

**KNOWLEDGE OF PRACTICE AND DANGERS OF SELF MEDICATION  
AMONG UNDERGRADUATES OF UNIVERSITY OF BENIN**

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**DEPARTMENT OF HEALTH, SAFETY AND ENVIRONMENTAL EDUCATION**

**FACULTY OF EDUCATION**

**UNIVERSITY OF BENIN**

**APRIL, 2024**

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**A RESEARCH PROJECT SUBMITTED TO THE DEPARTMENT OF HEALTH,  
SAFETY AND ENVIRONMENTAL EDUCATION, FACULTY OF EDUCATION,  
UNIVERSITY OF BENIN, BENIN CITY. IN PARTIAL FULFILLMENT OF THE  
REQUIREMENTS FOR THE AWARD OF B.Sc. (Ed.) IN HEALTH EDUCATION**

**APRIL, 2024**

## CERTIFICATION

We the undersigned certify that this study was carried out by Nkechi Blessing UZODIMMA in the Department of Health, Safety and Environmental Education, Faculty of Education, University of Benin, Benin City, in partial fulfilment for the award of B.Sc. (Ed.) Health Education.

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## **DEDICATION**

I dedicate this work to God Almighty who has been my source of strength and wisdom throughout the period of my study course, through whose grace and favor I have been able to run my course and scale through the hurdles of my academic pursuit in the University of Benin.

## **ACKNOWLEDGEMENTS**

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## ABSTRACT

This study was undertaken to determine the knowledge of practice and dangers of self-medication among undergraduates of University of Benin".

This study adopted the descriptive survey research design. The population of the study comprised of the entire forty-one thousand, one hundred and ninety six (41,196) undergraduates of the University of Benin, while the sample population used were 451 respondents. The instrument used is a questionnaire validated by the project supervisor and two other experts in the department of Health, Safety and Environmental Education in the University of Benin. The Pearson Product Moment correlation was used to establish the reliability of the instrument. Three research questions were raised for the purpose of the study.

The findings revealed that the practice of Self-medication among undergraduates of University of Benin is high. The dangers of self-medication as perceived by undergraduates of University of Benin includes; negative drug interaction, incorrect diagnosis, incorrect treatment of ailments and antibiotic resistance. Undergraduates of University of Benin engage in self-medication because of lack of awareness about drug administration, difficulty in accessing healthcare facilities, ease of obtaining over the counter drugs, financial constraints and time constraints. From the research findings, the following recommendations were made; students should seek advice from a healthcare professional in cases of serious or persistent symptoms to ensure accurate diagnosis and appropriate treatment, organizing health education programs within the school will raise awareness about the risks associated with self-medication and promote responsible healthcare practices and the school should invest in healthcare infrastructures as this will improve accessibility and quality of healthcare services.

## **CHAPTER ONE**

### **INTRODUCTION**

#### **Background to the Study**

Self-medication has become a common practice in today's society and has been reported as being on the rise internationally. With the easy availability of over-the-counter medications and the abundance of health-related information online, many people are taking law into their own hands, while it may seem like a convenient solution to manage minor ailments, self-medication can be dangerous.

Self-Medication is an aspect of Self Care. It involves the use of a substance without guidance from an expert. Self-care simply means looking after oneself to promote wellness, achieve good health and prevent diseases, ill health. It doesn't mean being selfish or greedy, it entails caring for oneself. Self-treatment plays a significant role in the healthcare system and is commonly practiced (Albawani, Hassan, Abd-aziz, & Gnanasan, 2016). It includes taking a drug without consulting a doctor/professional for guidance. Self-medication includes different practices such as misuse of OTC drugs, prolonged use of multiple medications, resorting to home remedies (such as herbs) for treatment, purchasing medications from unqualified sources, and relying on inferior quality drugs for curing various health issues. Common substances used for self-medication range from OTC medications to nutritional supplements and other nonprescription drugs. There has

been a significant rise in the amount of over-the-counter medications available, enabling more people to engage in self-treatment. These over-the-counter medications are available for purchase at different places like drugstores, grocery stores, and large retail stores (Wazaify, Shields, Hughes, & McElnay, 2005). Self-medicating can take various forms, like using substances or alcohol to reduce anxiety, boost mood, relieve pain, avoid reality, cope with depression, satisfy curiosity, etc.

There are both benefits and drawbacks to the rise of self-medication. The benefits include; full control of an individual over his or her health, easy access to medication, saves time and money. Also, the risks associated with self-medication far outnumber the benefits. They include; incorrect diagnosis and administration of medication, delay in seeking medical advice, masking of severe diseases, drug-to-drug interaction, drug abuse, drug addiction/dependence, etc.

This research is undertaken to understand students knowledge, practice of self-medication and the dangers associated with self-medication. This study investigates the knowledge of the dangers and practice of self-medication among the undergraduates of the University of Benin, Benin City, Edo State. Furthermore, it studies the extent to which students are aware of self-medication, factors that predispose students to self-medication practices, dangers associated with self-medication. It will also discuss when it's appropriate to self-medicate and when it's best to seek professional medical help.

## **Statement of the Problem**

Self-medication is a common practice that involves individuals taking over-the-counter medications or using home remedies to treat their ailments without consulting a healthcare professional. In today's fast-paced world, self-medication has become increasingly prevalent as people seek quick relief from minor health issues such as headaches, colds, or allergies. The accessibility of over-the-counter drugs and the vast amount of information available online make it tempting for individuals to self-medicate. However, it is essential to understand that self-medication has its limitations.

Every year on September 17th, World Patient Safety Day is observed with an emphasis on the theme "medication without harm". The initiative launched in 2017 urges stakeholders to focus on and intervene early in critical areas linked to major patient harm caused by dangerous medication practices. The Nigerian government in collaboration with WHO in 2022, organized a walk to commemorate this day and used it as a medium to sensitize the general public to desist from taking drugs without a prescription. The approved "National Policy for Controlled Medicines" document in November 2017 seeks to enhance the availability and access of life-saving drugs for Nigerians by overcoming current obstacles and preventing misuse and diversion of controlled medicines for medical and scientific use. Additionally, the school authorities have put several measures in place to reduce the incidence of self-medication; by organizing campaigns to create awareness about the potential risks associated with self-medication, providing an

adequate healthcare facility within the school, proximity to a teaching hospital meant to provide expected care, making accessibility to guidance and counseling units easier. Despite these efforts, self-medication is still perceived to be prevalent among undergraduates of University of Benin.

Generally, one would expect that the subject of self-medication should not be a challenge to an enlightened community of students due to their perceived level of awareness or intellectual capacity. However, the sudden complications of students health, sleeping disorders, students acting recklessly on campus like engaging in fights with lecturers and authorities, poor eating habits, substance abuse, particularly during the period of examinations tends to contradict this notion hence the need for this study.

### **Research Questions**

The following research questions were raised to guide this study;

1. Do students in University of Benin indulge in self-medication?
2. What are the dangers associated with the practice of self-medication as perceived by undergraduates of the University of Benin?
3. What are the factors that predispose students of the University of Benin to Self-medication?

## **Purpose of the Study**

The purpose of this study is to examine the knowledge of the dangers and practice of self-medication among the undergraduates of the University of Benin.

The specific objectives are:

- To ascertain involvement in the practice of self-medication among undergraduates of the University of Benin
- To identify the dangers associated with the practice of self-medication among undergraduates of the University of Benin
- To identify the various factors that predisposes undergraduates of the University of Benin to the practice of self-medication

## **Significance of the Study**

The findings of this study will be of benefit to the society at large. It will expose individuals particularly youths to the dangers of self-medication, promote appropriate self-care practices, reduce the rate of self-medication among students, etc. It will also draw the attention of students, parents, school management, government agencies (e.g. policy makers, law makers, law enforcement agencies), and other stakeholders to the harmful, injurious and self-damaging aspects of self-medication, the preventive aspects,

and how its practice can be reduced to the barest minimum. This research will assist health educators with the information needed for effective guidance and counseling of individuals (both victims and non-victims). It would add to existing literature, providing broader access for other researchers who may want to further in this area of study.

### **Scope and Delimitation**

This study will focus on the involvement, awareness of dangers and factors influencing the practice of self-medication among students. It is however delimited to undergraduates of the University of Benin.

### **Limitations of the Study**

For challenging research of this nature, it requires sufficient time for completion and submission but sadly during the course of the study, the researcher was engaged with other academic work which consequently cut down the time devoted to this work. Also, an encompassing research work involves enormous funds to carry out, and due to the present economic situation such funds are not available as required for the study.

### **Operational Definition of Terms**

The following words are defined as used in this study;

- Expert - is a person who is knowledgeable about self-medication practices

- Practice - To engage in self-medication repeatedly
- Influence - A power affecting students choice to either engage in the practice of self-medication or not to
- Non-prescription drugs- these are drugs that are sold without prescription to the patient, that is without a written order
- Over the counter medication - These are medicines that are sold directly to consumers without a prescription from a healthcare professional
- Factors - these are things that contribute or lead to the practice of self-medication
- Undergraduates - Persons studying at the University for a first degree, in both full-time and sandwich programmes

## CHAPTER TWO

### REVIEW OF RELATED LITERATURE

This chapter deals with the review of related literature for the study and was discussed under the following sub-headings:

- Concept of Self Medication
- Self-medication among students
- Factors responsible for self-medication
- Risks and limitations of self-medication
- The importance of professional medical advice
- Empirical Review
- Summary of reviewed literature

#### **Concept of self-medication**

Self-medication is defined as "the taking of drugs, herbs, or home remedies on one's own initiative, or on the advice of another person, without consulting a doctor"(Hernandez-Juyol & Job-Quesada, 2002). Self-medication as defined by Ryan, Wilson, Taylor, and Greenfield (2009), is the primary method of self-care, involving individuals maintaining their health by preventing and treating their own ailments.

The term self-medication as defined by the World Self-Medication Industry (WSMI) (2015), involves treating common health issues with medication specifically created and

labeled for use without medical supervision, and deemed safe and effective for such purposes. Additionally, self-medication can involve adjusting the dosage of a drug beyond what is recommended. It is further explained as the use of non-prescription medicine by people on their own initiative. Pharmacists play a key role in providing assistance, advice to guide against self-medication purpose (Jain, Malvi & Purviya, 2011). In the United Kingdom, where approximately 50% of healthcare is self-administered, the government promotes self-reliance, while organizations like the World Health Organization (WHO) encourage individual, family, and community participation in primary healthcare. The safety of over-the-counter (OTC) medications depends on proper use and dosage. To ensure optimal medicine use, consumers should have timely access to information on benefits, risks, and proper usage. In countries like India, where there is a wide range of diseases and inadequate health services, the proportion of drug use is high due to the reduction of load on medical services. The misuse of pharmaceuticals, particularly self-medication with antibiotics, has been widely reported, thus WHO has warned of the dangers of self-medication as a cause of antibiotic resistance. According to a study conducted by Reetesh, Bigoniya and Jain (2011) on self-medication, it was discovered that out of the total population (18.1%) considered high consultant fee as the reason of self-medication, (23.2%) opted for lack of time while (58.6%) persons explained it as a means of quick relief. Generally self-medication is used in some clinical

conditions like fever, pain, headache, cough, cold and acidity (Reetesh, Papiya, Sunny & Sonam, 2011).

Responsible self-medication involves using over-the-counter (OTC) and relatively low-risk medications to treat self-diagnosed conditions or symptoms, which can help alleviate mild illnesses and reduce healthcare financial burdens. To safely and effectively use prescription medication, individuals must accurately identify their symptoms, determine therapeutic goals, and select appropriate drugs, dosages, and treatment durations. It is also crucial to consider medical history, potential contraindications, co-existing health conditions, potential adverse effects, and monitor the individual's response to treatment. By following these guidelines, individuals can take a proactive approach for their healthcare while minimizing risks associated with medication use. The prevalence of self-medication varies widely across different countries, with some countries having significantly higher rates than others. For instance, in Spain, Chile, Vietnam, China, and India, the prevalence of self-medication has been reported as 12.7%, 75%, 40-60%, 32%, and 71%, respectively (Balamurugan, 2011). In Iran, the estimated per capita drug consumption is relatively high, with self-medication accounting for a significant portion of this consumption (Davati, Samadpour & Tabar, 2008).

The main reasons for self-medication globally include suffering from mild symptoms, having prior drug prescriptions, lack of awareness, easy access to drugs, and reliance on one's knowledge, cultural and socio-economic status. According to recent studies

conducted in China, (Lei, Jiang, Liu, Ferrier & Mugavin, 2018), and Brazil (Gama & Secoli, 2017), the most common reason for self-medication among participants was a non-severe or temporary illness, with 45-46% of respondents reporting this as the reason. In the Chinese study, 23% of participants were hesitant to see a doctor for relatively mild conditions, while 12% stated that they did not have enough time to do so. Similarly, in a study conducted among university students in Rwanda, the lack of a serious illness was the primary reason for self-medication (Tuyishimire, Okoya, Adebayo, Humura & Lucero-Prisno, 2019). Other factors such as financial constraints and insurance issues, have also been identified as contributing to self-medication (Lei X et al, 2018).

A nationwide cross-sectional study among teachers in Yemen, Saudi Arabia, and Uzbekistan found that self-medication prevalence ranged from 48% in Saudi Arabia to 78% in Yemen and Uzbekistan (Dnyanesh et al, 2017). A recent study conducted among pregnant women in Nigeria found that a significant proportion of them engage in self-medication, with an overall prevalence of 63% (Zhang, Yang & Wang, 2014). The most common sources of medicines purchased for self-medication among these women were patent medicine stores (55%), pharmacies (30%), and drug hawkers (14%). Interestingly, a majority of the women (77%) kept the medicines at home for self-medication purposes. The study also revealed that mothers-in-law and relatives (41%), patent medicine vendors (20%), pharmacists (12%), and traditional healers (7%) were the most commonly cited sources of advice for self-medication among the pregnant women. In contrast to Nigeria,

where access to primary care services is relatively easy and rapid, a high prevalence of self-medication (45%) with antibiotics for treating fever and common cold was observed in the rural population of Greece (Yusuff, Omarusehe, 2011). The majority of self-medication (76%) was obtained from pharmacies, followed by leftover medications at home (15%) and drugs obtained from relatives or friends (7%) (Skliros, Merkouris, Papazafiropoulou, 2010). In a study conducted to investigate self-medication practices for dental problems in Uttar Pradesh, India, the self-medication prevalence was found to be 72%. The majority of self-medication (62%) was obtained from pharmacy shops, while other minor sources included mobile drug vendors, hospital pharmacies, and patent medical stores. The main motivators for self-medication were pharmacists (45%), relatives (29%), traditional healers (11%), and personal knowledge (10%) (Jain et al, 2011).

Self-medication may include using leftover drugs from treatment courses prescribed previously, or drugs obtained from relatives or friends (Ocan et al, 2015). In parallel to this is the health information relating to the therapeutic and side effects of commodity self-medicated drugs that is more relevant and useful to the end user (Jain et al., 2011). However, among the numerous sources of information and knowledge on drug use and side effects mentioned above, those indulging in self-medication rely essentially on themselves, peer group, friends, relations and previous prescriptions given to their friends rather than consulting trained and qualified health experts for their medications. The rate

of Self-medication with both OTC (Over the counter) and prescription medicines has been reported to be approximately 90% among the population (Titilayo, Razaq & Eniola, 2010). The practice is very common among the people in the rural community (Ayanwale, Okafor & Odukoya, 2017); patients at outpatients' clinic (Omolase & Mahmoud, 2007); and even among undergraduates (Khalid, Ateeba, Musarrat, 2019).

However, it is crucial to understand that self-medication has its limitations. Certain health conditions require the expertise and guidance of a healthcare professional to ensure proper diagnosis and treatment. Self-diagnosis can be risky, as it may result in inaccurate identification of the underlying problem, leading to ineffective or even harmful treatment. Another critical aspect to consider when self-medicating is the potential for drug interactions and adverse effects. Without proper medical advice, individuals may unknowingly combine medications that can have harmful interactions or exceed the recommended dosage, leading to unintended consequences. Moreover, some individuals may have underlying health conditions or allergies that make certain medications unsafe for them, making professional guidance indispensable.

### **Self-medication among Students**

The practice of self-medication is a global phenomenon (Danshana, 2014). Self-medication, the practice of individuals diagnosing and treating their own health conditions without professional guidance, is a pervasive issue among undergraduates.

Self-medication among undergraduates is a prevalent health behavior. Numerous studies highlight the widespread practice of self-prescription, often driven by factors such as easy access to over-the-counter medications and limited health literacy. The dangers associated with self-medication include misdiagnosis, incorrect dosage, adverse drug interactions, and the potential for the development of drug resistance.

Several studies have been carried out with results indicating the alarming rates of self-medication among undergraduates. One of such studies carried out in Zaria by, Olayemi, Olayinka and Musa (2010), revealed that most of the students who practiced self-medication have knowledge about it and they happen to be students from health related departments and faculties such as pharmaceutical sciences and medicine. While the others who also practiced self-medication had little or no knowledge about self-medication but got information either from friends, family, or medical students who are still in practice.

Research by Smith, Smith, Mader, Guestier, Conn and Maddigan (2021) emphasized that a lack of awareness about potential risks, coupled with the desire for quick relief, contributes to the high prevalence of self-medication. Additionally, the influence of peer recommendations and online information further complicates the decision-making process for students seeking medical solutions independently. Furthermore, a study conducted by Richert and Johnson (2015) underscored the need for educational interventions to enhance health literacy among undergraduate populations. Improved

knowledge about the consequences of self-medication could empower students to make informed choices regarding their health.

Self-medication patterns vary among different population and are influenced by many factors, such as age, gender, income and expenditure, self-care orientation, education level, medical knowledge, satisfaction and perception of illnesses. A high level of education and professional status has also been mentioned as predictive factors for self-medication. According to Esan, Fasoro, Odesanya, Esan, Ojo & Faeji (2018), about 81.8% of undergraduate students practiced self-medication using analgesic, antibiotics, and antimalarial drugs without prescription within one month prior to the survey and majority of the students attributed the practice of self-medication to unfriendly attitude of health care workers in the university clinic. Another study conducted by Banerjee and Bhadury (2012) showed that cough and common cold was the predominant morbidity for which students practiced self-medication. Other causes of morbidity prompting the students to practice self-medication included diarrhea, fever, headache, pain in the abdomen due to heartburn/peptic ulcer.

The practice of self-medication among university students has become a serious problem. Media exposure and the increase of pharmaceutical advertisement pose a larger threat to this population. It raises concern of incorrect self-diagnosis, drug interaction and use other than for the original indications. A survey on widely advertised medication indicated that majority of college student used at least one of the advertised products,

without discussing with their physicians. The rate of self-medication among students in the field of medicine, dentistry, pharmacology, health education, health, nursing, midwifery, health economy and management is high (Shah & Ahmad, 2014). It is important to note that self-medication can be risky. Students self-medicate for various reasons and they include: lack of access to health care, lack of awareness, financial constraint, peer pressure, stress, curiosity, depression and anxiety, for pleasure.

### **Factors responsible for self-medication**

According to a study by Maryam, Abdi, Andayeshgar, Soroush & Khatony (2022), the reasons why individuals engage in self-medication include: access to medical information, previous experience, easy access to medicine, lack of enough time, access to medical staff, cost of a doctor's visit, inadequate respect for patient's privacy, pharmaceutical advertising in the media, and information explosion. Numerous factors are implicated as possible causes for the act of self-medication. It has been viewed as one of the main social issues on economic and health systems with variety in prevalence based on contextual determinates such as education level, knowledge, income, and gender (Behzadifar, Behzadifar, Aryankhesal & Ravaghi, 2020). These factors include:

#### **1. Lack of Healthcare Access**

Self-medication has become a common practice in many developing countries like Nigeria and mainly due to lack of access to health care, easy availability of over the

counter drugs in markets and poor drug regulatory practices. Nigeria with its over expanding population faces significant challenge in providing accessible and affordable healthcare for its citizens. Some individuals engage in the practice out of ignorance, poverty, lack of access to health care and/or non-availability of health facilities (Olufemi, Emmanuel, Mathew, 2019). The scarcity of healthcare facilities, coupled with financial constraints, has led to a pervasive reliance on self-medication as an alternative means of addressing health concerns. Nigeria, despite its economic potential, wrestles with a healthcare system characterized by insufficient infrastructure, shortage of healthcare professionals, and limited financial resources allocated to the health sector. As a result, a substantial portion of the population resorts to self-medication as a pragmatic response to health issues.

There are several factors prompting the lack of access to healthcare, they are:

- Inadequate infrastructure: Insufficient healthcare facilities and poorly equipped clinics limit the accessibility of medical services, particularly in rural areas.
- Shortage of healthcare personnel: The scarcity of qualified healthcare professionals such as doctors, nurses among others, exacerbates the challenge of providing timely and adequate healthcare services.
- Financial constraints: Huge expenses and the lack of comprehensive health insurance coverage pose significant financial barriers to accessing formal healthcare.

These factors can be addressed by;

- Investment in healthcare infrastructures: Increased investment in healthcare infrastructure will improve accessibility and the quality of healthcare services.
- Organizing Health education programs: Comprehensive public health education will raise awareness about the risks associated with self-medication and promote responsible healthcare practices.
- Affordable Healthcare policies: Policies geared towards easy accessibility of healthcare services, reduced high cost and availability of affordable healthcare services should be implemented.

## **2. Knowledge and Information**

In an era characterized by an abundance of health information, individuals are increasingly relying on their understanding of medical conditions and treatment options. The reasons why individuals engage in self-medication include: access to medical information (Maryam et al, 2022). Individuals with incomplete or inaccurate information about drug administration and use may also resort to self-medication, same applies to students. Some students may not fully understand the potential risks and side effects associated with medications and may self-medicate without realizing the potential harm. Varying levels of knowledge and information contribute to the prevalence of self-

medication, considering factors such as health literacy, information sources, and cultural perceptions of healthcare.

The key indicators of level of literacy as it relates to self-medication include;

- Ability to understand medical conditions: Individuals with higher health literacy levels may be more inclined to self-diagnose and self-prescribe for perceived minor ailments.
- Ability to interpret medication information: The ability to comprehend medication labels and instructions influences individuals confidence in self-medicating responsibly.
- Access to internet and social media: The ubiquity of health-related information on the internet and social media platforms shapes individuals knowledge and influences their decisions to self-medicate.
- Cultural beliefs and traditions: Cultural perceptions of health and illness impact individuals trust in traditional remedies, influencing their propensity for self-medication.
- Peer influence: Information shared among peers and social networks can significantly impact self-medication choices, with individuals often seeking advice from non-professional sources.

These can be addressed by:

- Creating awareness: Through educational campaigns will help emphasize the importance of consulting healthcare professionals and the potential risks of self-medication.
- Developing programmes: This will improve overall health literacy, hence, empowering individuals to make informed decisions about their health.

### **3. Access to Medications**

Access to medication serves as a critical determinant in individuals healthcare decisions. Ease of obtaining over-the-counter drugs without a prescription contributes to self-medication. According to Leadership, a local Nigerian newspaper, 75 percent of the populace rely on self-medication. This allows the market to flood with counterfeit drugs, low quality alternatives and charlatans selling ineffective herbal remedies. Maryam et al, (2022), stated that easy access to medication is a reason for self-medication.

Factors that influence easy access to medications:

- Convenience and immediate access: The unrestricted availability of over the counter (OTC) medications encourages self-medication by providing immediate access to remedies for common ailments without the need for a prescription.

- Perception of minor ailments: The ready availability of OTC drugs can lead individuals to self-diagnose and self-prescribe for what they perceive as minor health issues, increasing the likelihood of self-medication.
- The potential of government regulations: Stringent or lax prescription regulations influence individuals abilities to acquire medications thereby impacting the likelihood of resorting to self-medication.
- Complexity of healthcare system: Overwhelmed healthcare systems with limited access to healthcare professionals might prompt individuals to self-medicate due to difficulties in obtaining timely prescriptions or consultations.

Addressing these factors would require:

- Regulatory reforms: Implementing stricter regulations on OTC medications while ensuring easier access to essential prescribed medications with professional guidance.
- Health Education campaigns: Promoting awareness about responsible medication use, the dangers of self-medication, and the importance of seeking professional medical advice.

#### **4. Peer Pressure**

Peer pressure to use alcohol and drugs can contribute to substance use disorders, potentially leading to addiction (Villines, 2022). Peer pressure can influence self-

medication as individuals may feel compelled to conform to their peers' behaviors, even if it involves using medications without proper guidance. The desire to fit in or be accepted may lead someone to self-medicate to address perceived issues, without considering potential risks or consulting healthcare professionals. It's essential to prioritize one's health over peer expectations and seek professional advice when needed.

This can occur in a variety of ways:

- Normative influence: When individuals observe their peers engaging in certain behaviors, such as self-medicating, they may perceive this as the norm within their social group. The desire to fit in and be accepted can drive individuals to adopt similar behaviors, including self-medication, even if it's not the most appropriate or safe choice.
- Fear of exclusion: The fear of being excluded or ostracized from a social group can be a powerful motivator. Individuals might engage in self-medication to align themselves with the group's practices, fearing that not doing so could lead to isolation or rejection.
- Perceived benefits: If individuals witness their peers apparently benefiting from self-medication, whether real or perceived, they may be more likely to try it themselves. This perceived positive outcome can create a strong influence on someone's decision to self-medicate, even if the potential risks are not fully understood.

- Lack of information: Peer pressure can exploit gaps in knowledge. If a group collectively lacks accurate information about proper medication use and its potential consequences, individuals may be more susceptible to following the group's lead without questioning or seeking professional advice.
- Coping mechanism: Peer pressure can exacerbate the use of self-medication as a coping mechanism. If peers are using substances to cope with stress, anxiety, or other challenges, individuals may be more likely to adopt similar strategies without considering the long-term implications on their health.

Addressing this requires:

- Guidance and counseling: Individuals should seek guidance from healthcare professionals regarding self-medication rather than succumbing to potentially harmful peer pressure.
- Information: It's crucial for individuals to be aware of these influences, prioritize their own health and well-being, and seek help when necessary.

## **5. Immediate Relief**

The need for relief can be a significant factor influencing self-medication, as individuals may seek quick solutions to alleviate physical or emotional discomfort. Self-medication can provide a quick and easily accessible solution to alleviate symptoms, such as pain, cold and flu symptoms, or insomnia, without the need for a doctor's visit. Quick relief,

saving time, and minor illness were the main reasons for self-medication among health science college students (Loni et al, 2023).

The need for relief can influence self-medication through:

- Immediate gratification: When individuals experience discomfort, whether it's physical pain or emotional distress, there is often a desire for immediate relief. The prospect of finding quick relief can lead people to self-medicate, bypassing proper medical advice or prescription protocols.
- Avoidance of professional help: The need for relief may be accompanied by a reluctance to seek professional medical assistance due to various reasons such as cost, fear, or stigma. In such cases, individuals may resort to self-medication as a readily available and seemingly convenient option.
- Perceived control: Self-medicating provides individuals with a sense of control over their symptoms. The need for relief can drive people to take matters into their own hands, attempting to manage their conditions without relying on healthcare professionals.
- Unawareness of risks: The urgent need for relief may overshadow awareness of potential risks and side effects associated with self-medication. Individuals might prioritize immediate relief over the long-term consequences, especially if they lack information about proper medication use and potential health risks.

- Self-diagnosis: The need for relief can prompt individuals to engage in self-diagnosis, attempting to identify the cause of their symptoms without professional guidance. This self-diagnosis can lead to inaccurate assessments and inappropriate medication choices, potentially exacerbating health issues.

It's important for individuals to recognize the limitations of self-medication, understand potential risks, and prioritize seeking professional medical advice when faced with the need for relief. Professional guidance ensures a more accurate diagnosis, appropriate treatment, and consideration of potential long-term consequences.

## **6. Time Constraints**

Time constraints can be a compelling factor influencing self-medication as individuals may opt for quick solutions to address health issues when faced with limited time. The reasons for self-medication are mainly due to mild nature of illness and time constraints (Selvaraj, Kumar, and Ramalingam, 2014).

Time constraints can impact the decision to self-medicate in the following ways:

- Busy lifestyles: Demanding schedules and busy lifestyles may leave individuals with little time to visit a healthcare professional. The need for a rapid resolution to health issues may drive individuals to self-diagnose and self-prescribe, especially when they

believe the symptoms are familiar and can be addressed with over-the-counter medications.

- **Convenience and Efficiency:** The time required for scheduling and attending a healthcare appointment can be perceived as a barrier, leading people to choose self-medication as a more immediate and accessible solution.
- **Unavailability of timely appointments:** Difficulty in securing timely appointments with healthcare professionals can contribute to the decision to self-medicate. If individuals face delays in accessing medical care, they may turn to self-prescribed remedies to address immediate health concerns.
- **Work or academic pressures:** Professional and academic commitments can create time pressures, making it challenging for individuals to allocate sufficient time for healthcare appointments. The urgency to manage symptoms quickly may prompt self-medication as a convenient alternative to seeking professional advice.
- **Emergency situations:** In urgent situations or emergencies, individuals may resort to self-medication as a quick response to alleviate symptoms. The perceived urgency and lack of time for proper medical consultation can lead to impulsive decisions regarding medication use.

### **Addressing this requires:**

- **Prioritizing Health:** It's crucial for individuals to recognize the potential risks associated with self-medication and to prioritize their health despite time constraints. Balancing the need for prompt relief with responsible healthcare practices is essential for overall well-being.
- **Professional advice:** Seeking professional medical advice ensures accurate diagnosis, appropriate treatment, and consideration of any underlying health issues that might not be apparent through self-diagnosis.

### **7. Cost and Convenience**

Cost and convenience are important factors that can significantly influence self-medication behaviors. Previous research has shown that self-medication plays an active role in decreasing healthcare costs (Ayalew, 2017). Self-medication can be seen as a cost-effective and convenient alternative to visiting a healthcare professional, especially for minor ailments and students use this medium to self-treat their symptoms with over-the-counter medications or home remedies. A report of Kabul internet users on self-medication with over-the-counter medicines in 2023, participants cited cost, convenience, and perceived effectiveness as the main reasons for choosing OTC medications.

This can prompt self-care through:

- **Affordability of medications:** Over-the-counter (OTC) medications are often more affordable and readily available than prescription drugs. The lower cost of OTC options can make self-medication an attractive choice, especially for individuals who are concerned about healthcare expenses or lack comprehensive insurance coverage.
- **Lack of insurance coverage:** Individuals without health insurance coverage may be more inclined to self-medicate due to concerns about the financial implications of medical consultations and prescribed treatments. The immediate availability and perceived effectiveness of OTC medications can make them an appealing option.
- **Time and resource efficiency:** Self-medication is often perceived as a time-efficient solution. The convenience of purchasing medications without a prescription, coupled with the ability to address symptoms promptly, appeals to individuals seeking quick and hassle-free alternatives to traditional healthcare processes.
- **Accessibility of pharmacies and stores:** The widespread availability of pharmacies and retail stores offering a variety of medications without the need for a prescription enhances the convenience of self-medication. This accessibility encourages individuals to make independent choices about their healthcare without professional guidance.
- **Non-urgent health issues:** For conditions that are perceived as non-urgent or routine, individuals may prioritize cost savings and convenience over seeking professional

medical advice. This is particularly true for common ailments like headaches, cough, catarrh, flu, fever, mild pain, or cold symptoms.

Cost and convenience play significant roles in influencing self-medication, it's important for individuals to weigh these factors against potential risks. Professional medical advice should be sought and adhered. Balancing the need for affordability and convenience with responsible healthcare practices is important for overall wellbeing.

### **8. Perceived Severity of the Illness**

The way individuals perceive the degree of their illness determines their attitude or reactions towards it. For example, when an illness is seen as minor, individuals are more likely to self-medicate. People's experience of severity and duration of illness may also influence the opting of self-medication (Abay and Amelo, 2010).

The perceived severity of illness can strongly influence self-medication behaviors in several ways:

- Immediate action for severe symptoms: When individuals perceive their symptoms as severe or urgent, there is a tendency to seek professional help. The fear or concern about the seriousness of the illness may prompt individuals to visit healthcare facilities for approximate treatment.

- Overestimation of personal health knowledge: Individuals who overestimate their own health knowledge may believe they can accurately assess the severity of their illness and choose appropriate medications. This overconfidence can lead to self-diagnosis and self-medication, even in cases where professional evaluation would be more appropriate.
- Perception of familiarity with symptoms: Individuals who have experienced similar symptoms in the past and attribute them to common or non-serious conditions may be more inclined to self-medicate. The perception that they are familiar with the symptoms and their potential causes can contribute to a belief that self-treatment is sufficient.
- Desire for autonomy in health management: Some individuals prefer autonomy in managing their health, especially if they believe their illness is not extremely severe. The desire to control their healthcare decisions may lead them to self-medicate rather than seek external guidance.
- Limited understanding of health risks: A lack of understanding about potential health risks associated with self-medication can influence decisions, especially if individuals underestimate the complexities of certain medical conditions. The perceived severity of the illness may overshadow concerns about the safety and efficacy of self-prescribed treatments.

It is recommended that:

- **Personal Evaluation:** It's important for individuals to critically evaluate the perceived severity of their illness and recognize when professional medical advice is necessary.
- **Prompt identification and treatment:** While self-medication may be appropriate for certain minor ailments, serious or persistent symptoms should always prompt consultation with a healthcare professional to ensure accurate diagnosis and appropriate treatment

## **9. Previous Experiences:**

Positive or negative experiences with self-medication in the past can influence individuals to continue or stop the practice of self-medication. Findings from PNAUM 2017 show that self-medication is quite common in Brazil, often influenced by past experiences and familiarity with drugs. This practice is more prevalent among women and those who have a lower perception of their own health.

Previous experiences can influence self-medication behaviors in various ways:

- **Positive Outcomes:** If individuals have positive outcomes from previous instances of self-medication, where their symptoms improved without seeking professional help, they may be more inclined to repeat this behavior. Positive reinforcement can lead to a belief that self-treatment is effective and sufficient.

- Negative outcomes and caution: Conversely, negative outcomes or adverse reactions from past self-medication attempts can lead to caution and a more conservative approach in the future. Individuals may become more selective in choosing when to self-medicate, avoiding it when they recall negative consequences.
- Personal beliefs about healthcare: Previous experiences can shape an individual's beliefs about healthcare. Those who hold strong beliefs in self-reliance and autonomy in health management may be more likely to use self-medication as their key strategy for treatment.
- Successful management of minor ailments: For minor ailments or common health issues that individuals have successfully managed on their own in the past, there may be a tendency to repeat the same approach. This is particularly true for conditions perceived as routine, such as headaches, mild pain or common cold symptoms.
- Cultural or family practices: Cultural or family practices related to self-medication can heavily influence individual behaviors. If someone has grown up in an environment where self-medication is a common and accepted practice, they may continue to follow these patterns based on their upbringing and past experiences.

**Solutions include:**

- Weighing outcomes: It's important for individuals to reflect on their past experiences, considering both positive and negative outcomes, and to approach self-medication with caution
- Verification: While it may be appropriate for certain minor ailments based on positive experiences, serious or persistent symptoms should prompt consultation with a healthcare professional to ensure accurate diagnosis and appropriate treatment.

**10. Cultural and social factors**

There are certain cultural beliefs and societal norms regarding healthcare practices that can shape individuals attitudes toward self-medication.

This can influence decision making through:

- Cultural norms and practices: Cultural norms surrounding health and illness can strongly influence self-medication. In cultures where self-care and home remedies are inherent practices, individuals may be more inclined to self-medicate based on traditional beliefs and remedies passed down through generations.
- Social network influence: Peer pressure and influence within social networks can impact self-medication behaviors. If a social group normalizes and encourages self-

medication, individuals may be more likely to conform to these practices, driven by a desire to fit in or gain social approval.

- Stigma or beliefs about formal healthcare: Stigma or negative beliefs about formal healthcare systems can discourage individuals from seeking professional medical advice. In such cases, cultural factors may lead individuals to rely on self-medication as an alternative, driven by a preference for familiar cultural practices.
- Collective knowledge sharing: Social factors contribute to the collective knowledge shared within communities. If self-medication is widely accepted and encouraged within a social group or community, individuals may adopt similar practices, influenced by the shared beliefs and experiences of those around them.
- Knowledge transfer within families: Family traditions and practices related to self-medication can be influential. Knowledge transfer within families, where individuals learn from older generations about specific remedies or approaches, can shape attitudes toward self-medication.

**Recommendations include:**

- Information: It's important for individuals to be aware of how cultural and social factors can shape their views on self-medication and take appropriate measures where necessary.

- Holistic approach: A balanced approach that considers both traditional knowledge and evidence-based medical advice is crucial for maintaining overall health and wellbeing. Seeking professional guidance when necessary ensures accurate diagnosis and appropriate treatment.

Factors such as demographics have been discovered to impact self-medication. Awosusi and Konwea (2015) found that factors such as gender, age, sex and social role can impact self-medication. However, it is important to note that while these reasons may seem valid, self-medication should always be approached with caution. It's important for individuals to understand the various risks associated with the practice of self-medication and seek professional medical advice when necessary.

### **Risks and limitations of self-medication**

Self-medication is a common practice for many individuals seeking relief from minor ailments or discomfort. Self-medication involves the use of drugs (whether over-the-counter medications, home remedies, herbs etc) without the guidance of a healthcare professional. Although, some conditions and symptoms may be easily treated with over-the-counter medications, it is important to recognize that not all ailments can be effectively managed through self-medication.

Although self-medication is a form of self-care commonly used to manage symptoms of minor illnesses or injuries, this practice has many risks. The dangers of self-medication

involve: Incorrect self-diagnosis, delays in seeking correct medical guidance and adequate treatment, possible adverse effects, exacerbation of the condition being self-treated, risky drug interactions, and concealment of serious illnesses (Kathleen, 2023). Ruiz (2010), identified the potential risks of self-medication to include: incorrect self-diagnosis, delays in seeking medical advice when needed, infrequent but severe adverse reactions, dangerous drug interactions, incorrect manner of administration, incorrect dosage, incorrect choice of therapy, masking of a severe disease and risk of dependence and abuse. Without the expertise of a healthcare professional, there is a higher likelihood of misidentifying the underlying cause of your symptoms. This can lead to ineffective or even harmful treatments, potentially exacerbating the condition or delaying proper medical intervention. Also, self-medication can mask symptoms, making it difficult for healthcare professionals to accurately assess one's condition later on and this can complicate the diagnostic process and hinder the implementation of appropriate treatments. Furthermore, another crucial aspect to consider is the potential for adverse drug interactions. When self-medicating, individuals may unintentionally combine medications that have conflicting effects or interact negatively with each other. This can result in unforeseen complications and unwanted side effects, posing a risk to overall health and well-being of individuals. It can also lead to destruction of certain body organs such as the liver; and drug addiction especially when taken on a long term basis. Other potential risks of self-medication are incorrect self-diagnosis, incorrect choice of therapy,

failure to recognize special pharmacological risks, severe adverse effects, failure to recognize or self-diagnose contraindication, interaction, warning and precaution, incorrect route and excessive dosage, risk of dependence and abuse (WHO, 2008). Additionally, self-medication may not address the underlying cause of your symptoms but only provide temporary relief. Some conditions require comprehensive medical evaluation and treatment to prevent further complications or progression.

To mitigate these risks, it is essential to be well-informed about the medications you are considering and their potential side effects, seek professional guidance and adhere to instructions on how to use medication and follow treatment regimen. Consulting a qualified healthcare provider ensures accurate diagnosis, appropriate treatment, and personalized care. Healthcare professionals have the knowledge and experience to assess symptoms, conduct necessary tests, and prescribe the most suitable treatment plan.

### **The importance of professional medical advice**

Recognizing the importance of professional medical advice is paramount when it comes to self-medication. Although it may be tempting to diagnose and treat oneself based on symptoms found on the Internet or advice from friends and family, it is essential to remember that only a qualified healthcare professional can provide accurate and safe medical guidance. However, it is important to understand that not all health conditions

can be self-diagnosed or self-treated. Some symptoms might be indicative of a more serious underlying condition that requires professional attention.

Consulting a healthcare professional allows for proper evaluation of symptoms, medical history, and overall health. Pharmacists play a crucial role in recognizing, resolving, and avoiding drug-related problems in order to achieve the best possible patient outcomes and quality of life (Bennadi, 2013). They are professionally trained to support and assist patients in making informed health decisions (International Pharmaceutical Federation, 2022). Considering that the products used for self-medication is mostly accessed through the pharmacy (Shrestha et al, 2022), pharmacists are in the right position to deliver public health education and disease prevention strategies. It is well known that pharmacists play a significant role in the utilization of non-prescription medications, which could enhance patient results according to Bosse, Machado, and Mistry (2012). The report from the International Pharmaceutical Federation (FIP) titled “Pharmacy as a gateway to care: Assisting individuals in achieving improved health” highlights the importance of guided self-medication and the role pharmacists can have in assisting consumers in making self-care choices when using over-the-counter medicines (International Pharmaceutical Federation, 2017). Healthcare professionals possess the expertise and knowledge to accurately diagnose underlying health conditions and provide appropriate treatment options. Also, they can provide advice on accurate drug use, treatment of ailments, conditions necessary for the use of medications and potential risks associated with the use

of certain medications. Other healthcare professionals include the doctors, nurses, midwives, dentists etc.

Moreover, relying solely on self-medication without professional advice may lead to misdiagnosis or delayed treatment, potentially worsening the condition or causing unforeseen complications. Healthcare professionals have undergone extensive training and are updated on the latest medical advancements, ensuring that their advice is based on reliable and evidence-based information.

### **Empirical Review**

Zeid, Hamed and Mansour (2020) assess the prevalence and associated risk factors of self-medication among patients attending El-Mahsama family practice center, Ismailia, Egypt. A cross sectional study was conducted among 160 patients at the El-Mahsama Family Practice Center in Ismailia, Egypt, from November 2018 to February 2019. The participants in the study were chosen at random from people who go to the facility associated with Suez Canal University, offering both preventative and treatment services to a rural population. Participants were interviewed using a semi-structured questionnaire that included a sociodemographic scale and questions about self-medication knowledge and behavior. The data was analyzed using both descriptive and analytical statistical methods. According to the study, a remarkable 96% of participants engage in self-medication, with the primary motivation being financial savings. The most common

conditions that drive individuals to self-medicate are headaches (17%), musculoskeletal aches and pains (39.2%), and fevers (11.8%). The most frequently used self-medication drugs are analgesics (59.5%) and antibiotics (23.5%). The study concluded that the prevalence of self-medication is high among all socioeconomic levels of patients attending the El-Mahsama family practice center.

Malvi, Bigoniya and Jain (2011) conducted a research to gather information on extent of self-medication practice among the people of Bhopal region, Madhya Pradesh, India. The study aimed to investigate the prevalence of self-medication practices among adult males and females in Bhopal. A questionnaire was developed containing three sections. From a total of 150 participants, questionnaires were completed by 116 people in which 58.6% were male and 41.3% were female aged above 18 years belonging to urban areas of Bhopal. The findings revealed that the majority of participants (58.6%) were male, with the age group of 20-30 years being the most common. The majority of participants (56.8%) obtained information on self-medication from chemists, while 25% relied on advertisements. The most common reasons for self-medication were quick relief (58.6%) and lack of time to visit doctors (23.2%). The most commonly used medications were paracetamol (34.4%) and Disprin (18.9%). Headache (25.8%), fever (36.2%), and body pain (32.7%) were the most common conditions treated through self-medication. The study found that literacy and economy were significant factors influencing self-

medication practices among the population. The study concluded that Pharmacists should be more attentive towards people who take medicine without a prescription.

In 2017, Dnyanesh, Vaidehi, Gerard, and Gerhard conducted a comprehensive examination of various studies to evaluate self-medication behaviors. The search was restricted to articles released from January 1, 2000, to December 31, 2016. A comprehensive review of 140 studies involving over 189,000 participants from various age groups, including children, adults, and the elderly, was conducted to investigate the prevalence of self-medication. The studies were conducted in diverse geographical locations, with the majority originating from Brazil (12 studies, 9%), followed by India and Pakistan (9 studies, 6%) and (8 studies, 6%) from Nigeria. The majority of the studies (44, 31%) were focused on determining the prevalence of antibiotic self-medication while 75% of the studies were not specific to any particular therapeutic area. The most commonly self-medicated drugs were antibiotics (59%), followed by non-steroidal anti-inflammatory drugs (NSAIDs, 43.31%), and cough and cold medicines (13.9%). The top health complaints reported in the studies were cough and cold (61.43%), body pain (45, 32%), and gastrointestinal complaints (44.31%). The most common sources of self-medication were pharmacies (80.57%), followed by relatives and friends (45.32%), and leftovers (31, 22%). The study concluded that self-medication is a widespread phenomenon, with antibiotics being the most widely self-medicated drug.

A survey conducted by Wegbom, Edet, Raimi, Fagbamigbe and Kiri (2021) aimed at ascertaining self-medication practices and associated factors in the prevention and/or treatment of COVID-19 Virus among Nigerians. A self-reported questionnaire was used and a total of 461 respondents participated in the survey. Statistical analysis involving descriptive, bivariate, and multivariate analyses was conducted utilizing STATA 15. The results showed that nearly all respondents had adequate understanding of self-medication (96.7%). 41% of individuals engaged in self-medication for both preventing and treating COVID-19. Fear of stigmatization or discrimination (79.5%), fear of being quarantined (77.3%), and fear of infection or contact with a suspected person (76.3%) were the primary reasons for self-medication. Emergency illness accounted for 49.1% of the reasons for self-medication, followed by delays in hospital services at 28.1%, distance to the health facility at 23%, and proximity to the pharmacy at 21%. Vitamin C, multivitamins, and antimalarials were the top choices for self-medication, with vitamin C and multivitamin being used by 51.8% and antimalarials by 24.9% of respondents. Pharmacies were the main source where the drugs were bought (73.9%). Significant correlations with self-medication were found in males (OR: 0.79; 95% CI: 0.07–0.54) and individuals with adequate knowledge on self-medication (OR: 0.64; 95% CI: 0.19–0.77) from the multivariable logistic regression model. The main discovery in this research was that Nigerians with mostly tertiary education are using various over-the-counter drugs like vitamin C, multivitamins, and antibiotics/antimicrobial agents to

prevent and treat perceived COVID-19 infection, despite having a good understanding of the risks of self-medication.

A recent study published in 2021 by Akande-Sholabi, Ajamu, and Adisa investigated the prevalence, knowledge, and perception of self-medication practices among undergraduates in a Nigerian university. The study included 866 students, comprising medical, nursing, and pharmacy students, and collected data through a self-administered questionnaire. Data were summarized with descriptive statistics, while Chi-square and logistic regression tests were used for categorical variables at  $p < 0.05$ . Mean age was  $21 \pm 2.8$  years, and female respondents were 447 (51.6%). The study found that the prevalence of self-medication among respondents was 473 (54.6%). A total of 288 (55.3%) demonstrated good knowledge of self-medication practices, comprising 250 (52.2%) among those who have previously self-medicated and 229 (47.8%) among those who had not. The most common reasons for engaging in self-medication practices were treatment of minor ailments (357; 32.4%), while 248 (22.5%) believed they had the medical knowledge of what to use. Analgesic (353; 30.1%), antimalarial (352; 30.0%), and antibiotics (182; 15.5%) were the commonest classes of medication used for self-medication. The most frequently treated conditions were headache (363; 18.4%), malaria (334; 16.9%), and cough (184; 9.3%). More than half (281; 59.4%) of the respondents purchased their self-medicated drugs from the community pharmacy. Gender and respondents disciplines were found to be the independent predictors for good knowledge

of self-medication practice. These findings suggest that there is a significant gap in knowledge and understanding of self-medication practices among undergraduate healthcare students in Nigeria, which could have implications for their future practice as healthcare professionals.

### **Summary of Reviewed Literature**

The chapter presented a number of literature on self-medication as it relates to undergraduates. It also brought to limelight other researchers view which provided the research with necessary information. This chapter is also sub-divided into several sections in order to resolve some concepts and issues in the topic in particular. The practice of self-medication among university is on the rise with approximately 82% of undergraduates who turn to self-medication to treat perceived illness using analgesics, antibiotics, antimalarial drugs and cough syrups. Several factors were also identified as a reason for self-medication and they include: accessibility to medication, knowledge and information factor, peer pressure etc, with associated dangers such as: masking of severe illnesses, adverse drug interaction and damage of certain body organs. It is possible to mitigate potential risks associated with self-medication by promoting health literacy, ensuring access to accurate information and addressing sociocultural influences.

From the empirical perspective, related studies from Egypt, India and Nigeria were also reviewed. None of the studies examined the knowledge of the dangers and practice of

self-medication among undergraduates of University of Benin thereby creating a gap in the field of study.

## **CHAPTER THREE**

### **METHODOLOGY**

This chapter deals with research procedure adopted in the study. This is discussed under the following sub-headings:

- Research Design
- Population of the Study
- Sample and Sampling Technique
- Research Instrument
- Validity of the Instrument
- Reliability of the Instrument
- Method of Data Collection
- Method of Data Analysis

#### **Research Design**

The descriptive survey research design was adopted for this study. Descriptive survey describes analysis and interprets conditions that are in existence. The design was helpful in describing some terms, factors, characteristics that exist in the study. The interest of the researcher is in the identification and selection of variables, elements, subject which is considered relevant to the investigation (Uzuagulu, 2011). It also assisted the

researcher in making direct contact with the individuals whose chosen characteristic behaviors or attitude are relevant to the investigation.

### **Population of the Study**

The population of the study consists of Undergraduates of the University of Benin. The institution is made up of a total number of 41,196 students from the fifteen (15) Faculties.

Source: (Department of Academic Planning, Student Affairs Division 2021/2022).

### **Sample and Sampling Technique**

A total number of four hundred and fifty two (452) undergraduate students were used for the study. The systematic sampling technique was used to select the Faculties for the study. The Faculties were arranged in alphabetical order where the first and every other third Faculty were selected making a total of five (5) Faculties to be sampled, they include; Faculty of Agriculture, Dentistry, Environmental sciences, Management sciences and physical sciences. Also, the proportionate sampling technique was adopted to select 5% from each of the five Faculties selected. This will give a total of 452 respondents.

This technique was used because it gives participants an equal opportunity of being selected and was free from bias hence making the sample a true representative of the target population.

## **Research Instrument**

The data for the study was collected by means of a questionnaire developed by the researcher. The questionnaire was divided into two; Sections A and B. Section A contain items designed to collect the bio-data of the respondents, while Section B consist of three sub-sections; 1 to 3 which cover eighteen (18) items for the study on the Knowledge of the dangers and Practice of Self-medication among the undergraduates of the University of Benin, Benin City, Edo State. The instrument was structured on a Two Point Scale using "Yes" and "No" and weighted 2, 1 respectively.

The respondents were to tick (✓) on the boxes provided that corresponded with their response when answering the items for each research question that were patterned using the Guttman's dichotomous responses of "Yes" and "No". The justification for the use of six (6) items in the research Instrument was to allow for equal opportunity and balance the respondents view on the variables selected.

## **Validity of the Instrument**

The instrument was developed by the researcher and was subjected to thorough scrutiny. It was given to the project supervisor who checked for clarity, adequacy and suitability of the items to elicit the desired responses. It was also shown to two other expert lecturers in

the Department of Health, Safety and Environmental Education who certified it content valid. The suggestions and criticisms made resulted in the final draft of the instrument.

### **Reliability of the Instrument**

The reliability of the instrument was determined using a test retest procedure. The instrument was administered to twenty (20) undergraduates from the University of Benin who were not part of the study. After a period of two weeks, the instrument was re-administered. The scores obtained were subjected to analysis using Pearson Product Moment correlation coefficient. A value of 0.73 was an indication that the research Instrument is reliable and therefore fit for use.

### **Method of Data Collection**

The questionnaire was administered by the researcher and assisted by two research assistants. In order to elicit firsthand information from the respondents without bias, the respondents were implored to respond to the item freely and objectively. The respondents filled out their questionnaire and completed questionnaires were retrieved immediately.

### **Method of Data Analysis**

All the completed questionnaire were collated, coded and analysed. The analysis was done with descriptive statistics involving the use of frequency counts and percentages.

## CHAPTER FOUR

### PRESENTATION OF RESULT AND DISCUSSION OF FINDINDS

This chapter present the analysis of data collected, and the discussion of findings.

**Research Question One: Do undergraduates in the University of Benin engage in Self medication?**

**Table 1: Self medication among undergraduates of University of Benin**

S/N	Items	Yes (%)	No (%)	Total (%)
1	Have you ever taken a medication without consulting a healthcare professional?	404(89.6)	47(10.4)	451(100.0)
2	Do you purchase medication to treat a self-diagnosed ailment without guidance from a physician?	338(74.9)	113(25.1)	451(100.0)
3	Have you ever used leftover medication from a previous illness to treat another ailment?	275(61.0)	176(39.0)	451(100.0)
4	Do you decide when to stop or change a prescribed medications on your own?	254(56.3)	197(43.7)	451(100.0)
5	Have you ever taken medication recommended by a friend without consulting a doctor?	300(66.5)	151(33.5)	451(100.0)
6	Have you ever taken medication recommended by a family member without consulting a doctor?	404(90.0)	47(10.0)	451(100.0)

**Percentages in parentheses. Source: Field Survey, 2024**

The result on Table 1 above, depicts that 89.6% of the respondents have taken a medication without consulting a healthcare professional. Furthermore 74.9% and 61.0% of the respondents indulge in self diagnosis and prescription of medication and also use leftover medication from a previous ailment to treat a present condition respectively. The responses presented in the table also show that 43.7% of the respondents do not on their own stop or change prescribed medication. It was however revealed that 66.5% and 90.0% of the respondents take medications recommended by their friends and family members respectively. Overall, responses presented in the table indicate that undergraduates engage in self-medication.

**Research Question Two: What are the dangers associated with the practice of self-medication as perceived by Undergraduates of the University of Benin?**

**Table 2: The dangers associated with the practice of self-medication as perceived by Undergraduates of the University of Benin?**

S/N	Items	Yes (%)	No (%)	Total (%)
7	Do you know that some medications may interact negatively with each other if taken without the guidance of a physician?	405(89.8)	46(10.2)	451(100.0)
8	Do you know that self-medication can lead to incorrect diagnosis and treatment of ailments?	401(88.9)	50(11.1)	451(100.0)
9	Are you aware that improper use of antibiotics can lead to antibiotic resistance?	295(65.4)	156(34.6)	451(100.0)
10	Do you know that self-medication can be harmful to the health of individuals?	415(92.0)	36(8.0)	451(100.0)
11	Do you understand that there are potential risks associated with the use of certain medications?	413(91.6)	38(8.4)	451(100.0)
12	Are you aware that self-medication may lead to health complications?	419(92.9)	32(7.1)	451(100.0)

**Percentages in parentheses. Source: Field Survey, 2024**

In Table 2 above, it was gathered from respondents that some medications may interact negatively with each other if taken without the guidance of a physician. This view was reflected in the responses of 89.8% who responded positively. Furthermore, 11.1% and 34.6% of the respondents are not aware that self medication can lead to incorrect diagnosis and treatment of ailments as well as antibiotic resistance respectively. Also, 92.0% of the population are aware that self medication can be harmful to the health while 91.6% are of the opinion that there are potential risks associated with the use of certain medications. Similarly, 92.9% are aware that self-medication may lead to health complications. In general, it was gathered that majority of the respondents are able to identify the dangers associated with the practice of self medication as seen from the responses presented on the table.

**Research Question 3: What are the factors that predispose students of the University of Benin to Self medication?**

**Table 3: The factors that predispose students of the University of Benin to Self medication?**

S/N	Items	Yes (%)	No (%)	Total (%)
13	Are you aware that lack of awareness about drug administration can make people especially students resort to self medication?	394(87.4)	57(12.6)	451(100.0)
14	Have you ever encountered challenges in accessing healthcare facilities?	310(68.7)	141(31.3)	451(100.0)
15	Do you perceive that it's easier to obtain over-the-counter drugs to treat an ailment than visiting a health center?	391(86.7)	60(13.3)	451(100.0)
16	Have you ever felt the need to fit in with your peers thereby resorting to self medication?	91(20.2)	360(79.8)	451(100.0)
17	Have you ever experienced financial constraints that influenced your decision to self-medicate?	317(70.3)	134(29.7)	451(100.0)
18	Do you perceive seeking medical advice as time consuming?	262(58.1)	189(41.9)	451(100.0)

**Percentages in parentheses. Source: Field Survey, 2024**

Table 3 shows that 87.4% of the respondents are aware that lack of awareness about drug administration can make people especially students resort to self-medication. The table further depicts that 68.7% have encountered challenges in accessing healthcare facilities. It was also deduced that 86.7% of respondents perceive that it's easier to obtain over the counter drugs than visiting a health center. Majority (79.8%) of the respondents are of the view that peer pressure does not play a role in self-medication while 70.3% identified financial constraints as a risk factor for self-medication. Also, 58.1% of the respondents are in agreement that seeking medical advice is time consuming. Overall, with the exemption of peer pressure, all other factors indicated in table 3 were seen to influence decision of students to engage in self-medication.

### **Discussion of Findings**

This study reveals a high response rate which is as a result of the high level of involvement in the practice of self medication among undergraduates of University of Benin. From this research findings, it was discovered that self-medication is high amongst students. This is in line with the study conducted by Tolulope (2018), which indicated that about 81.8% of undergraduates practice self-medication as well as Khalid (2019) who also reported that 92.2% of students practice self-medication. This is because most of the students have knowledge about drugs and are from health related departments and Faculties, this evidence is backed up by the research carried out in Ahmadu Bello University, Zaria by Olayemi et al, 2010. This study further identified the dangers

associated with the practice of self-medication as perceived by Undergraduates of the University of Benin. It was discovered that majority identified negative drug interaction and incorrect diagnosis; this is in line with the study conducted by Kathleen (2023), antibiotic resistance and health complications; this is parallel to the study conducted by Ruiz and Saf, (2010), as dangers associated with the practice of Self-medication. It also identified the various challenges encountered by students that predispose them to the practice of self-medication and it was revealed that lack of awareness was a factor and this supports the study carried out by Maryam et al, (2022) which states that the reason why individuals engage in self-medication is access to medical information. Another factor identified is difficulty assessing healthcare facility which is parallel to the study by Emmanuel et al,( 2019) that lack of access to healthcare is a reason for self-medication. Ease of obtaining over the counter drugs is another factor and according to Maryam et al, (2022), easy access to medication is a reason for self-medication. Financial constraints and time factor; supported by Selvaraj et al, (2014). Finally, majority of the respondents agreed that peer influence did not play a role and this is in contrast with the study conducted by Villines, (2022) which states that peer pressure to use alcohol and drugs can contribute to substance use disorders.

It was concluded from this study that knowledge and practice of self medication among undergraduates of University of Benin is high despite being aware of the dangers associated. Trend of drug use among the undergraduate has not significantly changed

from the way it was reported six years ago by Tolulope. Schools have been recognized as social structures which can create awareness about self medication. Therefore, if urgent measures are put to curb the practice of self medication on campus, it is also possible to curb it in the society at large.

## CHAPTER FIVE

### SUMMARY, CONCLUSION AND RECOMMENDATIONS.

#### Summary

This study looked at "knowledge of practice and dangers of self medication among undergraduates of University of Benin". Three research questions were raised for the purpose of the study. The specific objectives were to ascertain the level of involvement in the practice of self-medication, to identify the dangers associated with the practice of self-medication among undergraduates and to identify the various challenges facing students that predisposes them to the practice of self-medication. This study adopted the descriptive survey research design. The population of the study comprised of the entire forty-one thousand, one hundred and ninety six (41,196) undergraduates of the University of Benin. The systematic sampling technique was adopted to select five (5) Faculties to be sampled, also, the proportionate sampling technique was adopted to select 5% from each of the five Faculties selected making a total of four hundred and fifty-one (451) respondents. The data collection procedure was through a questionnaire named "Knowledge of Practice and Dangers of Self Medication (KPDSM)". The questionnaire was validated by the project supervisor and two other experts in the department of Health, Safety and Environmental Education. The study adopted frequency count, simple percentage for data analysis.

The finding reveals that the practice of Self-medication among undergraduates of University of Benin is high. The dangers of self-medication as perceived by undergraduates of University of Benin includes; negative drug interaction, incorrect diagnosis, incorrect treatment of ailments and antibiotic resistance. Undergraduates of University of Benin engage in self-medication because of lack of awareness about drug administration, difficulty in accessing healthcare facilities, ease of obtaining over the counter drugs, financial constraints and time constraints.

## **Conclusion**

Self-medication is the most popular form of self-care. Self-medication among undergraduates is a prevalent health behavior. Most students who practice self-medication have knowledge about drugs and got information from family, friends and media. Self-medication patterns vary among individuals and are influenced by many factors such as information, cost and accessibility. The practice of self-medication is associated with potential risks and students engage in self-medication despite knowing it's implications on health. Promoting awareness about responsible medication use and seeking professional medical advice is important for promotion of overall health. This study therefore concluded that undergraduates of University of Benin despite being aware of the dangers of self-medication still indulge in it basically because of cost and convenience.

## **Recommendations**

Based on the findings of this study, the following recommendations were made:

- Students should seek advice from a healthcare professional in cases of serious or persistent symptoms to ensure accurate diagnosis and appropriate treatment
- Organizing Health education programs within the school will raise awareness about the risks associated with self-medication and promote responsible healthcare practices
- The school should invest in healthcare infrastructures as this will improve accessibility and quality of healthcare services

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## **Appendix A: Letter of request for retrieval of population data**

Department of Health, Safety and Environmental

Education,  
Faculty of Education,  
University of Benin, Benin City.  
February 1st, 2024

To:  
The Director,  
Office of Academic Planning,  
University of Benin.

Through:  
Head of Department,  
Department of Health, Safety and Environmental Education,  
Faculty of Education,  
University of Benin.

### **LETTER OF REQUEST**

I, UZODIMMA NKECHI BLESSING a 400 level student of the Department of Health, Safety and Environmental Education, Faculty of Education with Mat. No: EDU1904644 request for data on the Undergraduates of this great institution. Due to the nature of my research, I would need the total number of undergraduates across all Faculties in the University. This data will assist in the progress of my Research project which is a compulsory item for my clearance.

Thank you.

Yours faithfully,

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**UZODIMMA NKECHI BLESSING**

**Appendix B: Questionnaire**

**UNIVERSITY OF BENIN  
FACULTY OF EDUCATION**

**DEPARTMENT OF HEALTH, SAFETY AND ENVIRONMENTAL EDUCATION**

**QUESTIONNAIRE ON:**

Knowledge of practice and dangers of self medication among undergraduates of University of Benin

Dear Respondents,

The questionnaire is designed to investigate the Knowledge of practice and dangers of self medication among undergraduates of University of Benin. All information collected will be used solely for research purpose and will be treated with utmost confidentiality. Thank you for your cooperation.

**SECTION A: Demographic Data**

**INSTRUCTION:** Tick the correct answer in the box below

**Sex:** Male [  ] Female [  ]

**Age:** 16-19 [  ] 20-23 [  ] 24-27 [  ] 28 and above [  ]

**Faculty:** \_\_\_\_\_

**SECTION B:**

**1:** Do students in University of Benin indulge in Self medication?

S/N	ITEMS	YES	NO
1.	Have you ever taken a medication without consulting a healthcare professional?		
2.	Do you purchase medication to treat a self-diagnosed ailment without guidance from a physician?		
3.	Have you ever used leftover medication from a previous illness to treat another ailment?		

4.	Do you decide when to stop or change a prescribed medications on your own?		
5.	Have you ever taken medication recommended by a friend without consulting a doctor?		
6.	Have you ever taken medication recommended by a family member without consulting a doctor?		

**2:** What are the dangers associated with the practice of self medication as perceived by Undergraduates of the University of Benin?

S/N	ITEMS	YES	NO
7.	Do you know that some medications may interact negatively with each other if taken without the guidance of a physician?		
8.	Do you know that self medication can lead to incorrect diagnosis and treatment of ailments?		
9.	Are you aware that improper use of antibiotics can lead to antibiotic resistance?		
10.	Do you know that self-medication can be harmful to the health of individuals?		
11.	Do you understand that there are potential risks associated with the use of certain medications?		
12.	Are you aware that self-medication may lead to health complications?		

**3:** What are the factors that predispose students of the University of Benin to Self medication?

S/N	ITEMS	YES	NO
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13.	Are you aware that lack of awareness about drug administration can make people especially students resort to self medication?		
14.	Have you ever encountered challenges in accessing healthcare facilities?		
15.	Do you perceive that it's easier to obtain over-the-counter drugs to treat an ailment than visiting a health center?		
16.	Have you ever felt the need to fit in with your peers thereby resorting to self medication?		
17.	Have you ever experienced financial constraints that influenced your decision to self-medicate?		
18.	Do you perceive seeking medical advice as time consuming?		