

SELF-MEDICATION PRACTICES AMONG PATIENTS ATTENDING ORTHOPAEDIC CLINIC IN A NIGERIAN TEACHING HOSPITAL

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Abstract

Background: Self-medication is on the increase globally especially in developing countries where medicines are available without prescriptions and the people prefer to manage their health challenges themselves rather than seek medical advice for various reasons. Orthopaedic conditions are usually chronic in nature and are prone to self-medication.

Objectives: The objective of this study was to evaluate self-medication practices among patients attending orthopaedic clinic at Obafemi Awolowo University Teaching Hospitals Complex in Nigeria.

Methods: Patients that presented to the clinic and were aged 18 years and above were administered the questionnaire. A total of 202 patients that met the inclusion criteria and gave their consent were sampled. Data gathered were entered into the Statistical Package for Social Sciences (SPSS) version 16 for data analysis and management. Descriptive and inferential statistics including frequencies, percentages and chi square were used to summarize the data.

Results: Fracture (26.2%) secondary to accident and lower limb pain (21.4%) were the most common presenting complaints even though non-fracture associated pains accounted for 57.4% of the overall. One hundred and forty-eight (73.3%) practiced self-medication before reporting to the hospital; and paracetamol and Non-steroidal anti-inflammatory drugs (46%) were the medicines most commonly implicated. Out of 91 that responded to the use of additional medicines apart from the prescribed, 26 (28.6%) indicated that they used additional medicines.

Conclusion: A considerable number of the respondents indulged in self-medication before reporting to the hospital, with majorly analgesics (paracetamol and non-steroidal anti-inflammatory drugs).

Keywords: Self-medication, Orthopaedic, Teaching Hospital, Nigeria.

INTRODUCTION

Self-medication is on the increase globally especially in developing countries where medicines are available without prescriptions and the people prefer to manage their health challenges themselves rather than seek medical advice because of financial reasons and because they see their health problems as simple.^[1,2] The World Self-Medication Industry (WSMI) and the International Pharmaceutical Federation (FIP) define self-medication as the use of non-prescription medicines by people on their own initiative. Responsible self-medication is defined as the healthcare assumed by the patient where he or she has a greater degree of responsibility in the management of a symptom or illness, using a pharmaceutical product available over-the-counter (OTC).^[3,4,5]

Other dimensions of self-medication also include utilization of left over medicines from previous treatment, seeking the advices of surrounding people like family and friends and purchasing prescription-only-medications by resubmitting old prescriptions at the pharmacy.^[6] Irresponsible self-medication is suspected to be high in Nigeria, as most drugs can be obtained from the pharmacies without prescription. Medicines that are most commonly implicated in self-medication include analgesics, antimalarials, antibiotics and cough syrup.^[7]

Orthopaedic medicine is that specialty of medicine responsible for evaluation, diagnosis and treatment of musculoskeletal diseases.^[8] Pain is a common phenomenon with musculoskeletal disorders and may be acute or chronic in nature; acute pain is pain lasting for a short time, while chronic pain is defined as persistent or recurrent pain lasting longer than 3 months.^[9] Studies have shown that low back pain is the most universally experienced pain and approximately every person experiences this pain at least once in their lifetime. It is the most frequent cause of job-related disability and a major reason for missed work days and it places high financial burden on the individuals.^[10,11,12]

A survey on self-medication among patients attending Oral surgery clinic reported that 59% of the

respondents self-medicated for their toothaches.^[13] Another study among dental patients in Afid reported a prevalence of 31.34%.^[14] Another study that investigated self-medication practice for the management of ocular problems among patients attending a primary eye health facility in Owo, Nigeria reported a prevalence of 79%.^[15] Another study that evaluated the self-medication of antibiotics among professional students in North India reported a prevalence of 87%; and old prescription, friends and pharmacist were their major source of information about the medicines they used.^[1]

Self medication is practiced by people including those already attending clinic and those on admission.. A study in Northern Nigeria reported that 56.89% undergraduate students self-medicate with antibiotics.^[16] Similarly, students of health related fields have been to self-medicate too.^[17,18] Pregnant women who are supposed to exercise caution in the type of medicines they take also self-medicate, reports showed that some self-medicate at times with medicines that are contra-indicated in their state believing that such medicines would help in protecting their pregnancies.^[19] Mothers of children under-five also give their children medicines without seeking medical advice.^[20] Patients attending general outpatient clinics in different parts of the world have been reported to practice self medication.^[21,22,23,24] Interestingly, self-medication has also been reported among inpatients in Nigeria.^[25] The medicines used for self-medication included analgesics, antimalarials, multivitamins, antibiotics, anti-helminthics and herbal remedies.^[7,18]

Pain is a common phenomenon in orthopaedic patients.^[26] Most of the medicines used to control pain have their serious limitations especially when used over a long period of time. More so, there are limited data on the extent of use of self-prescribed medicines among this class of patients before reporting to the hospital and even while attending clinic.

The objective of this study therefore is to evaluate self-medication practices among patients attending orthopaedic clinic at Obafemi Awolowo University Teaching Hospital Complex, Ile-Ife.

METHOD

Study design

This study was a cross-sectional survey of patients attending the Orthopaedic clinic of Obafemi Awolowo University Teaching Hospital.

Study site

This study was carried out at Obafemi Awolowo University Teaching Hospital Complex (OAUTHC), a tertiary facility that caters for the healthcare needs of several categories of ambulatory and institutionalized patients. It is an 842 bed capacity hospital and is comprised of six (6) different units.

Study population

The study population comprised of patients attending

the Orthopaedic clinic of Obafemi Awolowo University Teaching Hospital Complex (OAUTHC), Ile-Ife. All the patients that presented to Orthopaedic clinic between January 2015 and March 2015 were approached to participate in the study.

Sample size determination

Sampling and recruitment procedure: Patients that presented to the clinic and met the inclusion criteria were approached while they were waiting to see their physician or as they were coming out of consulting rooms.

Inclusion Criteria/ Exclusion Criteria:

All respondents aged 18 years and above that consented to the study were administered the questionnaire. Patients less than 18 years and those that did not give their consents were excluded from the study. A total of 202 respondents gave their consents and were administered the questionnaire.

Instrument for data collection: A pretested semi-structured questionnaire was used to collect data. The questionnaire was reviewed for content by an expert in the field and was subsequently pretested among ten patients attending the clinic. These were not included in the final study. The questionnaire comprised of two sections: Section A captured socio-demographic characteristics of respondents while Section B addressed self medication practices among the respondents.

Ethical Considerations: The study was approved by Osun State Ministry of Health's Ethics and Research Committee (OSHREC/PRS/569T/102). Also, the consent of all participants were sought and obtained before the questionnaire was administered.

Data analysis and management

Data obtained were sorted, coded and entered into the Statistical Package for Social Sciences (SPSS) version 16 for data analysis and management. Descriptive statistics including frequency and percentages were used to summarize the data. Chi-square test was used to evaluate the relationship between the complaint that brought the respondents and self-medication before coming to the hospital, and other parameters that related to the management of the pain of the respondents, with $p < 0.05$ considered significant.

RESULTS

A total of 202 respondents participated in the study. Of these, 108 (53.5%) were and majority (160; 79.2%) practiced Christianity as their religion. About one-third of the respondents (64; 31.7%) were traders or artisans, and 16 (7.9%) were unemployed. Majority (153; 83.6%) were residents of Osun state (Table 1).

Table 1. Demographic characteristics of respondents

Variables	Characteristics	Frequencies (n)	Percentage (%)
Gender	Male	108	53.5
	Female	94	46.5
Age (years)	1-15	24	12.1
	16-30	41	20.7
	31-45	41	20.7
	46-60	49	24.7
	61 and above	43	21.7
Religion	Christianity	160	79.2
	Islam	34	16.8
	Others	8	4.0
Marital status	Single	63	32.3
	Married	129	66.2
	Widowed	3	1.5
Occupation	Trading/artisan	64	33.7
	Civil servant	48	25.3
	Student	36	18.9
	Unemployed	16	8.4
	Retired	14	7.4
	Farming	10	5.2
	Clergy	2	1.1
State of Residence	Osun	153	83.6
	75.7		
	Ondo	17	9.3
	Lagos 4.5	9	4.9
	Ogun	2	1.1
	Plateau State	1	0.5
	Ekiti	1	0.5

Presenting complaints with the highest frequencies were fracture secondary to accident (49; 26.2%) and lower limb pain (40; 21.4%). Overall, more than half of the respondents (116; 57.4%) had non-fracture associated musculoskeletal pain (mostly arthritis) as the complaint that brought them to the hospital (Figure 1). More than half (52.6%) of those that responded to the time taken to report to the hospital took some time before reporting to the hospital to make the complaint (Table 2).

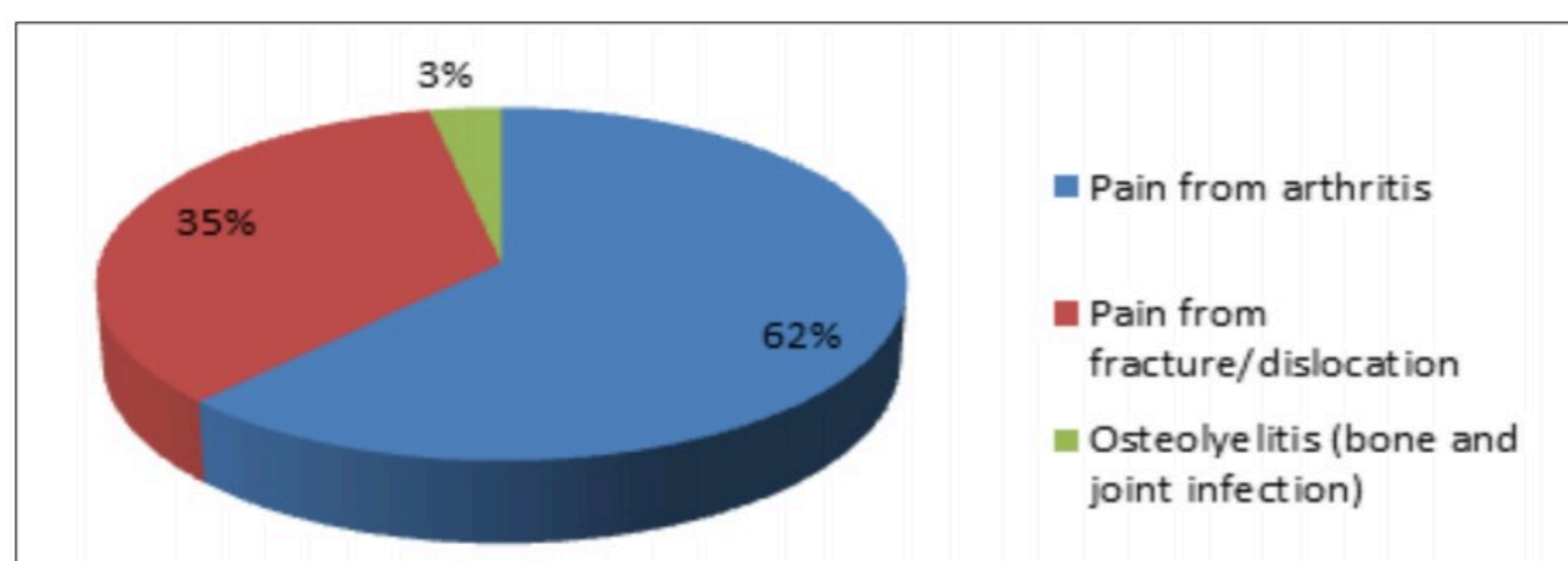


Figure 1. Summary of complaints that brought respondents to the hospital

Table 2. Time taken by respondents before reporting to the hospital

Time lapse	Frequency (N)	Percentage (%)
Immediately	81	46.3
<24 hours	9	5.1
< 1 week	5	2.9
1 – 2 weeks	10	5.7
2 – 4 weeks	15	8.6
1 month to < 1 year	32	18.3
More than 1 year	13	7.4
Very long	8	4.6
Not sure	2	1.1

About two-thirds (148; 73.3%) had used one form of medicine or the other for the pain before reporting to the hospital. Of these, about half (68; 46%) had taken one form of oral analgesics including paracetamol and/or non-steroidal anti-inflammatory drugs. A few of them (13; 8.8%) used traditional medicine, while one of them (0.7%) had used an opioid analgesic (Table 3).

Table 3. Medicines self-medicated before reporting to the hospital

Medicine taken	Frequency (N)	Percentage (%)
Paracetamol	38	25.7
Non-steroidal anti-inflammatory drugs	30	20.3
Topical creams	28	18.9
Supplement	19	12.8
Traditional medicine	13	8.8
Unknown substances	10	6.8
Anti-infectives	9	6.1
Opioid	1	0.7

In response to taking other medicines in addition to those prescribed by the physicians, 91 (45.0%) responded. Out of which, 26 (28.6%) answered in the affirmative while the remaining 65 (71.4%) reported that they do not take other medicines not prescribed. Reasons given for taking additional medicines were to control pain (58; 88.9%), headache (4; 5.6%) and when the prescribed ones appeared not to be working (4; 5.6%).

One hundred and twenty patients (76.7%) had no complaint with their therapeutic management. However, 21 (13.2%) indicated that they felt sleepy (drowsy) after taking their medications while another 9 (5.7%) had gastrointestinal disturbances.

There was an association between the nature of complaint that brought the patients to the hospital and self-medication practices as well the time lapse before reporting to the hospital. Patients that presented with musculo-skeletal (especially arthritic pain) pains significantly self-medicate more than patients with fracture before reporting to the hospital ($p=0.043$). Similarly, those with fracture present significantly earlier (within 24 hours) than those with arthritis and pains not associated with fracture ($p=0.025$).

DISCUSSION

Although responsible self-medication is an important part of self-care, however, it has to be done responsibly for it to achieve its purpose of enhancing health. Thus, periodic evaluation of this practice is important, particularly in people with chronic pain. There were more males than females in this study, this could be related to the type of activities that males indulge in; males are more prone to be involved in more strenuous activities than females, which could lead to pain, compared to females. This findings is similar to that of Rohilla *et al.* and Lakmal and colleagues that reported that more males than females reported to the hospital on account of trauma.^[27,28]

Lower limb pain was very common among respondents followed by back pain. This is in

deviance to the report of IASP and other studies that said that lower back pain is the most common pain followed by neck pain, whereas neck pain ranked sixth in this study.^[6,29] This deviance can be due to the nature of work that the respondents are involved in, as about one-third were traders/ artisans who might have to be mobile for most part of their working hours, as opposed to civil servants who might be seated for most part of their working hours.

Although a number of respondents reported that they came to the hospital immediately they started feeling the pain, about half of the respondents still used one form of medication or the other before reporting at the hospital without medical consultation with those having chronic pains self-medication more than those that came as a result of fracture. There was also a significant association between self-medication before coming to the hospital and the type of pain experienced by patients. Patients with chronic pain self-medicate more than patients with acute pain. There was also a significant association between the type of pain and the time it took the respondents to report at the hospital. This also has to do with the severity of the pain, the more severe the pain, the earlier the respondents reported at the hospital. Most chronic Orthopaedic pains are as a result of arthritis and findings in the literature showed that majority of patients with arthritis would have used one medication or the other without the input of a professional.^[30]

The use of analgesics (paracetamol and NSAIDs) was high among the respondents. This is in alignment with other studies.^[2,31] Many of them also admitted to the use of topical treatment particularly topical creams and Shea butter. Some of the patients also admitted to using supplements especially calcium supplements for their condition. Only one patient admitted to the use of opioid analgesic (tramadol). The use of opioid is rare probably because it is controlled or because it is not commonly prescribed for out-patients as studies have shown that previous prescriptions are major sources of information about medicines people self-medicate.^[6]

Some of the patients that had been attending the clinic still self-medicate to control pain; this might be due to suboptimal pain control for some of the patients. Majority of the respondents did not have any complaint about their drug therapy; however, there were few complaints of drowsiness and gastrointestinal disturbances. There is therefore the need for the physician to always ask of complaints about their patient's drug therapies during the consultations sessions, so that appropriate changes can be done or counseling given to avoid irreversible adverse effects as these adverse effects can ultimately affect adherence to medications and increase inappropriate self-medication. There is the need for pharmacists to arise to their responsibilities to their patients as these cases of drug therapy complaints have been escaping the pharmacy unit, meanwhile, pharmacists are the best suited professionals in the healthcare team trained to identify drug therapy complaints and resolve them. The current pharmacy practice in Nigeria is still at the dispensing level (product-oriented practice), though some healthcare facilities are gradually migrating to the patient-centered practice, it is still a far cry from what the practice is like in the developed nations.

Despite the useful information provided in this present study, its limitations include the likelihood of memory or recall bias among the respondents on the use of medications before reporting to the hospital, the limited sample size and non probabilistic sampling technique.

CONCLUSION

A considerable number of the respondents indulge in self-medication before reporting to the hospital, with majorly analgesics (Paracetamol and Non-steroidal anti-inflammatory drugs) while some continue to self-medicate even after commencing clinic. The practice of self-medication is also associated with the type of pain.

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