



Self-Medication

among Nurses in a Tertiary Hospital in Southwest Nigeria

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ABSTRACT

Background: Self-medication is the use of nonprescription medicines by people on their own initiatives. This study was carried out to determine the knowledge, attitude and practice of nurses in Lagos University Teaching Hospital (LUTH) towards self-medication.

Method: This was questionnaire based descriptive study carried out in 2009. The questionnaire containing a mix of open-ended and close-ended questions was administered to the respondents.

Results: Response rate was 75%. Most of the respondents were aged between 31 – 40 years (32.7%), 4%

were males and 96% were females. The respondents' knowledge about self-medication was good and knowledge of risks and adverse effects of self-medication was adequate. Majority of them (79.0%) agreed that self-medication results in adverse effects. Self-medication was practiced by 81.0% of the respondents. Analgesics/Antipyretics (79.7%) were the most common drugs used for self-medication.

Conclusion: Knowledge about appropriate self-medication was good, attitude towards self-medication was positive and the practice of self-medication was common. However, caution may be exercised to ensure that nurses do not completely rely on self-medication at the expense of their health when they are supposed to see a doctor.

Key Words: Self-medication, Nurses, Tertiary hospital, Nigeria

INTRODUCTION

People generally hold the view that medicines should be used in the event of any sickness or discomfort¹. Self-medication is the treatment of common health problems with medicines especially designed and labeled for use without professional supervision (i.e. over-the-counter drugs), and approved as safe and effective for such use².

In economically deprived communities, most episodes of illnesses are treated by self-medication^{3,4}.

The factors contributing to people to self-medicate could be greater access to drugs, greater access to information, the time it takes to see the doctor, traditional and cultural practices, uncontrolled advertisement and economic factors. In developed countries with sufficient medical manpower, many people still buy non-dangerous medications without a doctor's prescription⁵. These are the over-the-counter (OTC) drugs whose sales statistics reflect the pattern of self medication⁶. Other factors influencing self-treatment may include cost of drugs, educational levels, socioeconomic factors, age and sex⁷.

Interaction between prescribed drugs and drugs taken for self-medication is an important risk factor that health care providers must be aware of^{7,12}.

Self-medication with over-the-counter (OTC) drugs has increased correspondingly with the growth of the pharmaceutical industry. Sales of over-the-counter drugs account for between 30% and 80% of total pharmaceutical sales in the majority of world regions¹³. In 2007, in United States, it was 7.7% and United Kingdom was 15.8%. Higher percentages of over-the-counter (OTC) sales are often found in regions that are less developed such as India and China¹³.

Sources of information for self-medication could be from people with previous experience of a similar illness, friends and family, nurses, patent medicine dealers or

attendants, radio, television and newspaper.

There is considerable variation, however, in the age at which independent self-care is achieved, as well as in the accuracy of medication and dosage selection.

In 1997, Chambers and colleagues found that 58% to 76% of the 651 junior high school students surveyed reported taking analgesics without the specific knowledge of their parents¹⁴. In many of those cases, the adolescents' level of autonomy was supported by their parents. Girls tended to self administer medications more often than boys, and the percentage of adolescents self administering medications increased with increasing age. Most of the adolescents reported initiating self-medication at 11 to 12 years of age.

In many parts of the world, nurses are the main providers of primary health care, including the use of prescription and non-prescription medicines². It is important that nurses are knowledgeable about self care, self medication and self medication products, and understand their desired action, common adverse events, interactions with other medicines and the importance of seeking timely referrals. Equally, nurses have a key role in consumer education about responsible self medication including: when to seek advice from health professionals; how to monitor effects, including adverse events; deciding when to stop medicines; use of patient information leaflets; and storage and disposal of unused products².

Nurses play a vital role in health promotion, including aiding clients to develop responsibility on the use of drugs, informed self-medication and self-care competency. Nurses often being first point of medication contact for the public, health-care systems are increasingly recognizing the importance of their role in educating and supporting people

with self care, particularly self-medication for minor ailments, as well as for long-term medical conditions.

Thus, the objectives of the study were to determine the knowledge, attitude and practice of nurses towards self-medication, the categories involved in self medication and reason for self-medication among them.

METHODS

Study Area

This study was carried out at the Lagos University Teaching Hospital (LUTH), Idi Araba, Lagos, Nigeria between February and April 2009. Lagos University Teaching Hospital is one of the largest teaching hospitals in Nigeria. It is located in Lagos State which is a state in Southwestern Nigeria. Lagos is one of Nigeria's most populated states. It is the chief port, principal economic and cultural centre. The teaching hospital has 761 bed spaces and records over 9,000 patient attendances in a month.

Study population

The target population for the study was nurses in the Lagos University Teaching Hospital (LUTH). The total number of nurses in LUTH as at the time of this study was 430.

Research design

The study was a descriptive cross sectional type.

Study instrument

A structured and pretested questionnaire was used in collection of data. The questionnaire was divided into three parts namely: A, B, and C. Part A focused on bio-data of the respondents, Part B focused on the knowledge and Part C focused on the attitude and practice of nurses towards self medication.

Procedure for data collection

A simple random sampling technique was used to select the respondents. Consent of respondents was sought. Questionnaires were distributed to 200 respondents but 150 were

returned. Some of the questionnaires were collected immediately while some were collected later.

Data analysis

Data analysis consisted of simple percentage frequency distribution and cross tabulation for Chi square (χ^2) test for statistical significance. Significance was set at $P \leq 0.05$.

RESULTS

Majority of the respondents were between 31 – 40 years. Also majority of them were females as indicated in Table 1.

Majority of the respondents were staff nurses as indicated in Table 2. Years of experience are indicated also in Table 2. Among the respondents, 98.7% of them have heard of self-medication (Table 2)

As to what the respondents understand by self-medication, 90.0% of them said it is the treatment of common health problems without medical supervision while 10.0% of the respondents said it is the use of drugs in combination with prescribed drug.

Table 3 shows the sources of information for the respondents that have heard of self-medication.

Table 3 showed Analgesics/Antipyretics as the most commonly used drugs for self-medication (79.7%) followed by cough syrup (56.8%), antibiotics (44.6%), anti-inflammatory agents (30.4%), ear drops (17.6%), anti asthma drug (2.0%) and oral systemic steroids (1.4%)

Among respondents that have heard of self medication 63.5% of them think self-medication is not cost effective while 36.5% think it is cost effective. Also 79.1% of them think self-medication could result into unwanted/adverse effects. Less than half of them (48%) think they have enough knowledge about drug that will help in self-medication (Table 3). Only 15% felt self-medication is good for their health and reasons given for this include the fact that the hospital

is too far and they spend too much time in the hospital.

About 81% of the respondents had bought medication without a medical prescription. Majority of respondents that ever bought medication without a medical prescription actually used the medication themselves (61.2%), 23.1% indicated both self and another family member, 9.9% mentioned

another family member, 5% indicated someone else and 0.8% did not respond to the question (Table 4).

Cross tabulation for Chi Square test was done to determine any association between age, religion, designation, years of experience versus use of drugs without prescription (Table 5). A similar cross tabulation was done for these

variables versus use of old prescriptions (Table 6). The results showed $p > 0.05$; which implies that there is no significant statistical association between the variables tested and use of drugs without prescription or use of old prescriptions.

Table 1: Socio-demographic distribution of the respondents (n=150)

| Factors/Indicators | n (%) |
|-----------------------|------------|
| AGE (year) | |
| 21 – 30 | 40 (26.7) |
| 31 – 40 | 49 (32.7) |
| 41 – 50 | 31 (20.7) |
| 51 – 60 | 14 (9.3) |
| No response | 16 (10.6) |
| SEX | |
| Male | 6 (4) |
| Female | 144 (96) |
| Marital Status | |
| Single | 39 (26) |
| Married | 107 (71.3) |
| Widowed | 3 (2) |
| No response | 1 (0.7) |
| Ethnicity | |
| Hausa/Fulani | 4 (2.7) |
| Igbo | 68 (45.3) |
| Yoruba | 74 (49.3) |
| Others | 1 (0.7) |
| No Response | 3 (2.0) |

Table 2: Nurses designation/status (In ascending order of seniority), experience and knowledge of self-medication (n = 150)

| Designation | n (%) |
|--------------------------------------|------------|
| Staff Nurse | 72 (48) |
| Nursing Officer | 19 (12.7) |
| Senior Nursing Officer | 21 (14) |
| Principal Nursing Officer | 12 (8) |
| Asst. Chief Nursing Office | 24 (16) |
| Chief Nursing Officer | 2 (1.3) |
| Years of Experience | |
| < 5 | 40 (26.7) |
| 5- 10 | 40 (26.7) |
| 11- 20 | 35 (23.3) |
| > 20 | 25 (16.3) |
| No response | 10 (6.7) |
| Self-medication | |
| Have heard | 148 (98.7) |
| Have not heard | 1 (0.7) |
| No response | 1 (0.7) |
| If Ever used old prescription | |
| Ever used | 62 (41.3) |
| Never used | 78 (52.0) |
| Can't remember | 5 (3.3) |
| No response | 5 (3.3) |

Table 3: Self-medication sources of information, attitude and reason for self-medication. n= 148
(Those that have heard of self medication)

| | |
|--|--------------|
| Sources of information for them | n (%) |
| General or private practitioner | 66 (44.6) |
| Patent medicine dealer | 59 (39.9) |
| Friends | 89 (60.1) |
| Fellow Nurses | 97 (65.5) |
| Previous illness experience | 62 (41.9) |
| Radio | 61 (41.2) |
| Television | 69 (46.6) |
| Newspaper | 57 (38.5) |
| Drugs self medicated with | n (%) |
| Analgesic /Antipyretic | 118 (79.7) |
| Anti inflammatory | 45 (30.4) |
| Cough syrup | 84 (56.8) |
| Anti asthmatic drugs | 3 (2.0) |
| Antibiotics | 66 (44.6) |
| Systemic steroid (oral) | 2 (1.4) |
| Ear drop | 26 (17.6) |
| Self-medication is cost effective | n (%) |
| Yes | 54 (36.5) |
| No | 94 (63.5) |
| Don't know | - |
| Self-medication could result in Adverse Effects | n (%) |
| Yes | 117 (79.1) |
| No | 31 (20.8) |
| Don't know | - |
| Have enough knowledge to self medicate | n (%) |
| Yes | 71 (48.0) |
| No | 66 (44.6) |
| Don't know | 11 (7.4) |
| Self-medication is good for their health | n (%) |
| Yes | 23 (15.5) |
| No | 125 (84.5) |

Table 4: User of medication that was bought without medical prescription (n = 121)

| | |
|-------------------------------|--------------|
| User of the Medication | n (%) |
| Yourself | 74 (61.2) |
| Another family member | 12 (9.9) |

| User of the Medication | n (%) |
|------------------------|-----------|
| Both | 28 (23.1) |
| Someone else | 6 (5.0) |
| No response | 1 (0.8) |

Table 5: Cross tabulation for Chi square test of age, religion, designation, years of experience versus use of drugs without prescription

| Variable | Use of drug without prescription | | | X ² | df | p-value |
|----------------------------|----------------------------------|--------------------|-----------------|----------------|----|-------------------|
| | Ever used n (%) | Never used n(%) | Total n(%) | | | |
| Age (year) | | | | | | |
| 21-30 | 30 (76.9) | 9(23.1) | 39(100) | 1.2 | 3 | 0.75 |
| 31-40 | 41(85.4) | 7(14.6) | 48(100) | | | |
| 41-50 | 26(83.9) | 5(16.1) | 31(100) | | | |
| 51-60 | 11(84.6) | 2(15.4) | 13(100) | | | |
| Total | 108(82.4) | 23(17.6) | 131(100) | | | |
| Religion | | | | | | |
| Christianity | 109(84.5) | 20(15.5) | 129(100) | 2.33 | 1 | 0.13(Fisher exact |
| Islam | 12(66.7) | 6(33.3) | 18(100) | | | exact |
| Total | 121(82.3) | 26(17.7) | 147(100) | | | p=(0.09) |
| Designation | | | | | | |
| CNO/ACNO | 22(84.6) | 4(15.4) | 26(100) | 1.08 | 2 | 0.58 |
| PNO/SNO | 28(87.5) | 4(12.5) | 32(100) | | | |
| SN/NO | 71(79.8) | 18(20.2) | 89(100) | | | |
| Total | 121(82.3) | 26(17.7) | 147(100) | | | |
| Years of Experience | | | | | | |
| < 5 | 34(85.0) | 6(15.0) | 40(100) | 4.10 | 3 | 0.25 |
| 5 – 10 | 27(71.1) | 11(28.9) | 38(100) | | | |
| 11 – 20 | 30(85.7) | 5(14.3) | 35(100) | | | |
| >20 | 21(87.5) | 3(12.5) | 24(100) | | | |
| Total | 112(81.8) | 25(18.2) | 137(100) | | | |

CNO: Chief Nursing Officer.

ACNO: Assistant Chief Nursing Officer

PNO: Principal Nursing Officer

SNO: Senior Nursing Officer

SN: Staff Nurse

NO: Nursing Officer

Table 6: Cross tabulation of for Chi square test of age, religion, designation, years of experience versus use of old prescriptions

| Variable | Use of old prescriptions | | | X ² | Df | p-value |
|----------------------------|--------------------------|--------------------|-----------------|----------------|----|---------|
| | Ever used n(%) | Never used n(%) | Total n(%) | | | |
| Age (year) | | | | | | |
| 21-30 | 16(47.1) | 18(52.9) | 34(100) | 2.99 | 3 | 0.39 |
| 31-40 | 17(37.0) | 29(63.0) | 46(100) | | | |
| 41-50 | 17(56.7) | 13(43.3) | 30(100) | | | |
| 51-60 | 7(50.0) | 7(50.0) | 14(100) | | | |
| Total | 57(46.0) | 67(54.0) | 124(100) | | | |
| Religion | | | | | | |
| Christianity | 55(44.7) | 68(55.3) | 123(100) | 0.00 | 1 | 0.99 |
| Islam | 7(41.2) | 10(58.8) | 17(100) | | | |
| Total | 62(44.3) | 78(55.7) | 140(100) | | | |
| Designation | | | | | | |
| CNO/ACNO | 13(52.0) | 12(48.0) | 25(100) | 4.08 | 2 | 0.13 |
| PNO/SNO | 18(56.3) | 14(43.7) | 32(100) | | | |
| SN/NO | 31(37.3) | 52(62.7) | 83(100) | | | |
| Total | 62(44.3) | 78(55.7) | 140(100) | | | |
| Years of Experience | | | | | | |
| < 5 | 13(36.1) | 23(63.9) | 36(100) | 3.3 | 3 | 0.35 |
| 5 – 10 | 15(41.7) | 21(58.3) | 36(100) | | | |
| 11 – 20 | 19(54.3) | 16(45.7) | 35(100) | | | |
| >20 | 13(54.2) | 11(45.8) | 24(100) | | | |
| Total | 60(45.8) | 71(54.2) | 131(100) | | | |

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use of drugs without prescription, there was no association between any of these variables and use of drugs without prescriptions. A similar cross tabulation was done for these variables with use of old prescriptions, there was no association between these variables and use of old prescriptions. This implies that use of drugs without prescription and use of old prescriptions cut across all cadres of nurses in this study

Rational self-medication is necessary and is an important aspect of health care which if properly managed could be cost effective and make time available for doctors to attend to more serious cases. Also economic costs of patients taking time off work to go to the doctor can be reduced. Importance of self-medication should not be overlooked as people can now take active role in managing their

health problem and reduce the strain on the health budget of the country. However, caution may be exercised to ensure that people do not completely rely on self-medication at the expense of their health when they are supposed to see a doctor. Public awareness and enlightenment is the key to achieve this objective.

CONCLUSION

From this study it can be concluded that nurses in LUTH practice self-medication. Most of the respondents also had a good knowledge of what each medication was meant for and general risk associated with self-medication.

The nurses self medicate because they know and are able to identify the major effects and side effects of the medication. Since self medication cures their ailments, save their time and information was gotten from

their fellow nurses then they would use the same medication whenever they have similar ailment.

Knowledge about appropriate self-medication was good, attitude towards self-medication was positive and the practice of self-medication was common. However, caution should be exercised to ensure that nurses do not completely rely on self medication at the expense of their health when they need to see a Doctor.

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