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ORIGINAL ARTICLE

Self-medication practices among dental, midwifery and nursing students

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ABSTRACT

Objective: To determine the pattern of self-medication among dental, midwifery and nursing students and to evaluate the factors associated with self-medication. **Materials and Methods:** A questionnaire-based cross-sectional of dental, nursing and midwifery students undergoing clinical training in University of Benin Teaching Hospital, Nigeria was conducted in 2010. The elicited data include demography, use of drug without doctor's prescription, type of drug used (pain relievers, antibiotics, anti-malarial, cough medication and nutritional supplement), reasons for self-medication, factors that influenced the choice of drug and source of drug. **Results:** A total of 76.8% of the respondents indulged in self-medication practices. Of which, 33.0% used the medication inappropriately. The type of self-medication use was, pain relievers (60.5%), antibiotics (43.2%), anti-malarial (40.5%), cough medication (16.7%) and nutritional supplement (16.0%). Previous experience with the illness and perceived minor nature of the illness were the predominant reasons for the self-medication practices among the respondents. The major factors that influenced their choice of medication were previous experience with similar symptoms (39.7%), advice of non-doctor health professional (33.5%). Pharmacy shop was the main source of the self-medicated drugs. **Conclusion:** Self-medication was a common practice among this studied group of health workers. The level of inappropriate drug use denotes self-medication as an unhealthy option, and it therefore, should be discouraged.

Key words
Health professionals, Nigeria, self-medication

INTRODUCTION

Self-medication is defined as obtaining and consuming drugs without the advice of a doctor either for diagnosis, prescription or surveillance of treatment[1] is endemic in developing countries.[2] It is considered beneficial as individuals play an active role in remedying their own acute medical conditions.[3] It is believed in some quarters that responsible self-medication may be economical, save life in acute conditions and time spent in waiting to see a doctor.[4,5] Inappropriate self-medication, however, may result in serious health hazards such as adverse drug reactions, drug dependence and increased resistance of pathogens.[6]

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Studies have been done on self-medication with antibiotics among medical[7] and dental students[8] in Nigeria. The group of health workers in this study was made up by dental, nursing and midwifery students. Dental students are future prescribers of drugs, and so it is important to find out how rational their drug use is. Nursing and midwifery students, on the other hand, will be expected to handle several types of medications as well as have easy access to drugs in their future practice. This can favor self-prescription and self-medication.[9] Furthermore, dental, nursing and midwifery students constitute a group of future health professionals who serve an important role in educating members of the community against self-medication. It is therefore, important to determine to what extent they are also involved in this potentially harmful practice.

The objective of this study was to determine the pattern of self-medication among dental, midwifery and nursing

students and to evaluate the factors associated with self-medication.

MATERIALS AND METHODS

This questionnaire-based cross-sectional of dental, nursing and midwifery students studying at University of Benin Teaching Hospital, Nigeria was conducted in 2010. A self-administered, 12- itemed questionnaire was used for the study. The questionnaire sought details on the demography, use of drug without doctor's prescription, type of drug used (pain relievers, antibiotics, anti-malarial, cough medication and nutritional supplement) and for what condition, reasons for self-medication, factors that influenced the choice of drug and the source of the drug. Inappropriate drug used was determined by checking if the self-medicated drug has any known therapeutic effect on the medical condition it was used for.

Informed consent was obtained from the individual participants, before the commencement of the survey. The Statistical Package for Social Science (SPSS) version 15.0 was used for data analysis. Results were presented in simple frequency tables.

RESULTS

The number of respondents who participated in the study was 383. Only 8.6% of the respondents were above 27-years of age. A total of 76.8% of the respondents practiced self-medication [Table 1]. The drugs were used inappropriately by 33.0% of the respondents who practice self-medication. The type of self-medicated drugs was pain relievers (60.5%), antibiotics (43.2%), anti-malarial (40.5%), cough medication (16.7%) and nutritional supplement (16.0%) [Figure 1].

Previous experience with the illness and perceived minor nature of the illness were the predominant reasons for the self-medication practices among the respondents, and the two reasons make up 32.7% and 23.2% respectively [Table 2]. The major factors that influenced their choice of medication were previous experience with similar symptoms (39.7%), advice of another health professional (33.5%) [Table 3]. Pharmacy shop was the main source of the self-medicated drugs (66.2%) [Table 4].

DISCUSSION

The prevalence of self-medication among the respondents (76.8%) was high. This is comparable to the 73% among Nigeria tertiary hospital workers[10] and 72.1% documented among secondary school pupil in Hong Kong.[11] The high educational and literacy level of the studied respondents may be the reason[10,12] this result also shows that access to healthcare does not significantly reduce self-medication practices. The young age group of the respondents may also be contributory to the documented prevalence.

The most commonly self-medicated drug was pain relievers. This was similar to the finding in other studies[6,13-15] Although information on the type of pain reliever self-medicated was not sought in this study, the important role of non-steroidal anti-inflammatory drug in the aetiology of peptic ulcer justifies further studies on self-medication with pain relievers. Self-medication with antibiotics and anti-malaria drugs was also quite high in this study. This finding is important as development of resistant strain to antibiotics and anti-malaria drugs is now a major source of concern.

Table 1: Demographic characteristics of the respondents

Characteristics	Frequency *n*	Percent
Age (years)		
16-18	25	6.5
19-21	105	27.4
22-24	123	32.1
25-27	97	25.3
>27	33	8.6
Gender		
Male	150	39.2
Female	233	60.8
Marital status		
Single	365	95.3
Married	18	4.7
Religion		
Christianity	373	97.4
Islam	8	2.1
Traditional religion	2	0.6
Self-medication		
Yes	284	76.8
No	89	23.2
Total	383	100.0

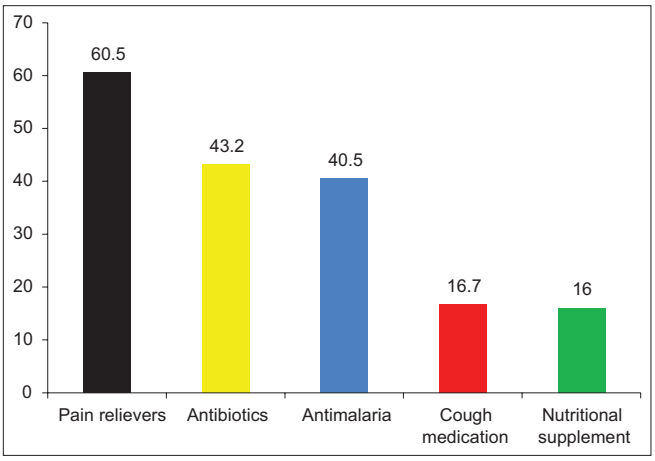

Figure 1: Type of self-medicated drugs among respondents

Table 2: Reasons for self-medicated drugs among respondents

Reasons	*n* (%)
Need to save time and money	46 (16.2)
Belief in the efficacy of the drug	58 (20.5)
Availability of drug	6 (2.1)
Illness perceived to be minor	66 (23.2)
Previous experience of similar illness	93 (32.7)
Non-availability of health personnel	3 (1.1)
Financial constraint	12 (4.2)
Total	284 (100.0)

Table 3: Factors influencing the choice of self-medicated drugs among respondents

Factors	*n* (%)
Advice from pharmacy staff	40 (14.1)
Advice from friends/neighbours	36 (12.7)
Advice from other health professionals	95 (33.5)
Previous experiences with similar symptoms	113 (39.7)
Total	284 (100.0)

Table 4: Source of the self-medicated drugs among respondents

Source	*n* (%)
Patent medicine dealer	59 (20.8)
Pharmacy	188 (66.2)
Class mate/room mate	14 (4.9)
Parents/relative	23 (8.1)
Total	284 (100.0)

The self-medicated drugs were correctly used among 67.0% of the respondents, and this is lower than 75.5%[16] and 95.6% reported in earlier studies.[10] The prevalence of inappropriate self-medication of 33% reported in this study is worrisome because it has been stated that self-medication is as an unhealthy option as it can cause treatment failure, drug resistance and drug toxicity.[17-19]

Previous studies reported that the most common reason for self-medication is to save time and cost.[6] Although time and cost saving constituted a significant reason in this study, previous experience with illness was the predominant reason for self-medication in this study. This supports the finding of other studies.[12,13] In this study, respondents also claimed to practice self-medication because of the perceived minor nature of the illness. This reason has been given in previous studies.[11,12]

Experience has been said to be the best teacher, so it is not surprising that the previous experience with similar symptoms was a common reason influencing the choice of self-medicated drugs. The members of this study group come in contact with many health workers in their institution of training, and this may be the reason why they reported that other health professionals, apart from doctors, influenced their choice of self-medicated drugs.

The quality and efficacy of drugs depend upon source of the drug procurement. Pharmacy shop was the main source of the self-medicated drugs in this study, and this is similar to the finding among Sudanese undergraduate university students.[19] many patronize the pharmacy shop because they think the possibility of a pharmacy shops stocking and selling substandard drugs is low. This finding implies that standards are not necessarily compromised when self-medication is practiced.

CONCLUSION

Self-medication was a common practice among the future health workers. The level of inappropriate drug use denotes self-medication as an unhealthy option, and it should therefore be discouraged. Education on irrational use of drug is highly advocated.

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