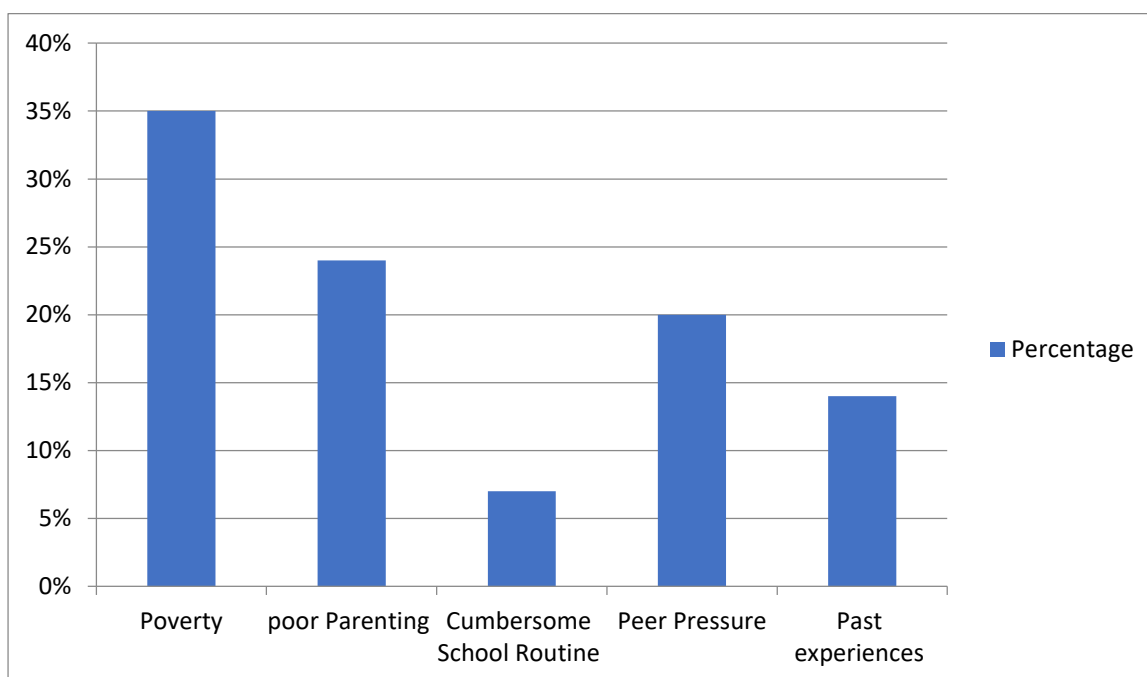
Another observation suggested that:

From what I have observed so far, most students claim not to have money to consult a doctor. They often see consultation as a cost effective venture without knowing it is safer and least health risky. They don't usually consider their health first. Another thing they claim as excuse is distance to hospital. Most student justify their self-medication as not living close to good medical structure. And so they will go to a nearby chemist to buy drugs.*(Male, Married, 36 Years, Lecturer, Department of Business Administration, COOU, Igbariam)*

Based on this particular topic, our last interviewee explained that:

Most students like us are involved in self-medication because of school routines – lectures, seminars, practical, personal study time and also distractions from friends. One hardly finds time to book a sit-down appointment with doctors then travel to see him for just minor issues par say. Also, there have been times I took certain medicine for certain reasons and it worked out perfectly fine. So these days, when I have similar symptoms, I will just get those medicines and help myself*(Female, Student, 22 Years, Department of Sociology, COOU Igbariam)*.

Fig. 1: Respondents View on the Causes of Self-Medication among Students of public Universities in Anambra State



Research Question 2: what are the perceived consequences of self-medication among Undergraduates of Nnamdi Azikiwe University and Chukwuemeka Odumegwu Ojukwu University in Anambra State?

Table 2: Responses of Respondents on the consequences of self-medication practices among Undergraduates of Nnamdi Azikiwe University and Chukwuemeka Odumegwu Ojukwu University in Anambra State.

| Item | Yes | | No | | Total |
|---|-------|-----|-------|-----|------------|
| | Freq. | (%) | Freq. | (%) | |
| Are you familiar with the consequences of self-medication in your school? | 155 | 43% | 205 | 57% | 360 (100%) |
| Do you know that self-medication can cause improper investigation for other underlying illnesses? | 311 | 86% | 49 | 14% | 360 (100%) |
| Do you think that self-medication can cause students to take improper medicines? | 290 | 81% | 70 | 19% | 360 (100%) |

Field Survey, 2025

As presented in table 2, minority (43%) of the respondents strongly agree that they are familiar with the consequences of self-medication while majority (57%) claimed they don't know about the dangers associated with it. Majority (86%) of the respondents also agreed that self-medication can cause improper investigation of other underlying illnesses while minority (14%) respondents don't seem to beware of that. Majority (81%) of the respondents also agree that self-medication can cause students to take an improper medication while minority of the respondents (19%) believes that self-medication is still a proper way of medicating.

However, the response of the interviewee shed more light on this very topic. When asked about the consequences of self-medication in the school, he answered:

“It is always good to seek for professional advice for medical solutions because life is at risk. One can hardly differentiate between an original drug and a fake one. Self-medication blinds people from treating the root cause of the problem; once a temporal relief is noticed, everything is fine to them. And this weakens the immune systems and causes the illness to keep manifesting after a while. Again, partakers in this take improper dosages of the drugs which can cause serious or more threatening drug reactions. Then, most students don't even take time to study the expiry dates or authenticity of the

drugs being taken which often results to serious damages. Its just plenty but it is well". "Self-medication has more bad sides than good sides," he added."(Male, Single, 21Years, Student, Department of Music, NAU, Awka)

Another interviewee answered that:

"The most direct consequence is misdiagnosis and delayed proper treatment. What you think is a simple stomach bug could be appendicitis, and while you're taking antibiotics, it gets worse. I've seen a friend have a severe allergic reaction to a drug a roommate gave him. There's also the issue of incorrect dosage"taking too little or too much. In the long run, you can build up resistance, especially to antibiotics, so when you genuinely need them, they might not work. It also wastes money on drugs that may not even be effective for your condition."(Female, Married, 43Years, Lecturer, Department of Music, NAU, Awka)

In agreement, another interviewee however said:

"Individually, it leads to adverse drug reactions, dependency, and masking of underlying serious diseases. But the consequences extend beyond the individual. It contributes massively to antimicrobial resistance, which is a global health crisis. There's also the economic burden of treating complications from wrong medication. Furthermore, it perpetuates a cycle of poor health literacy and distrust in formal healthcare systems. For a demographic like Nigerian Students, it can affect academic performance due to prolonged illness or side effects like drowsiness, and it normalizes risky pharmaceutical behavior as a life skill."(Female, Single, 22 Years, Student, Department of English Education, NAU, Awka)

This interviewee stated that:

One major consequence of not consulting a qualified medical practitioner before taking medications is that you never can tell other underlying illnesses on the patient's body which may be more life-threatening than imagined. (Male, Married, 46 Years, Lecturer, Department of Business Administration, COOU, Igbariam)

Lastly, another interviewee jokingly said: "I see self-medication as easier and always within reach. I don't see anything bad in it". (Male, Student, 25 Years, Department of Sociology, COOU Igbariam)

Test of Hypothesis

H1: Students self-medication has a significant relationship with past experiences about the particular drugs they took for certain circumstances.

Table 3: Relationship between Students self-medication and past experiences about the particular drugs they took for certain circumstances

| | | Do you agree that self-medication is the self-prescription and administration of drugs and any other substance(s) for the purpose of relief from ill-health? | | |
|--|-------|--|-----|-------|
| | | Yes | No | Total |
| Does it mean that peer pressure, cumbersome school routine, poor parenting, previous experiences, poverty, etc all contribute to influencing self-medication practices in your school? | Yes | 321 | 339 | 660 |
| | No | 39 | 21 | 60 |
| | Total | 358 | 360 | |

$\chi^2 = 18.670$, $df = 2$, $p = .000$

Table 3 shows that a statistical relationship ($X^2 = 18.670$, $df = 2$, $N = 360$, $p = .000$) was found between the Students self-medication and past experiences about the particular drugs they took for certain circumstances at $P = .000$. As a result, the alternative hypothesis was rejected while the null hypothesis was accepted. The conclusion is that student's self-medication has a significant relationship with past experiences about the particular drugs they took for certain circumstances.

Conclusion

The issue of self-medication among students of public universities in Anambra State reveals that most respondents understand self-medication as the self-prescription and administration of drugs or other substances for the purpose of relieving illness. A majority of the respondents also confirmed that they have engaged in self-medication at one point or another. However, most respondents appear to be unaware of the potential risks associated with self-medication and therefore perceive it as generally safe. The causes of self-medication among students, although varying in magnitude, include peer pressure, poverty, poor parenting, previous experiences with illness, inadequate health awareness campaigns, heavy academic workload, and the distance of medical facilities from students. The consequences of self-medication are significant. Findings indicate that students who engage in self-medication are more likely to experience adverse drug reactions resulting from incomplete dosage, while the underlying health conditions may remain untreated.

Therefore, government, school authorities, parents, healthcare professionals, and non-governmental organisations should collaborate to address the prevalence of self-medication among students in public universities in Anambra State. The study concludes that a majority of university students engage in self-medication practices. Common ailments for which self-medication is practiced include headache, cold, and gastric acidity. Furthermore, factors such as perceived non-seriousness of mild illnesses, easy availability of drugs, lack of trust in institutional healthcare services, and prior knowledge of similar illnesses are the main drivers of self-medication behaviour.

Recommendations

1. Efforts should be intensified at the university level to develop interventions that would encourage positive behavior such as seeking medical consultation, at a renowned conventional hospital or university clinic before taking medications and proper sanctions should be melted out by the university to curb its rate.
2. Information, Education and Communication (IEC) materials should be employed in sharing information on the harmful effects of self-medication to aid better understanding of its consequences also they should be able to organize videos and other informational contents to be able to address this issue properly because learning comes mainly by observing.
3. At the community level, strict rules and penalties regarding unauthorized drug advertisement or sale should be enforced; many over the counter drugs do not have labels and NAFDAC registration numbers and therefore, should not be allowed to be seen in various communities around Anambra state.
4. The creation of health clubs/associations should be welcomed such as advising students to join NGO'S who fights adulterated drugs or use of expired drugs so as to create a more personal platform through which students can clarify issues on self-medication (and other health matters) and impact can be made.
5. Free medical check-up schemes should be implemented and encouraged by the university through grants from the federal or state government and as well private individuals so as to enable less privileged students to know their health status and get professional medical advice periodically.
6. Prices of laboratory diagnosis should be cheaper for students and reviewed from time to time to help students to always investigate for any underlying illnesses and symptoms that might be detrimental to their health and therefore enable them to develop a positive health seeking behavior.
7. The university medical centre should be in close proximity to student's residential areas. Improving physical access makes it more convenient for students to visit the clinic than a pharmacy or seeing road side vendors.
8. The university management adopts persuasive communication techniques. This involves using campus media and trusted voices to frequently communicate the risks of medication misuse to positively influence student's health decisions.
9. Medical center staff members should be humane and caring when attending to sick students which would encourage them to seek professional help instead of going to over the counter or patent medical stores.
10. Routine public health campaigns on the dangers of medication misuse should be a mandatory part of the orientation program for all new students and reinforced throughout the semester.

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