

**FACTORS INFLUENCING SELF- MEDICATION AND ITS PREVENTIVE MEASURES AMONG STUDENTS OF NNAMDI AZIKIWE UNIVERSITY, AWKA**

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**ABSTRACT**

The study investigated factors influencing self-medication among undergraduate students of Nnamdi Azikiwe University Awka. Three research questions guided the study and one hypothesis was tested. The study adopted a descriptive survey design, the population comprised of 1268 students, 204 undergraduate students were sampled using simple random sampling technique and proportionate sampling technique. Instrument for data collection was a structured questionnaire titled Self-medication and Preventive Measures Questionnaire (FISPMQ). The instrument was validated by three experts, two from the Department of Health Promotion and Public Health Education and one from Measurement and Evaluation Department, Faculty of Education Nnamdi Azikiwe University, Awka. Reliability of the instrument was established using Cronbach Alpha coefficient that yielded a coefficient value of 0.78 which makes the instrument reliable. The data collected were analyzed using simple frequency tables while the study hypothesis was tested using one way ANOVA. Findings from the study shows that financial constraints, peer pressure, access to Over The Counter (OTC) drugs, lack of awareness of the dangers of self-medication and adequate knowledge of healthcare and medications are factors influencing self-medication among undergraduate students. The study also found that self-medication leads to frequent health issues or complications in students. Furthermore, the study found that self-medication leads to potential adverse reaction and risk of dependency and abuse among students. Based on these findings, the study recommends among others that university authorities should implement regular awareness programs on the dangers of self-medication, utilizing campus media and peer support groups to spread information on safe medication practices.

**Keywords:** Self-Medication, Factors, Effective, Preventive Measures, Students

## **Introduction**

Self-medication in recent times has become an issue of significant global concern. Behzadifar *et al.*, (2020) defined self-medication as a term that covers a variety of behaviours that range from self-care to prevention and management of diseases. Self-medication refers to the practice of individuals diagnosing and treating their own health conditions using medications without professional guidance. This phenomenon has become increasingly prevalent globally, particularly among young adults and university students. While self-medication can provide immediate relief for minor ailments, it raises significant concerns among scholars and health practitioners due to its potential health risks and implications for public health. Auta *et al.* (2019) defined self-medication as the use of medications for self-diagnosed disorders or symptoms or the continuous use of prescribed drugs for chronic conditions without professional guidance, emphasizing the autonomy and associated risks involved. Fadare *et al.* (2021) elaborated on this definition by highlighting the socio-cultural dimensions in Nigeria, where economic constraints, cultural beliefs, and perceived inadequacies in healthcare accessibility drive individuals to self-medicate. They note that community knowledge and peer influence significantly shape this practice, leading to potential misuse.

Similarly, Okoro *et al.* (2020) investigated self-medication among university students, describing it as a common behavior influenced by academic stress, peer pressure, and the availability of over-the-counter medications. They suggest that while self-medication offers quick relief for minor ailments, it poses significant risks such as incorrect dosages and adverse drug interactions. Osemene and Lamikanra (2022) further expanded on the economic aspects, suggesting that the high cost of healthcare services and medications prompts individuals to self-medicate as a cost-saving measure. They view self-medication as a rational choice for many

Nigerians, despite its potential adverse effects. Lastly, Eke and Eke (2023) discuss the regulatory and educational challenges, highlighting the lack of stringent regulatory frameworks and insufficient public health education as major contributors to the prevalence of self-medication. They call for comprehensive policies to mitigate these risks. Understanding the factors that drive students to self-medicate is crucial for developing effective interventions to mitigate these risks. Several factors can influence self-medication practices among undergraduate students including accessibility of medications, peer influence, knowledge of healthcare, financial constraints, lack of health insurance, availability of drugs, lack of knowledge and busy schedules (Belachew *et al.*, 2021). Madtha, *et al.*, (2022) opined that peer influence significantly impacts students' decision to self-medicate. Madtha *et al.*, (2022) explained that undergraduate students often rely on the advice and experiences of their peers when it comes to health-related decisions as friends and classmates frequently share medications and recommend drugs based on their own experiences or hearsay.

By implication, students may turn to self-medication as a way to quickly treat their symptoms and return to their daily routines. It is important for universities to educate their students on the proper use of medications and the potential dangers associated with self-medication practices. Providing access to affordable medical care and health insurance can also help reduce self-medication practices among undergraduate students (Nwosu *et al.*, 2021). The WHO (2021) guidelines stated that the act of practicing responsible self-medication can help prevent and treat diseases that do not require patients to seek medical consultation. This action can therefore reduce the increasing pressure on medical services for relief of minor ailments especially when resources are limited. However, there are risks associated with self-medication which include lack of clinical evaluation of the condition by a health care provider which could

result in misdiagnosis and incorrect choice of medicines, delays in seeking proper treatments, use of excessive medicines or lower dosage and prolonged duration of use of medicines (Behzadifar, *et al.*, 2020; Ghosh & Shewade, 2020). Again, self-medication can also lead to incorrect self-diagnosis, delays in seeking appropriate care, dangerous drug interactions, risk of dependence, drug abuse, incorrect dosage and choice of medication.

Nigeria stands out among the few countries of the world where drugs are freely displayed for sale in unauthorized places such as markets, shops, roadside stalls, motor parks and other public places by individuals not duly licensed (Oyewole, *et al.*, 2013). This can also result to self-medication among undergraduate students. Recent studies have identified various factors contributing to self-medication, including mental health stigma (Eisenberg *et al.*, 2019), lack of access to healthcare services (Suleman *et al.*, 2022), social media influence (Lee *et al.*, 2021), and cultural beliefs (Wong *et al.*, 2021). Moreover, academic work loads and school pressure has exacerbated the issue, with students experiencing increased stress, anxiety, and depression; undergraduate students of Nnamdi Azikiwe University, Awka are not exempted. It is against this backdrop that this study aims at determining the factors influencing self-medication among undergraduate students of Nnamdi Azikiwe University, Awka. Nnamdi Azikiwe University (Unizik) undergraduates comprised of young adults within the age range of 18 to 25 years, pursuing various academic programs in the university. Most of them are dependent on themselves when they are in school, sometimes if they are sick, they don't seek professional medical care, they do buy drugs from a patent medical-stores.

### **Statement of the Problem**

Ideally, when individuals fall ill, they should seek professional medical care from a healthcare provider to ensure accurate diagnosis and appropriate treatment. This approach

minimizes the risks associated with incorrect self-diagnosis and inappropriate treatment, thereby promoting better health outcomes. However, among undergraduate students at Nnamdi Azikiwe University (NAU), there seem to be a growing trend of self-medication, where students bypass professional healthcare services and use over-the-counter drugs or home remedies without proper medical guidance. This practice often leads to misuse of medication, exacerbation of health issues, and potential development of drug resistance, which undermines the effectiveness of future treatments.

The problem is further compounded by several factors including limited access to healthcare facilities, a lack of awareness about the dangers of self-medication, and a culture of convenience that encourages quick fixes rather than seeking professional advice. Despite ongoing efforts by health professionals, educational institutions, and governmental bodies to address these issues through health campaigns, awareness programs, and improved access to healthcare services, self-medication remains prevalent among students. These initiatives have not sufficiently altered the behavior or practices of the students, indicating a need for more targeted and effective strategies. According to James *et al.* (2018) Self-medication is common practice among undergraduates, with studies showing that 60-80% of the students engaged in self-medication. Obi *et al.* (2023) reported that there is rising cases of self-medication among undergraduate students in Unizik. Obi *et al.* 76.1% of undergraduate self-medicated due to the perception of minor illnesses, while 49% made self-decisions regarding their treatment.

To address this issue, this research aims to investigate the factors influencing self-medication among undergraduate students at NAU and explore effective preventive measures. By conducting comprehensive surveys, the study will identify key drivers of self-medication, investigate the implications of self-medication on students and propose evidence-based strategies

to enhance awareness and encourage responsible health practices among students. It is against this backdrop that the present study aims to investigate factors influencing self- medication and its preventive measures among undergraduate students in Nnamdi Azikiwe University, Awka.

### **Purpose of the Study**

The main purpose of this study is to investigate factors influencing self- medication and its preventive measures among students of Faculty of Education of Nnamdi Azikiwe University, Awka while the specific purposes are to determine the:

1. factors that can influence self-medication among Faculty of education students of Nnamdi Azikiwe University, Awka.
2. health implication of self-medication among Faculty of Education students in Nnamdi Azikiwe University, Awka.
3. measures to eradicate self-medication among Faculty of Education students in Nnamdi Azikiwe University, Awka.

### **Research Hypotheses**

1. There is no significant difference between causes and health implication of self-medication among Faculty of education Students in Nnamdi Azikiwe University, Awka.

### **Methodology**

The researcher adopted descriptive survey research design for the study. The area of the study was carried out in Nnamdi Azikiwe University, Awka. The population of the study comprised of 1,268 regular undergraduate students in Faculty of Education, in Nnamdi Azikiwe University, Awka. Multi stage sample and sampling techniques was adopted for this study, four (4) departments from the Faculty of Education comprised were selected using simple random sampling technique of balloting without replacement, 51 students were selected using purposive

sampling technique from each department, making it a total number of 204 students were selected for the study.

The instrument of data collection is a self-structured questionnaire titled Factors Influencing Self-medication and Preventive Measures Questionnaire (FISPMQ) developed by the researchers. This is made up of two sections (section A and B). Section A comprise of the bio data of respondents while section B consist of three sections and 18 items that reflect the research questions used in the study. Options in section B of the questionnaire is made up YES/NO. The instrument was validated by two experts in the Department of Health Promotion and Public Health Education and an expert in Measurement and Evaluation in Nnamdi Azikiwe University, Awka to determine the degree/extent at which the instrument fits the purpose it was designed for. To obtain the reliability of the instrument, the questionnaire was tested by administering 20 copies to some Faculty of Education students in another Chukwuemeka Odumegwu Ojukwu University, Igbariam campus (outside the area study). The data obtained from the administered questionnaire was then analyzed using Cronbach alpha method. The overall coefficient value gotten was 0.78 which was an indication that the instrument is reliable.

The researchers administered the structured questionnaire with the help of a research assistant to the sample in the Faculty of Education. The respondents were asked to express their opinion in line with the items on the questionnaire. The researchers with the help of the research assistants collected back the filled questionnaires on the spot to avoid loss of questionnaires. Thus, a total of 204 (100%) questionnaire were shared however, only 200 (98%) were adequately filled and returned. Data collected were analyzed and interpreted using frequency tables, percentages and ANOVA. The bio-data and questions that addressed the research questions were analyzed using frequency and percentages. The higher the percentage on an option (Yes/No), the

likelihood of acceptance or rejection in relation to the item. The study hypothesis was tested at 0.05 level of significance. Thus, when the level of significance obtained is greater than 0.05, the null hypothesis was accepted and the alternative hypothesis rejected and vice-versa.

## Results

**Table 1: Age Distribution of Respondents**

| Age                | Frequency  | Percentage |
|--------------------|------------|------------|
| 16-20 years        | 14         | 7.0        |
| 21-25 years        | 116        | 88.0       |
| 26-30 years        | 59         | 29.5       |
| 31 years and above | 11         | 5.5        |
| <b>Total</b>       | <b>200</b> | <b>100</b> |

**Source: Field survey, 2024**

Table 1 shows that 7.0% of the respondents are within the age category of 16-20 years, 88.0% are within the age category of 21-25 years, 29.5% are within the age category of 26-30 years while 5.5% are aged 31 years and above.

**Table 2: Distribution of Respondents by Gender**

| Gender       | Frequency  | Percentages |
|--------------|------------|-------------|
| Male         | 93         | 46.5        |
| Female       | 107        | 53.5        |
| <b>Total</b> | <b>200</b> | <b>100</b>  |

**Source: Field Survey, 2024**

Table 2 shows that 46.5% of the respondents are male while 53.5% are females.



**Table 3: Distribution of Respondents by Departments**

| <b>Departments</b>                           | <b>Frequency</b> | <b>Percentages</b> |
|--|------------------|--------------------|
| Library and Information Science              | 48               | 24.0               |
| Early Childhood and Primary Education        | 51               | 25.5               |
| Educational foundations                      | 50               | 25.0               |
| Health Promotion and Public Health Education | 51               | 25.5               |
| <b>Total</b>                                 | <b>200</b>       | <b>100</b>         |

**Source: Field Survey, 2024**

Table 3 shows that 24.0% of the respondents are student of Library and Information Science, 25.5% are students of Early Childhood and Primary Education, 25.0% are students of Educational Foundations Department while 25.5% are students of Health Promotion and Public Health Education Department.

### **Analysis of Research Questions**

**Research Question 1:** What are the factors influencing self-medication among Faculty of education students of Nnamdi Azikiwe University, Awka?

**Table 4: Frequency and percentages of the factors influencing self-medication among Faculty of education students**

|    |   | <b>YES</b> |          |               | <b>NO</b> |          |               |
|----|---|------------|----------|---------------|-----------|----------|---------------|
|    |   | <b>N</b>   | <b>%</b> | <b>Remark</b> | <b>N</b>  | <b>%</b> | <b>Remark</b> |
| 1. | Financial constraints                               | 167        | 83.5     | VH            | 33        | 16.5     | VL            |
| 2. | Peer pressure                                       | 180        | 90.0     | VH            | 20        | 10       | VL            |
| 3. | Access to over the counter (OTC) drugs              | 174        | 87.0     | VH            | 26        | 13       | VL            |
| 4. | Lack of awareness of the dangers of self-medication | 155        | 77.5     | VH            | 45        | 22.5     | VL            |
| 5. | Adequate knowledge of healthcare and medications    | 160        | 80.0     | VH            | 40        | 20.0     | VL            |
| 6. | Attempting to deal with past trauma                 | 76         | 38.0     | VL            | 124       | 62.0     | VH            |

Data presented in table 4 shows that majority of the respondents (83.5%) as against (16.5%) indicated yes that financial constraints influence self-medication among students of Faculty of Education in Nnamdi Azikiwe University. The table also shows that 90% of the respondents also agreed that peer pressure influences student self-medication. The table further shows that majority of the students (87.0%) also agreed that access to counter drugs influences students' self-medication. Table again, shows that majority of the respondents (77.5%) indicated yes that lack of awareness of the dangers of self-medication influences students' self-medication in Faculty of Education. In contrast, the table shows that a high percentage (62.0%) indicated no that attempting to deal with past trauma influences self-medication among students in Faculty of Education.

**Research Question 2:** What are the health implications of self-medication among Faculty of education students of Nnamdi Azikiwe University, Awka?

**Table 5: Health implications of self-medication among Faculty of education students**

|     |   | YES |      |        | NO  |      |        |
|-----|---|-----|------|--------|-----|------|--------|
|     |   | N   | %    | Remark | N   | %    | Remark |
| 7.  | Students suffer from overdose as a result of self-medication                  | 86  | 43.0 | L      | 114 | 57.0 | H      |
| 8.  | Self-medication leads to frequent health issues or complications in students. | 128 | 64.0 | H      | 72  | 36.0 | L      |
| 9.  | Self-medication leads to masking of severe diseases.                          | 137 | 68.5 | H      | 63  | 31.5 | L      |
| 10. | Self-medication worsens illness conditions.                                   | 64  | 32   | L      | 136 | 68.0 | H      |
| 11. | Self-medication leads to potential adverse reaction.                          | 168 | 84.0 | VH     | 32  | 16.0 | VL     |
| 12. | Self-medication leads to risk of dependency and abuse.                        | 170 | 85.0 | VH     | 30  |      | VL     |

Table 5 shows that majority of the respondents (57.0%) indicated no that students suffer from overdose as a result of self-medication. The table also shows that majority of the

respondents (64.0%) agreed that self-medication leads to frequent health issues or complications in students. The table also shows high level of agreement (68.5%) among students that self-medication leads to masking of severe diseases. Data presented in table 5 further shows that a high level of the respondents (68.0%) disagreed that self-medication worsen illness conditions. The table further shows that a very high percentage of the respondents (84.0%) agreed that self-medication leads to potential adverse reaction. Lastly, table 5 shows that a high percentage of the respondents (85.0%) indicated yes that self-medication leads to risk of dependency and abuse.

**Research Question 3:** What are the measures to eradicate self-medication among Faculty of education students of Nnamdi Azikiwe University, Awka?

**Table 6: Measures to eradicate self-medication among Faculty of education students**

|     |  | YES |       |        | NO |      |        |
|-----|--|-----|-------|--------|----|------|--------|
|     |  | N   | %     | Remark | N  | %    | Remark |
| 13. | Implementation of educational programmes about the risks of self-medication.                     | 189 | 94.5  | VH     | 11 | 5.5  | VL     |
| 14. | Providing accessible and affordable healthcare services in school clinic.                        | 200 | 100.0 | VH     | 0  | 0.0  | VL     |
| 15. | Regular workshops on proper medication practices and consultation.                               | 174 | 87.0  | VH     | 26 | 13.0 | VL     |
| 16. | Strict enforcement of policies against the sale of over-the-counter drugs without prescriptions. | 188 | 94.0  | VH     | 12 | 6.0  | VI     |
| 17. | Encouraging peer support groups for sharing information on safe medication.                      | 160 | 80.0  | VH     | 40 | 20.0 | VL     |
| 18. | Promoting awareness through campus media and social networks.                                    | 187 | 93.5  | VH     | 13 | 6.5  | VL     |

Table 6 shows the responses given by respondents on measures to eradicate self-medication among Faculty of education students. Data presented in the table shows very high percent of agreement for all the items. From the table it can be seen that implementation of educational programmes about the risks of self-medication, providing accessible and affordable healthcare services in school clinic, regular workshops on proper medication practices and consultation, strict enforcement of policies against the sale of over-the-counter drugs without

prescriptions, encouraging peer support groups for sharing information on safe medication and promoting awareness through campus media and social networks were agreed by the majority of the respondents as measures to eradicate self-medication among students of Faculty of Education in Nnamdi Azikiwe University, Awka.

### Test of Hypothesis

**Ho:** There is no significant difference between causes and health implications of self-medication among undergraduate students of Faculty of Education.

**Table 7: One Way ANOVA test of Hypothesis 1**

|                | Sum of Squares | Df  | Mean Square | F      | Sig. |
|----------------|----------------|-----|-------------|--------|------|
| Between Groups | 15.499         | 2   | 7.749       | 83.453 | .437 |
| Within Groups  | 8.172          | 183 | .093        |        |      |
| Total          | 23.670         | 199 |             |        |      |

Source SPSS version 25

Table 7 shows significant value of .437 which is greater than the level of significance of .05. This is an indication that the alternative hypothesis is rejected and the null hypothesis accepted. By implication, there is no significant difference between causes and health implications of self-medication among undergraduate students of Faculty of Education.

### Discussions

The study through the first research question found that there are several factors influencing self-medication among undergraduate students of Faculty of Education in Nnamdi Azikiwe University, Awka prominent among which are financial constraints. Again, the study found that peer pressure influences self-medication among undergraduate students of the faculty of education. This finding supports the finding of Nwosu *et al.* (2021) who found peer pressure as a major influencing factor of self-medication among students. However, the present study did

not find lack of parental guidance as an influencing factor as Nwosu *et al.* did. Again, the present study found access to over the counter (OTC) drugs, lack of awareness of the dangers of self-medication and adequate knowledge of healthcare and medications as influencing factors of self-medication among Faculty of Education students in Nnamdi Azikiwe University, Awka. This finding may have resulted because students' interaction with their peers could influence their disposition towards self-medication.

The study through the second research question found that self-medication leads to frequent health issues or complications in students of Faculty of Education in Nnamdi Azikiwe University, Awka. This finding supports Ghosh and Shewade (2020) who emphasized that self-medication can exacerbate health issues rather than providing relief for students. The study also found that self-medication leads to masking of severe diseases in students of Faculty of Education in Nnamdi Azikiwe University, Awka. Furthermore, it was found by the study that self-medication leads to potential adverse reaction and risk of dependency and abuse among students of Faculty of Education in Nnamdi Azikiwe University, Awka. The finding of the study indicate that self-medication could affect students' health. This is because when students self-medicate it could lead to further health complications.

The study through the third research question found that implementation of educational programmes about the risks of self-medication is a measure to eradicate self-medication among Faculty of education students. This finding in one way or the other support the findings of Jibril *et al.* (2023) who found that school-based programmes reduces students involvement in self-medication. The present study also found that providing accessible and affordable healthcare services in school clinic, regular workshops on proper medication practices and consultation, strict enforcement of policies against the sale of over-the-counter drugs without prescriptions,

encouraging peer support groups for sharing information on safe medication and promoting awareness through campus media and social networks are other measures to eradicate self-medication among Faculty of education students. The finding of the study indicate that the use of educational programme could offer students' knowledge on the problems associated with self-medication.

### **Conclusion**

Based on the result obtained from the study, it was concluded that several factors such as peer pressure and access to over-the-counter drugs among others are responsible for why undergraduate students of Faculty of Education in Nnamdi Azikiwe University, Awka engage in self-medication. The study also concludes that self-medication leads to health issues/complications and other adverse reaction on undergraduate students of Faculty of Education students. The study further concludes that several measures for instance, implementation of educational programmes among others can be used to eradicate self-medication among undergraduate students of Faculty of Education in Nnamdi Azikiwe University, Awka.

### **Recommendations**

Based on the findings of the study, it was recommended that:

1. University authorities should implement regular awareness programs on the dangers of self-medication, utilizing campus media and peer support groups to spread information on safe medication practices.
2. The university clinic should provide affordable, accessible healthcare services and offer regular workshops on the importance of professional medical consultations to reduce reliance on self-medication.

3. Strict enforcement of policies by ministry of health, banning the sale of over-the-counter drugs without prescriptions should be ensured within and around university campuses to limit easy access to medications.

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