Medication prior to rheumatology consultation in a Togolese Teaching Hospital

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Abstract

Objective: To determine the frequency and nature of the medication prior to specialized consultation in rheumatic patients.

Design: This was a cross-sectional study of patients admitted for the first time for rheumatology consultation at CHU-SO in Lomé, Togo.

Methods: The data relating to the medication prior to the consultation were collected by questioning. The diagnosis of the conditions covered by the consultation was based on clinical and para-clinical examinations.

Results: Two hundred and eleven patients (151 women and 60 men) with a mean age of 49 years were included in the study. Forty-five patients (21%) were covered by health insurance because of their status as state employees, unlike the other 166 (79%) working in the informal sector. Spinal degenerative pathology (76%), knee osteoarthritis (20%) and tendinitis (10%) were the main diseases observed. One hundred and ninety- five patients (92%) were on medication prior to the rheumatology consultation. Non-steroidal anti-inflammatory drugs (118 cases, 75%) and analgesics (93 cases, 59%) were the most common therapeutic classes that were used. Self-medication was observed in 141 patients (67%) at all levels of education combined. Eighty-four of the 141 patients (60%) have used street drugs, and 98 of them (70%) were oriented by word of mouth. General medical practitioners (25%) and medical assistants (19%) were the main prescribers before the rheumatology consultation. Epigastric pain (16 cases) was the main side effect observed. One hundred and forty-four patients (66%) had no idea of the risks of self-medication, added to lack of money by 122 (87%) patients and lack of knowledge of rheumatology by 67 (48%) patients.

Conclusion: Self-medication, the frequency of which is known all over the world, is more notable in Africa and in rheumatic diseases where pain is the main symptom and its relief is one of the criteria for evaluating the effect of any therapy.

Key words: Self-medication, Rheumatology, Togo, Africa

Introduction

Pain is the main symptom of rheumatic diseases for which it is the main reason for consultation. Its relief is the first concern of both the patient and the doctor, hence the importance of symptomatic treatment based on analgesics and non-steroidal anti-inflammatory drugs[1-3]. Analgesics and non-steroidal anti-inflammatory drugs are among the most prescribed drugs in the world, both in private medicine and in hospital medicine. They are among the world's best-selling substandard and falsified drugs according to the World Health Organization[4]. Paracetamol is now legally sold outside the pharmaceutical circuit in some developed countries[4,5]. In sub-Saharan Africa more than elsewhere, the use of these drugs in self-medication is favored by the continent's low medical and paramedical coverage, as well as by poverty and the low rate of social protection coverage[6]. These combined factors explain the recourse to self-medication, which is heavily fueled by street pharmacy in sub-Saharan Africa. This explains the extreme frequency of self-medication observed in rheumatology. The purpose of this study was to determine the frequency and nature of the medication prior to the specialist consultation in Togolese rheumatic patients.

Materials and methods

The study took place in the Rheumatology Department of the CHU-SO in Lomé, Togo. The population of Togo is about 8,000,000 inhabitants. Life expectancy at birth is 66 years. Forty percent of Togolese are aged under 15 years, 56% are aged between 14 and 64 years, and 4% are aged at least 65 years. The gross domestic product per inhabitant is USD 760. Health expenditure represents about 30% of household income. On average, there is one medical doctor for 15,000 inhabitants, one midwife for 12,000 inhabitants, and 1.63 nurses for 10,000 inhabitants. The public sector has 700 healthcare facilities. Seventy percent of Togolese live within a radius of less than 5 km from a healthcare facility[7].

Health coverage began in stages, through the National Health Insurance Institute, set up in 2011 for the benefit of State employees and equivalent, corresponding to a coverage rate of 7% of the population. For three years, a social assistance has been set up for the benefit of 1,500,000 primary and secondary students in the public sector. In addition, initiatives to enlist the informal sector are underway. These different provisions are called upon to converge towards a national system of universal health coverage governed by a regulation[7].

This was a cross-sectional study carried out over three months in the Rheumatology Department of CHU-SO. All patients admitted to consultation for the first time were included. A survey sheet made it possible to collect the socio-demographic characteristics of the patients, the presence or absence of medical coverage by insurance, the reason for consultation, the treatment taken before the consultation and its effects, the reasons for resorting to such treatment. These data were added to those for diagnostic purposes resulting from the clinical and the para-clinical examinations.

Results

Two hundred and eleven patients (151 women and 60 men) were included in the study. The mean age of these patients was 49 years (range from 12 to 85 years). Forty-five of these patients (21%) were state employees and consequently had health insurance. The other 166 patients (79%) belonging to the informal sector, did not have a health insurance scheme. The level of education was primary school for 40 patients, secondary school for 82 patients and university level for 40 patients. The mode of installation of the pain was progressive in 186 (88%) patients. The pain was chronic in 195 (92%) patients, acute in 191 (91%). Degenerative spine disease (76%), knee osteoarthritis (20%) and tendinitis (10%) were the major diseases observed. Activities of daily living were impaired in 95 (66%) patients.

Ninety-five patients (92%) were under medication prior to rheumatology consultation, and non-steroidal anti- inflammatory drugs (118 cases, 75%) and analgesics (92 cases, 59%) were the most common therapeutic classes that were used.

Self- medication was observed in 141 (67%) patients, all levels of education combined: eighty-four of the 141 (59.57%) patients used street drugs, and 98 (70%) of them were referred by word of mouth. General medical practitioners (25; 46%) and medical assistants (19; 42%) were the main prescribers before the rheumatology consultation. Epigastric pain (16 cases) were the main side effect observed. One hundred and forty-four patients (66%) did not have any idea of the risks of self-medication, which 122 (87%) patients joined due to lack of funds, and 67 (48%) due to ignorance of the rheumatology.

Discussion

This was a cross-sectional study aimed at determining the profile of the medication prior to the specialist consultation in 211 rheumatic patients. As a result, 195 (92%) patients had treatment prior to the specialist consultation. This treatment was self-medication in 41 (67%) patients. The treatment prior to the specialist consultation finds its origin in the important place occupied by pain in rheumatic diseases, in the heavy consumption of analgesics and non-steroidal anti-inflammatory drugs in daily medical practice, in the over-the-counter sale of these drugs as well in the classical pharmacy as in that of the street, and in the important place of these drugs among those of inferior quality and falsified.

Another aspect of the medication prior to the consultation is that relating to medicinal plants. The use of these plants is very frequent in Africa, all pathologies combined. In our study, we did not conduct a systematic research on the use of these plants but this could be the subject of another work. The drugs used by our patients before the consultation were both generics and specialty drugs. The two types of drugs are sold in pharmacies as well as in streets. Medication through friends and family members is based on word of mouth as mentioned above. Although our sample only included 211 patients, the results of our study are probably superimposable on all rheumatism diseases and beyond, to all medical specialties

Several studies have shown that self-medication is a real public health problem in

emerging countries[9]. The prevalence of self-medication in these countries is difficult to quantify because it varies according to the populations, pathologies and drugs used [9,10]. The limits of our study are represented by the mode of data collection on a declarative basis of patients, which can be a source of bias.

Self-medication and the recourse to non-specialist are favored by low rheumatology and medical coverage (Togo has only about ten rheumatologists) and low health insurance coverage (about 40% of Togolese are covered). Only a fifth of our patients, because of their status as State agents, benefit from health insurance[7].

In addition to the low health and insurance coverage, other factors favoring self-medication are added: financial constraints, low level of education, actual or *de facto* over-the-counter sale of drugs (even for those to be sold on medical prescription), substandard or falsified drugs trafficking, important proportion of analgesics and anti-inflammatory drugs among the trafficked drugs. This is the case with level 1 analgesics, paracetamol in particular, and even those of level 2, like tramadol, the subject of significant seizures in recent years in West Africa[8-11].

The results of the study are consistent with the observations both in the Third World and the West 12-16. Globally, analgesics are the most commonly used drugs in self-medication14. The frequency of the medication before the consultation in our study was 92% and that of self-medication was 67%. This frequency is close to that of studies conducted both in Europe in the field of rheumatology12 and in Africa in other specialties[13,16]. The place of pain in rheumatic pathology explains the important role of analgesics and non-steroidal anti-inflammatory drugs in self-medication and during the period preceding the specialist consultation.

Conclusion

This study shows that the fight against self-medication involves the eradication or reduction of its contributing factors which are poverty, insufficient medical coverage, extension of health insurance, the fight against substandard and falsified drugs trafficking. In daily rheumatology practice, the correct management of the patient requires taking into account self-medication and medications taken upstream of the specialist consultation, with a dual diagnostic and therapeutic purposes.

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