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BEHAVIOURAL PATTERNS AND SELF-MEDICATION AMONG STUDENTS IN PUBLIC AND PRIVATE UNIVERSITIES IBADAN, OYO STATE, NIGERIA

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ABSTRACT

This study examines the behavioural determinants of self-medication among students in public and private universities in Ibadan, Oyo State, Nigeria. Given the growing prevalence of self-medication among young adults, particularly university students, the research explores how habits, attitudes, and perceptions shape engagement with self-treatment practices. A cross-sectional descriptive design with a mixed-methods approach was employed. A total of 375 students from Lead City University and the University of Ibadan participated in a quantitative survey, while six students and three medical professionals provided qualitative insights through in-depth and key-informant interviews. Data were collected with structured questionnaires and interview guides. Quantitative analysis, using descriptive statistics and linear regression, reveals a high prevalence of self-medication (85.3%), with reliance on previous experiences, peer influence, convenience, and avoidance of healthcare institutions emerging as significant predictors ($\beta = 0.77$, p < 0.01). Thematic analysis of qualitative data reinforces these findings, as students cite time constraints, long queues at clinics, and confidence in self-diagnosis as key motivators. The study concludes that behavioural tendencies and institutional barriers jointly sustain self-medication. It recommends a multimodal strategy led by social workers, in collaboration with universities and medical professionals, to strengthen student support systems, and encourage safer health-seeking behaviours.

Keywords: Self-medication, behavioural patterns, university students, health-seeking behaviour.

INTRODUCTION

Self-medication, the use of drugs to treat self-diagnosed disorders without professional consultation, has become increasingly prevalent among young adults, particularly university students. This behaviour, often perceived as a time-saving or cost-effective alternative to seeking professional healthcare, poses significant health risks ranging from incorrect selfdiagnosis to the development of antimicrobial resistance (Al-Worafi, 2020). Globally, the trend of self-medication is rising, with varying prevalence rates across different socioeconomic and educational contexts. In developing countries, where access to healthcare services is often limited by economic or infrastructural challenges, self-medication is especially rampant (World Health Organization [WHO], 2021). According to the WHO, up to 80% of the population in some developing nations rely on self-medication as their primary healthcare approach. Among university students, self-medication is often driven by a complex interplay of academic stress, easy accessibility to over-the-counter (OTC) medications, and strong peer influence. Academic stressors such as examinations, deadlines, and the pressure to maintain high academic performance often lead students to seek quick relief from symptoms like headaches. insomnia, or anxiety, without consulting healthcare professionals. Furthermore, Peer influence also plays a role, as students often share medication recommendations based on personal use rather than medical advice (Lukovic et al., 2014; Sawalha, 2007).

University students represent a unique demographic typically between the ages of 17 and 29 who are in a transitional phase marked by increased autonomy, academic pressure, and lifestyle experimentation. These factors often lead to changes in health behaviour, including risky health practices like self-medication (James et al., 2008). Studies have shown that students tend to prefer self-treatment for common ailments such as headaches, menstrual cramps, or colds, often due to time constraints, previous experiences, or a lack of trust in health systems (Klemenc-Ketis et al., 2017). In Nigeria, the practice of self-medication is

alarmingly high, with estimates suggesting that more than 60% of the population engages in it regularly (Osemene&Lamikanra, 2012). This issue is exacerbated by the unregulated pharmaceutical market, widespread availability of prescription drugs without medical authorization, and inadequate enforcement of drug control policies. In urban centres like Ibadan, students in both public and private universities are increasingly vulnerable due to easy access to OTC medications, coupled with varying degrees of healthcare services provided by their institutions.

There are notable socio-economic and structural differences between public and private universities in Nigeria that may influence students' behavioural patterns towards self-medication. Public university students often contend with infrastructural inadequacies, underfunded health services, and academic instability due to strikes. In contrast, private university students, who typically come from relatively wealthier backgrounds, may experience stricter institutional controls but better healthcare infrastructure (Ajibola et al., 2018).

Investigating the contextual differences between students in public and private universities provides valuable insight into how institutional structures and socioeconomic status influence health-seeking behaviours, particularly self-medication. Public university students often contend with overcrowded campuses, underfunded health centres, frequent academic disruptions, and limited access to professional medical care. In contrast, private university students typically have more consistent academic calendars and better on-campus healthcare services, yet may still engage in self-medication due to perceived convenience, peer influence, or cultural norms (Osemene & Lamikanra, 2012; Afolabi, 2008). Therefore, a study focusing on both the prevalence and behavioural patterns among students in public and private universities in Ibadan is timely and essential for designing context-specific health education and policy interventions.

Against this backdrop, the present study seeks to explore the behavioural patterns that influence self-medication among students in public and private universities within Ibadan, Oyo State. It investigates the psychological, socioeconomic, and institutional factors that may account for differences in behaviour. By doing so, the study aims to contribute to more tailored health policy interventions that can address this issue within the university system. Therefore, the central aim of this research is to identify the behavioural patterns towards self-medication among students in public and private universities in Ibadan, Oyo State.

Literature Review

Self-medication refers to the practice of individuals treating self-diagnosed ailments or symptoms using drugs without consulting a licensed medical professional. According to the World Health Organization (WHO), self-medication involves the selection and use of medicines by individuals to treat self-recognized illnesses or symptoms, often relying on past experience or advice from non-professional sources (WHO, 2021). This practice includes the purchase and use of over-the-counter (OTC) medications, leftover prescriptions, or drugs obtained through informal channels. While often perceived as a component of self-care, selfmedication exists on a spectrum between responsible and irresponsible usage. Responsible self-medication, as acknowledged by the WHO, can be beneficial in managing minor conditions such as colds, headaches, or allergies when proper drug usage guidelines are followed and access to healthcare is limited (Al-Worafi, 2020). For example, the appropriate use of OTC pain relievers or antacids under standard dosages can reduce the burden on healthcare systems. However, irresponsible self-medication occurs when individuals use prescription-only drugs without guidance, exceed recommended dosages, or treat serious medical conditions independently. This form of misuse increases the risks of drug interactions, resistance particularly with antibiotics and masking of underlying illnesses (Hughes et al., 2001).

University students, especially in low- and middle-income countries, frequently self-medicate using a variety of drug types. These drugs typically fall into three broad categories:

Analgesics (Pain Relievers): These include paracetamol, ibuprofen, and aspirin. Students often use them for headaches, body pains, and menstrual cramps without considering

potential side effects like gastric irritation or kidney damage with excessive use (Osemene & Lamikanra, 2012).

Psychotropics and Sedatives: These include sleeping pills, anti-anxiety medications, and antidepressants. Use without medical supervision can lead to dependence and exacerbate mental health conditions (Bennadi, 2014).

Behavioural Patterns in Health-Seeking

Health-seeking behaviour refers to the sequence of actions undertaken by individuals in response to perceived health problems, aimed at restoring well-being. It encompasses decision-making processes, choices of healthcare sources, and timing of interventions. According to MacKian (2003), health-seeking behaviour is influenced not only by the severity of symptoms but also by an individual's perception of illness, personal beliefs, accessibility to services, and broader social context. Among university students, these behaviours manifest in unique patterns shaped by their academic environment, age group, and transition into independence. Health-seeking behaviour is not a singular act but a dynamic process involving recognition of symptoms, appraisal of their seriousness, and decisions on whether and how to seek care. It often lies on a continuum from informal self-care (e.g., rest, home remedies) to formal healthcare (e.g., visiting a doctor). Mechanic (1968) introduced the idea that health-seeking is conditioned by illness perception, which includes symptom visibility, perceived severity, and knowledge about the illness.

In the context of university students, this process is often shaped by the perceived efficacy of self-treatment and barriers to formal care, such as cost, time, stigma, and institutional support. As a result, many students resort to self-medication or delay professional consultation unless symptoms worsen (Osemene & Lamikanra, 2012).

Influences on Behaviour: Psychological, Cultural, and Social Drivers

Numerous interrelated factors influence students' health-seeking behaviour. Psychological factors include stress, anxiety, fear of diagnosis, and prior health experiences. Academic stresslinked to examinations, tight schedules, and competitive pressure can exacerbate physical symptoms or lead to avoidance of clinical settings due to fear of losing academic time (James et al., 2008). Some students, particularly those in medical or health-related fields, may overestimate their diagnostic capabilities, increasing self-medication rates (Lukovic et al., 2014). Cultural beliefs also shape health decisions. In many African contexts, illnesses are often attributed to spiritual or traditional causes, leading individuals to prefer herbal or nonbiomedical solutions, especially when conventional medicine is perceived as ineffective or inaccessible (Afolabi, 2008). Peer influence and social norms can also perpetuate unsafe practices, such as sharing medications or using non-prescribed drugs endorsed by friends. Social and economic status plays a significant role as well. Students from lower-income backgrounds, especially those in public institutions, may avoid formal healthcare due to affordability issues. Conversely, students in private institutions, while often from more privileged backgrounds, may self-medicate due to easier access to a variety of medications and lack of strict drug control (Ajibola et al., 2018).

Decision-Making Autonomy among University Students

University life often marks a student's first experience with personal autonomy in health decision-making. Away from parental supervision, students are empowered to make independent choices regarding when, how, and where to seek care. This autonomy, while fostering independence, can lead to inappropriate health practices if not coupled with adequate health literacy. Many students consider their ailments too minor to warrant medical consultation, or they rely on past experiences and peer advice. Moreover, digital health information especially from unreliable sources can reinforce poor decisions. According to Sawalha (2008), students often misdiagnose conditions based on internet searches or anecdotal reports from peers, which can lead to misuse of medications or delayed treatment for serious conditions.

Additionally, institutional structures influence autonomy. In some public universities, limited healthcare facilities or long waiting times discourage formal care, whereas private institutions might have better resources but still suffer from a culture of health neglect due to students' misplaced confidence in self-treatment (Eticha & Mesfin, 2014).

Understanding these behavioural patterns is critical to developing effective interventions targeting students' health literacy, regulation of OTC medications, and access to youth-friendly healthcare services.

Contextual Influences: Public vs. Private Institutions and Behavioural Patterns in Health-Seeking

The behavioural patterns of self-medication among university students are significantly shaped by the institutional context in which they study. In Nigeria, distinct differences between public and private universities influence students' approaches to healthcare. These variations stem from disparities in healthcare infrastructure, socio-economic status, institutional policies, and environmental conditions, which together impact how students perceive and respond to health challenges.

Public universities in Nigeria are often characterized by overcrowding, underfunded healthcare systems, and prolonged academic disruptions due to industrial actions. The student population in these institutions typically spans diverse socio-economic backgrounds, with a significant proportion coming from lower-income households. As a result, students often face barriers to accessing formal healthcare, including long queues at campus clinics, insufficient medical staff, and limited drug availability (Osemene & Lamikanra, 2012). Consequently, many resort to self-medication as a quicker, more affordable alternative, even for symptoms that warrant professional attention (Afolabi, 2008). In contrast, private universities tend to offer more structured academic calendars, better infrastructure, and relatively well-funded medical centres. Students in these institutions often belong to middle- or upper-income families, granting them better access to health resources. However, the perception of convenience and time-efficiency still drives many to self-medicate. Additionally, because private institutions sometimes enforce strict movement or visitation policies, students may prefer self-treatment over navigating institutional procedures for off-campus medical care (Ajibola et al., 2018).

Social context also varies between the two types of institutions. Public university environments are often more autonomous and socially dynamic, allowing for higher peer influence in health decision-making. Private university students, while operating within more controlled environments, may still face cultural and peer pressure to manage health informally, especially in a bid to avoid parental involvement or institutional documentation (Eticha & Mesfin, 2014). Ultimately, these contextual influences reinforce varying patterns of self-medication and health-seeking behaviour. While economic limitations drive the behaviour in public universities, convenience and autonomy appear to be stronger motivators in private institutions. A comparative understanding of these dynamics is essential for designing effective, institution-specific health interventions.

Understanding the behavioural patterns associated with self-medication requires examining existing empirical evidence across various demographic, educational, and geographical settings. Several studies in Nigeria and beyond have highlighted how habitual use, attitudes, and perceptions significantly influence self-medication practices, especially among youth and students. These findings provide a foundational backdrop for analyzing university students' behaviour in Ibadan. A study by Ekpenyong & Ekpenyong (2020) in Bayelsa State assessed awareness of self-medication risks among 300 secondary school students. Results revealed low awareness and risk perception, with students commonly engaging in self-medication without understanding its long-term health implications. The study emphasized that behavioural patterns begin early and are reinforced by a lack of structured health education, which may carry into tertiary education. This underlines the importance of targeting students with tailored health interventions from a young age.

Among university students, Tohan et al. (2024) conducted a structural equation modelling study in Bangladesh and found a significant relationship between knowledge, convenience,

and attitudes toward self-medication. Students who believed that visiting a doctor was inconvenient or unnecessary were more likely to self-medicate. Siraj et al. (2022) investigated self-medication patterns among health science students in Ethiopia. A 68.1% prevalence rate was recorded, with analgesics and antimicrobials being the most commonly used. Students without health insurance, those living in urban areas, or studying medical-related courses had higher knowledge scores. However, less than half exhibited favourable attitudes. This dissonance between knowledge and behaviour suggests the presence of habitual patterns and social influences as key motivators of self-medication.

A systematic review by Pillai & Sivaperumal (2024) of 23 cross-sectional studies involving 8,445 respondents globally identified pain, fever, and respiratory symptoms as the top reasons for self-medication. The most commonly used drugs were NSAIDs and antipyretics. The review concluded that habitual use and perceived safety were consistent global trends. It emphasized the need for regulatory enforcement and behavioural health campaigns to mitigate unsafe practices.

In rural India, a mixed-method study in West Bengal involving 212 households reported a 41% self-medication rate, with acute illnesses, middle school education, and Class III socio-economic status being significant predictors. The study highlighted that education and socioeconomic conditions strongly influence self-treatment behaviours, echoing the need for contextual understanding when evaluating student behaviour in Nigerian universities. Together, these studies provide compelling evidence that behavioural factors such as stress response, convenience, social modelling, and perception of drug safety are central to self-medication practices. However, institutional context such as access to care in public vs. private universities remains underexplored. Thus, the current study addresses this gap by comparing how these behavioural elements manifest across distinct university environments in Ibadan.

The Knowledge, Attitude, and Practice (KAP) Model

The Knowledge, Attitude, and Practice (KAP) model is a widely recognized framework used to understand health behaviours, including self-medication. The model suggests that knowledge about a health issue influences a person's attitude, which in turn shapes their practices. In the context of self-medication, this means that students who possess adequate knowledge about drug use, including risks like adverse drug reactions (ADRs), are more likely to develop responsible attitudes and safer medication practices (Tohan et al., 2024). However, when knowledge is insufficient or inaccurate, it can foster poor decision-making. Numerous studies have shown that inadequate understanding of drug safety and dosage is one of the strongest predictors of unsafe self-medication (Siraj et al., 2022). Additionally, attitudes play a mediating role. A negative attitude toward healthcare systems or prescription processes can reinforce habitual self-treatment, while awareness of the dangers of ADRs can lead to more cautious behaviours (Pillai & Sivaperumal, 2024). These interrelations underscore the importance of investigating both what students know and how they feel about medications. In the current study focusing on university students in Ibadan, the KAP model serves as a robust theoretical lens. Public and private university students likely differ in their access to information, exposure to healthcare professionals, and cultural attitudes toward medication use. For instance, students in private universities might have more access to structured health education, while those in public institutions may rely more on peer knowledge or informal sources, shaping different patterns of attitude and practice. Moreover, convenience is an increasingly important factor that extends beyond traditional KAP domains. In Nigeria, where prescription-only drugs are often sold over the counter, ease of access becomes a behavioural driver independent of knowledge or attitude (Osemene & Lamikanra, 2012). Many students opt for self-medication not necessarily due to poor knowledge, but because of long clinic wait times, cost, or restrictive institutional policies. This behavioural dimension convenience over compliance must be factored into the interpretation of health-seeking practices among students.

Thus, applying the KAP model in this study helps uncover the psychosocial dynamics behind self-medication. At the same time, recognizing structural barriers and perceived convenience

enhances its practical relevance, particularly in designing policy and education strategies tailored to both public and private institutional contexts.

METHODOLOGY

Research Design

This study employed a cross-sectional descriptive research design, utilizing both quantitative and qualitative methods to investigate behavioural patterns and self-medication practices among students in public and private universities in Ibadan, Oyo State. The survey method was adopted due to its broad reach, cost-effectiveness, and suitability for capturing students' habits, attitudes, and perceptions at a single point in time. Data were collected through structured questionnaires, in-depth interviews, and key-informant interviews to allow for triangulation and richer interpretation of findings. This mixed-methods approach enhanced the robustness of the study by integrating numerical data with context-driven insights. The dependent variable was the students' self-reported involvement in self-medication practices. Independent variables included behavioural and social factors such as coping mechanisms, cultural beliefs, habits, perceived impacts of self-medication, and educational level. Quantitative data were analyzed using univariate and bivariate statistical methods, while qualitative responses were subjected to thematic analysis to identify recurring patterns and contextual narratives.

Population of the Study

The study population included undergraduate and postgraduate students from Lead City University (LCU) and the University of Ibadan (UI), representing private and public institutions respectively. It also incorporated medical professionals a pharmacist, a medical doctor, and a medical laboratory scientist who served as key informants. Lead City University was chosen as a private institution with a reputation for innovative academic delivery, while the University of Ibadan represents Nigeria's oldest public university, renowned for academic diversity and its extensive student population.

Sample and Sampling Technique

A multi-stage sampling technique was used. First, purposive sampling was employed to select the two institutions based on proximity, accessibility, and their contrasting characteristics as public and private universities. In the second stage, stratified sampling was applied using faculties as strata to ensure broad representation across disciplines. Using Slovin's formula with a student population of 15,000 and a 5% margin of error, the required sample size was calculated as approximately 390. With an added 5% attrition buffer, the final sample size was set at 400 students (200 from each institution). Of these, 175 responses were collected online via Google Forms, while 225 responses were gathered through face-to-face administration. In addition, six participants (three from each university) were selected for in-depth interviews, while three medical professionals participated in key-informant interviews. This qualitative sample provided insight into medical expertise, student behaviour, and institutional challenges surrounding self-medication.

Research Instruments

Three research instruments were used in this study. A structured questionnaire, organized into seven sections (A–D), was designed to capture socio-demographic data (Section A), behavioural patterns toward self-medication (Section B), health-seeking behaviours and access barriers (Section C), and drug usage patterns (Section D), including use of antibiotics, analgesics, and herbal remedies. An in-depth interview guide was used to probe student motivations, habitual behaviours, and perceived risks, providing context for their self-medication practices. The key-informant interview guide gathered expert insights from medical professionals on associated risks and regulatory challenges.

RESULT

A total of 375 students participated in this study, comprising respondents from both public (University of Ibadan) and private (Lead City University) institutions in Ibadan. As shown in Table 4.1, the gender distribution was fairly balanced, with 170 males (45.3%) and 205 females (54.7%). The majority of participants were between the ages of 19–24, accounting for 60.8% of the total sample, a reflection of the typical age range for university students in Nigeria. In terms of institutional affiliation, 202 (53.9%) were from a private university, while 173 (46.1%) were from a public institution. Participants spanned across various academic levels, with a fairly even spread from 100 to 500 level. A significant number (86.7%) were pursuing a BSc degree, and a small fraction were enrolled in postgraduate programs. Notably, 53.9% of the participants resided on campus, while 45.9% lived off-campus. One of the most striking results was the high prevalence of self-medication, with 320 respondents (85.3%) admitting to practicing self-medication. This confirms the growing concern that university students frequently engage in unsupervised drug use.

Qualitative data were gathered from six student participants through in-depth interviews (IDIs) and three healthcare professionals through key-informant interviews (KIIs). These participants provided context and insights that helped explain the patterns identified in the survey data. The IDI participants were evenly distributed across institutions and included a mix of undergraduate and postgraduate students. Their academic disciplines ranged from pharmacy and veterinary medicine to computer science and social work, allowing for diverse perspectives. The KII participants consisted of a medical laboratory scientist, clinical pharmacist, and a medical doctor, whose expertise provided validation for student responses and contextual understanding of self-medication risks.

A linear regression analysis was conducted to examine the relationship between behavioural patterns and self-medication behaviour. As shown in Table 4.3, behavioural patterns significantly influenced self-medication [t(1, 375) = 23.001, β = 0.77, p < 0.01], explaining 77% of the variance in self-medication practices among the students. This strong positive relationship indicates that students with higher tendencies toward informal, habitual, or peer-influenced behaviours were more likely to self-medicate. Therefore, the null hypothesis was rejected, and the alternative hypothesis accepted behavioural patterns are a significant predictor of self-medication among university students in Ibadan.

Qualitative Themes and Participant Narratives

1. Use of Self-Knowledge and Familiarity with Symptoms

Many students cited prior experience with similar symptoms as the basis for self-treatment. Rather than consulting a physician, they reused medications previously taken for the same symptoms.

"Once I start feeling my malaria symptoms, I would also just buy an anti-malaria drug to treat myself." (IDI, 23-year-old male, UI)

"When I have a cold, I don't bother going to the clinic. I just use what I used the last time." (IDI, 21-year-old female, LCU)

This reliance on perceived familiarity reflects a habitual behavioural pattern in which illness is self-managed based on memory rather than diagnosis.

2. Preference for Quick Relief and Convenience

Academic obligations often compel students to seek fast relief. The long wait times at university clinics further discourage professional consultation.

"When I go to the clinic and see a long queue, I just don't bother to wait. Instead, I go straight to a pharmacy and get attended to quickly." (IDI, 23-year-old male, UI)

"If it's not serious, I would rather buy drugs than waste time at the hospital." (IDI, 28-year-old male, LCU)

This underscores how convenience and academic pressure shape health-seeking behaviour.

3. Self-Diagnosis and Informal Drug Selection

Students often determine their illness and select medication based on symptoms alone, bypassing both diagnostic tests and medical advice.

"I just know it's malaria or typhoid, so I use drugs straight away." (IDI, 21-year-old female, UI) "Students think they know their body well, but they often misjudge symptoms and take the wrong drugs." (KII 3, Medical Doctor)

This practice reflects overconfidence and low medical literacy, increasing the risk of misdiagnosis and adverse drug reactions.

4. Under-dosing, Over-dosing, and Instructional Neglect

Several participants admitted to skipping medication instructions, adjusting dosages arbitrarily, or using expired drugs.

"I used the syrup without reading the prescription... I became drowsy and nauseous." (IDI, 23-year-old male, UI)

"Sometimes I under-dose if I'm not sure of the right intake." (IDI, 23-year-old male, UI) Such behaviours reflect poor medication practices, which may result in treatment failure or toxicity.

5. Drug Sharing and Peer Influence

Students frequently share medications or accept drug recommendations from peers without verification.

"I used what my friend used for her stomach pain because I felt the same thing." (IDI, 21-year-old female, LCU)

"Most of these students don't even do tests to confirm what is wrong before they start taking drugs." (KII 1, Pharmacist)

This demonstrates how peer networks function as informal health systems within university environments.

DISCUSSION

The quantitative data show that 85.3% of the students surveyed admitted to practicing self-medication. This high prevalence aligns with earlier studies conducted among university students in Nigeria and other low- and middle-income countries. For instance, Osemene and Lamikanra (2012) found that over 60% of Nigerian university students engage in self-medication, often due to poor access to healthcare and high perceived convenience. Similarly, Siraj et al. (2022) reported a 68.1% prevalence among health science students in Ethiopia, reinforcing the idea that self-medication is not confined to those outside the medical field. The regression analysis in this study confirmed that behavioural patterns significantly predicted self-medication behaviour (β = 0.77, p < 0.01), accounting for 77% of the variance. This substantial influence validates the application of the Knowledge, Attitude, and Practice (KAP) model, which posits that behaviour is shaped by what individuals know, how they feel, and how they choose to act (Tohan et al., 2024). When knowledge is inadequate or distorted, and attitudes are overly confident or indifferent, risky health practices such as self-medication become more common.

Qualitative findings emphasized convenience as a dominant theme driving self-medication. Students consistently reported that visiting a clinic was time-consuming, often involving long queues, unfriendly staff, or bureaucratic delays. As a result, many preferred to treat symptoms on their own, relying on past experience or advice from friends. These responses align with findings by Afolabi (2008), who observed that time-saving and ease of access to drugs significantly contributed to the practice of self-medication among Nigerian youth. Moreover, the role of academic pressure in shaping health behaviours cannot be overlooked. University students often juggle coursework, exams, and extracurricular obligations, which leaves little room for clinic visits or diagnostic procedures. James et al. (2008) noted that students often avoid medical consultations unless absolutely necessary, opting instead for fast relief methods to avoid disruption of their academic routines.

The practice of self-diagnosis was also prevalent in this study. Students reported diagnosing themselves based on prior experiences or symptoms perceived to be "familiar," such as malaria, headaches, or gastrointestinal issues. This form of health behaviour demonstrates high reliance on subjective health interpretation rather than medical confirmation. According to Bennadi (2014), such over-reliance on self-diagnosis often leads to inappropriate drug use, especially in contexts where prescription-only drugs like antibiotics are easily accessible without regulation. Furthermore, students admitted to making health decisions based on peer recommendations or shared drug usage. This social dimension of health behaviour mirrors the social learning theory, where behaviour is shaped through observation and imitation of others, especially when these practices are normalized within the peer group (Bandura, 1986). Sawalha (2008) similarly reported that university students frequently self-medicated based on what worked for friends, often without understanding the pharmacological implications.

Another major behavioural pattern uncovered was instructional neglect students skipping labels, under-dosing, or extending medication usage without guidance. Some students confessed to ignoring dosage instructions or misusing medications because they believed they "knew what worked." This highlights a gap in medication literacy, which involves the ability to read, understand, and follow drug instructions effectively (Hughes et al., 2001). These behaviours align with global trends, as Pillai and Sivaperumal (2024) observed in their review that self-medication is often accompanied by non-compliance with dosage, particularly in young adults who perceive themselves as low-risk patients. Such practices increase the likelihood of treatment failure, drug toxicity, or antimicrobial resistance especially in the misuse of antibiotics and antimalarial drugs, both of which were commonly used by the participants. Perhaps one of the most alarming findings was the deliberate avoidance of health professionals. Many students indicated that they only visited clinics if symptoms persisted or worsened. This reactive rather than preventive approach reflects a deep-seated rationalization of risk, where students justify self-treatment on the grounds that previous outcomes were favourable. "The drugs always work, so I don't see the need to do tests or see a doctor." (IDI, 23-year-old male, UI)

This attitude supports the findings of Tohan et al. (2024), who demonstrated that even when students possess knowledge about adverse drug reactions (ADRs), they may still continue self-medicating if they perceive the process as effective and convenient. This cognitive bias minimizes perceived risk and reinforces habitual behaviour.

While both student groups exhibited similar behavioural patterns, subtle differences emerged. Private university students, though having better access to institutional healthcare, still preferred pharmacies or over-the-counter solutions due to movement restrictions or personal preference. In contrast, public university students often cited resource limitations such as clinic overcrowding or drug shortages as a barrier to formal healthcare access.

Conclusion

This study explored the behavioural patterns influencing self-medication among students in public and private universities in Ibadan, Oyo State. The findings revealed an alarmingly high prevalence (85.3%) of self-medication practices among students, cutting across institutional lines. Behavioural patterns including reliance on self-diagnosis, peer influence, preference for convenience, under- or over-dosing, and minimal consultation with health professionals significantly predicted students' involvement in self-medication, as confirmed by the regression analysis (β = 0.77, p < 0.01). Qualitative insights further revealed that students rationalized their behaviour based on perceived familiarity with symptoms, distrust in or inaccessibility of formal healthcare, and time-saving motives. The Knowledge, Attitude, and Practice (KAP) model provided a useful framework in understanding how awareness, perception, and environmental conditions shape student health behaviours. Overall, both public and private university students displayed a set of entrenched, self-reinforcing behaviours that pose serious risks to their health and public health outcomes such as drug resistance and adverse drug reactions.

Recommendations

- 1. Universities should integrate medical social workers into their health services to provide psychosocial support, health education and referral services for students at risk of self-medicating.
- 2. Social workers should facilitate student support centres and programs aimed at fostering healthy coping mechanisms, reducing stigma, and encouraging timely medical consultation.
- 3. Beyond the campus, Social work efforts should also target families and communities, especially in shaping student beliefs and cultural attitudes toward drug use and health behaviours.
- 4. Medical social work professionals should campaign for more inclusive health insurance schemes that cater specifically to students' needs.
- 5. Tertiary institutions should include medical social workers in health policy advisory boards to ensure student-centred approaches are reflected in university health strategies.

These recommendations aim to shift behaviours and promote safer, informed decision-making regarding drug use among university students.

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