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KNOWLEDGE OF HEALTH EFFECTS AND PRACTICE OF SELF-MEDICATION AMONG STUDENTS OF PRINCE ABUBAKAR AUDU UNIVERSITY ANYIGBA, KOGI STATE

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ABSTRACT

Self-medication is an ancient trend in the health sector, the practice is as old as mankind.Self-medication can produce a series of health risks that in many cases may result in toxicity, side effects, adverse reactions, and in some cases intoxication or lack of effectiveness because they are used in situations where they are not indicated. The study investigated knowledge of health effects and practice of self-medication among students of Prince Abubakar Audu University Anyigba, Dekina Local Government Area Kogi State. Two research questions were formulated to guide the study. The study adopted cross-sectional survey research design. 200 students were sampled for the study using simple random sampling techniques. Structured questionnaire was used as instrument for data collection. The data collected were analyzed using mean. Frequency counts and standard deviation. The findings of the study showed that most of the respondents have good knowledge of self-medication and that self-medication is widely practiced among undergraduates of Prince Abubakar Audu University, Anyigba, Kogi State Nigeria despite their knowledge of its side effects. Based on the findings of the study, it was therefore recommended that the school authority needs to enhance the level of knowledge on the health consequences of self-medication through seminar and health talk.

Keywords: Knowledge, Health Effects, Practice, Self-medication

Introduction

The practice of self-medication is a global phenomenon and it has become an issue under debate in health care (Almasdy, 2011). Evidence has shown that self-medication is not restricted to a region or race since both developing and developed countries are experiencing the menace of inappropriate self-medication (Sarahrood, 2010). World Self-Medication Industry (WSMI, 2010) defined self-medication as treatment of common health problems with medicines specially designed and labeled for use without medical supervision and approved as safe and effective for such use. Additionally, self-medication also involves the use of medical products by the individuals to treat self- recognized disorders or symptoms.

Self-medication among developing and developed nations may be due to the disparities in the cultural, economic, health care system and policies in each nation. Self–medication as a behaviour

could be classified as responsible or non- responsible and as a result, the behaviour cannot be considered entirely harmful (Kalaiselvi, 2014). Responsible self-medication entails using approved and available medicine in a safe and effective way as directed though without prescription. The types of drugs used are indicated for a self-recognizable condition following initial medical diagnosis, which means that users have previous knowledge of the dose, time and side effect(s) of the overdose of the drug. Responsible self-medication is possible in the developed nations because of high quality of education, accessibility to health information, safety and quality health care including government policies on health coupled with the health-seeking behaviour and skeptical expert knowledge (Talevi, 2010). Non-responsible self-medication is the use of drugs in the treatment of self- diagnosed ailments or symptoms of diseases without supervision or prescription by a physician (Ruiz, 2010). It is characterized by indiscriminate use of drugs for the management of ailments many of which have resulted into intoxication .The most common drugs used without prescription include antimalarial, analgesics, antipyretics, antibiotics and cough syrup (Galato, 2010).

The sources of the drugs people use without prescription, sometimes are from pharmacy and left over drugs from previous medication. Students have reasonable information about drugs through print media, pharmacy, medicine dealers, family and friends or patent medicine shops.The factors influencing self-medication remain issues of intense debate in academic discourse. Availability of drugs in markets and poor drug regulatory practices contribute to self-medication. Many Nigerians, most times, trivialize ailments such as headache, fever, cough, throat infection, common cold and stomach ache while, some do perceive some ailments to be too mild to necessitate medical consultation. Other factors like demographic factors have been found to influence self-medication. For instance, gender, age, sex and social role were discovered to have influence on self-medication (Awosusi&Konwea, 2015)

Knowledge deals with the awareness, understanding, or information or fact that has been obtained by experience or study. In health knowledge influence the capacity to acquire, retain and use information. It can also influence comprehension, experience, discernment and skill in health. In public health practice, knowledge can significantly contribute to improving patient safety and reducing harm . Inadequate knowledge of medication use may directly lead to misuse by community, students and patients.They are understandably unwilling to submit to the inconvenience of visiting a doctor for what they rightly feel they can manage for themselves, given adequate information.

A large number of independent surveys conducted in all continents provide important insights into how students have been evaluating and using non- prescription medicines over the past 20 years and how their knowledge of over-the- counter medicines is changing. (International Alliance of Patients Organizations 2013). In economically deprived communities, most episodes of illnesses in both the old and young are treated by self-medication. Poor socio-economic status and high cost of modern drugs were highlighted as the commonest reasons for this in one study (Omolase, 2012).

Information and advice about Self-medicated drugs can come from lay or uninformed people. Some studies show that lay people ; particularly family members , relatives or friends are popular as advisers (Igun,2010). Informal drug providers, such as lay drug sellers and traditional healers, who are mostly non-health professionals, are also popular as drug advisers, particularly in developing countries like Nigeria.The advice given by lay people is mainly based on their experience in using either prescribed or non-prescribed drugs .This raises question regarding appropriateness and accurateness of the advice given as their previous medical conditions may be different.

Studies showed minor illnesses, convenience and lack of time to be the most familiar reasons across socio- economic classes for the practice of self-medication. Afolabi, (2013) reported that an age-based study showed that students living independently often self-medicate with over- the-counter (OTC) drugs for common problems such as fever, mild pain, colds, allergies, indigestion and gas, constipation, and insomnia. Previous OTC medicine use studies indicate that about 50% of students over 20 years regularly use OTC pain relievers and vitamins, 23% regularly use antacids, and 10% regularly use cold remedies or antihistamines. The major reason for self-medication in studies by Omolase (2012), in Nigeria and Shankar in Nepal proved to be their knowledge of the simplicity of the health condition, The other reasons cited in these studies were financial constraints in over 20% of their respondents, as well as non- availability of services and their certainty of the efficacy of self-medication in 9% and 10% of cases respectively.

Across different continents and among different cultures of the world, different varieties of drugs are self-medicated and sometimes abused. There are some drugs that, throughout the world are common as self-medicated drugs. The common medication is analgesic, antipyretic products, cough and cold remedies, anti-allergy and vitamins or minerals. Drugs commonly abused and used for self-medication include analgesic, antibiotics, Antacids, anti-malaria, anti-diarrhea, and anti-histamines. Analgesic is used for pain relief. It is usually referred to as painkiller or pain reliever. Technically, these drugs relieve pain without causing one to sleep. Antibiotics are drugs that are used to kill bacteria and/or prevent their growth. It plays a major role in drug therapy and when used rationally, they tend to help save lives. The efficacy of antibiotics is limited to bacterial infections and thus their misuse for other forms of infection contribute to antibiotic resistance (https://medlineplus.gov,2019).

Antacids are drugs that simply neutralize the acidic contents of the stomach. They are composed of elements such as calcium, magnesium and compounds such as Sodium Bicarbonate which act as Bases and thus neutralize the acidic contents of the stomach. Self-medication drugs for malaria are common because of malaria-like symptoms (fever, chills, and anorexia) which turn to be common symptoms for a lot of conditions and thus are treated as Malaria (Awadet al.,2015). Common side effects of some of the common malarial drugs are itching with chloroquine and headaches, anorexia and dizziness with artemether/lumefantrine.

Anti-diarrhea drugs reduce the number of times that an individual has to move his or her bowel because they work by slowing the movement (peristalsis) of the gut. They are mostly used in acute diarrhea settings and they mostly treat the symptoms (diarrhoea) and not the cause. Anti-histamines are drugs that block histamine receptors in the body and help in the treatment of symptoms of allergies as well as cold and flu symptoms. They are used in treating allergic rhinitis, colds, flu, food allergies, hay fever, urticaria, drug hypersensitivity, insect bites as well as bee stings. They act both centrally and peripherally and cause more side effects such as sedation, dizziness, dry mouth, tachycardia and hypotension. They act peripherally and cause fewer sedating effects as the first-generation agents.

Based on previous researches, it is evident that self-medication is common among university students who have little or no knowledge of the mechanism of action, right dosage, side effects, and adverse effects of the drugs they prescribe and administer to themselves. These drugs, administered without the guidance of a competent health care provider, pose a great hazard to the health of these students and may affect their studies and cause financial burden to their parents and the government, as the case may be. Also, there is a paucity of studies on self-medication among undergraduates at Prince Abubakar Audu University, Anyigba, Kogi State in Nigeria.

To this end, the researchers aim at assessing knowledge of health effects of self-medication among undergraduates of Prince Abubakar Audu University, Anyigba, Kogi State, Nigeria in order to enhance a better and safer approach to the use of medication, particularly among students.

Objectives of the Study

The research study aimed to investigateknowledge of health effects and practice of self-medication among students of Prince Abubakar Audu University Anyigba, Kogi State. The study sets out to achieve the following objectives:

1. To determine knowledge of health effects of self-medication among students of Prince Abubakar Audu University, Anyigba Kogi State.

2. To ascertain level of self-medication practice among students of Prince Abubakar Audu University, Anyigba Kogi State.

Research Questions

1. What is the level of knowledge of health effect of self-medication among students of Prince Abubakar Audu University, Anyigba Kogi State.

2. What is the level of self-medication practice among students of Prince Abubakar Audu University, Anyigba Kogi State.

Materials and Methods

This study adopted a cross-sectional survey . The design involves the logical collection of data for the purpose of describing existing observed phenomena in a concise form and permits clear representation of samples of the target population. The population for this study is 12,701 which consist of heterogeneous group of both genders, of different age groups, religions, tribes, educational level and departments undergoing regular study in Prince Abubakar Audu University, Anyigba, Kogi State. A sample of two hundred (200) students was selected for the study. In selecting the sample, there are eight faculties in the university, out of which four (4) were selected through simple random sampling by way of balloting. Purposive sampling technique was used to select fifty (50) respondents from each of the faculties selected. The instrument that was used for this study is a structured questionnaire. The questionnaire was divided into two sections, namely: Section A, which sought information on demographic characteristics of the respondents; and Section B, which was on knowledge of health effects of self-medication and practices of self-medication. Its items were rated based on the modified 4-point Likert Scale, i.e., Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD). The instrument was presented to experts for necessary modification to ensure face and content validity. The experts' observations and suggestions were taken into consideration and reflected in final draft of the questionnaire. The reliability was ensured through a pre-test on 30 respondents from two faculties not used for the study, yielding a coefficient of 0.76. The researchers personally visited all the selected faculties to administer the questionnaire to the respondents. Completed copies of the questionnaire were collected on the spot after they had been filled. The data collected were analyzed using frequency counts, mean scores, and standard deviation. The criterion decision was that any mean score that was 2.50 above was accepted, while any mean score less than 2.50 was rejected.

Results

Research question one : What is the level of knowledge of health effect of self-medication among students of Prince Abubakar Audu University Anyigba, Kogi State?

Table 1: Level of knowledge of health effects of self-medication among students of Prince Abubakar Audu University , Anyigba.

S/N	Items	SA	A	D	SD	Mean	SD	Decision
1	Self-medication leads to drug dependency.	180	10	5	5	3.82	0.015	Accepted
2	Self-medication may result to drugs resistance.	110	50	10	30	3.2	0.203	Accepted
3	Self-medication could cause adverse drugs reaction.	160	30	5	5	3.73	0.106	Accepted
4	Self-medication may result to worsening of disease.	150	40	7	3	3.69	0.142	Accepted
5	Self-medication may result to masking of disease condition.	100	80	4	16	3.32	0.038	Accepted

Table 1 revealed that the mean rating of items 1,2,3,4 and 5 are 3.82, 3.2, 3.73, 3.69, and 3.32. All the mean ratings were above the cut - off point of 2.5. This implied that the respondents agreed that self-medication leads to drug dependency, drug resistance, adverse drug reaction,worsening of disease condition and masking of disease condition, among students in Prince Abubakar Audu University Anyigba, Kogi State.

Research question two: What is the level of self-medication practice among students of Prince Abubakar Audu University Anyigba, Kogi State?

Table 2: Level of Practice of Self-medication among students of Prince Abubakar Audu University, Anyigba.

S/N	Items	SA	A	D	SD	Mean	SD	Decision
1	I consume self-medicated drugs when symptoms are minor.	100	60	30	10	3.25	0.202	Accepted
2	I consume self-medicated drugs whenever I feel sick.	90	40	25	45	2.86	0.345	Accepted
3	I take self-medicated drugs when I cannot visit a school clinic.	30	40	25	5	3.48	0.048	Accepted
4	I always use drugs likeParacetamol, Procold without consulting medical personnel.	100	60	20	20	3.2	0.201	Accepted
5	When purchasing drugs, I always get the chemist to dispense for me without a medical prescription.	90	60	15	35	3.03	0.054	Accepted

Table 2: above revealed that the mean ratings of items 1, 2, 3, 4, and 5 are 3.35, 2.86, 3.48, 3.2, and 3.03. All the mean ratings were above the cut-off point of 2.5. This implied that the respondents agreed that they consume self-medicated drugs when symptoms are minor, whenever they feel sick, when they cannot visit a school clinic and always use drugs such as, paracetamol, and Procold without consulting medical personnel, when purchasing drugs, they always get to the chemist to dispense for them without a medical prescription.

Discussion of Findings

Findings of the study revealed that self-medication leads to drug dependency, self-medication leads to drug resistance, adverse drug reaction, worsening of disease condition, and masking of disease condition, among students in Prince Abubakar Audu University Anyigba, Kogi State. This finding is in line with Hussain (2015) that stated that Potential risks associated with self-medicated medicine 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.

Findings of the study also revealed that respondents consume self -medicated drugs when symptoms were minor, whenever they were sick, when they could not visit the school clinic and that they always used drugs like paracetamol, and Procold among others without consulting medical personnel. These findings support studies which reported analgesics as the most self-medicated drugs and paracetamol and the Non- steroidal anti-inflammatory drugs (NSAIDs) being the most used, either alone in combination with other drugs such as anti-malarias' or antibiotics, that minor illnesses, convenience and lack of time to be the most familiar reasons across socio-economic classes for the practice of self-medication ().

Conclusion

The study concluded that there was a high level of knowledge and indulgence in poor practice of self-medication (almost all of the respondents practiced self-medication) among undergraduates at Prince Abubakar Audu University. There was a cognitive dissonance between the respondents' knowledge and practice of self-medication as knowledge did not translate into good practice.

Recommendations

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

Efforts should be intensified at the University to development interventions that would encourage positive behaviour changes such as seeking medical consultation before purchasing drugs, seminar, health talk and symposium should be employed in sharing information on the harmful effects of self-medication to aid better understanding of its consequences. Also, health clubs/association should be created so as to create a more personal platform through which students can clarify issues on self-medication.

Conflicts of interest

The authors have no conflicts of interest to declare.

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