

Self-Medication during Dermatological Disorders Seen in the Dermatology Department of the University Hospital Joseph Raseta Befelatanana, Antananarivo Madagascar

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Abstract

Introduction: Self-medication is the act of choosing a treatment for a benign condition or symptom, for preventive or curative purposes, without medical advice. This practice aggravates dermatological pathologies and promotes the appearance of cutaneous adverse effects of the drugs used. Our study aims to describe the characteristics of this self-medication in patients seen in consultation/hospitalization at the Dermatology Department at the University Hospital Joseph Raseta Befelatanana (UHJRB) in Antananarivo.

Methods: This is a 6-month descriptive and cross-sectional study of the characteristics of self-medication during dermatological conditions encountered in the Dermatology Department at UHJRB in Antananarivo.

Results: Self-medication was performed by 56.82% of the selected cases. Women and young people aged 20 to 25 predominated in this practice. The level of education did not influence the practice of self-medication. Autonomic dermatoses were the most observed (31.2%). Thirty-eight percent combined several drug classes. The most used drugs were herbal medicine (24%) and corticosteroids (27%). Sixty-four percent used topical treatment. The purchase of drugs at the pharmacy concerned 35% of patients. The main reason was that the lesion was not a problem for patients (22.4%). Patients practiced self-medication either on their own initiative or under the influence of those around them (67.2%). Adverse events were detected in 48.8% of cases.

Conclusion: Improving patient self-medication counseling is critical. We particularly highlight the dangers in the misuse of corticosteroids.

Keywords: Self-Medication; Dermatology; Madagascar

Introduction

In dermatology, self-medication has a responsibility in the fact that skin disorders are among the five causes of morbidity and loss of working capacity [1]. In Orléans, this self-medication concerns 22% of the population studied [2]. In Africa, it seems to occupy a very important place [3,4]. Studies in various African countries confirm this [3,5-7]. Indeed, the undesirable effects of this therapeutic mode justify the majority of consultations at the hospital in France [2] and especially in Africa [3,6,8,9]. In Madagascar, there is no study yet that addresses self-medication in dermatology from this angle. The objectives of our study are to determine the frequency, to describe the characteristics and modalities of self-medication in patients seen in consultation/hospitalization at the Dermatology Department at UHJRB Antananarivo.

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Materials and Methods

We did a study in the Department of Dermatology UHJRB Antananarivo over a period of 6 months (May to October 2015). This was a cross-sectional descriptive study of patients with dermatological pathology seen in consultation and/or hospitalization in this department during the study period. We included patients aged at least one year with dermatosis, met for the first time at the level of the service that performed primary self-medication in relation to their dermatological lesions who could answer the questionnaire form either by themselves or their accompanying person. We excluded patients who refused or withdrew from the study during the interview. The parameters studied were socio-demographic characteristics (age, gender, educational level, occupation), clinical parameters (dermatosis or diagnosis retained for patients) and the characteristics of self-medication. The participant was informed of the purpose of the questions that were going to be asked. The exploitation of the data was done anonymously. Data collection was done by direct interview by a single trained investigator using „evaluation questionnaires” as a tool. The interview was with the patient himself or a parent in the case of a minor. The data obtained was collected and entered on „Microsoft Excel” and then analyzed using the „IBM SPSS Statistics 22” software.

Results

During the study period, four hundred and eighty-four patients had come for first-time consultation or hospitalization at the service level. Of these 484 cases, two hundred and twenty had been identified and investigated. Among these 220 registered patients, one hundred and twenty-five had used self-medication, or 56.82% of the population studied. The average age was 22, with extremes of 1 to 86 years. The female had more self-medication than men (57.6% vs. 42.4%) with a sex ratio of 0.74. The level of education did not influence the practice of self-medication and noting that the academics accounted for a significant proportion of 41 patients (32.8%) (Table 1). The pathologies for which patients self-medicated were autonomous dermatoses in 39 cases (31.2%), infectious dermatoses 36 cases (28.8%), allergic dermatoses 24 cases (19.2%), diseases of the system 16 cases (12.8%), tumor dermatoses 4 cases (3.2%), cosmetic dermatoses 4 cases (3.2%) and genodermatoses 2 cases (1.6%) (Table 2). In our study, the treatments used for self-medication were local treatment for 80 cases (84%), a general treatment for 24 cases (19%) and an association between local and general treatment for 21 cases (17%). The drugs were used alone or in combination. The most used treatments were herbal medicine and corticosteroids (Table 3). In the majority of cases, the patients practiced self-medication either on their own initiative or by influence of the entourage respectively 42 cases (33.6%). Other sources of information that motivated self-medication were family 30 cases (24%), internet 7 cases (5.6%), 1cas books (0.8%) and various sources in 3 cases (2%), 4%) (Table 4). Several reasons were recorded including negligence in 28 cases (22.4%), routine in 23 cases (18.4%), impatience in 17 cases (13.6), effectiveness observed in others in 7 (5.6%) and for multiple reasons in 50 cases (40%). The treatment came from the pharmacy in 44 cases (35.2%), the market in 29 cases (23.2%). In 23 cases (18.4%) treatment was stored at home, donations from neighborhood in 5 cases (4%), and provenance was not specified in 24 cases (19.2%).

Degree of education	Number (n)	Percentage (%)
University	41	32,8
Students	35	28
Secondary	20	16
Primary	24	19,2
Not in school	5	4

Table 1: Distribution of patients by degree of education.

Pathologies involved	Staff (N)	Percentages (%)
Autonomous Dermatoses	39	31,2
Infectious Dermatoses	36	28,8
Allergic Dermatoses	24	19,2
Diseases of the system	16	12,8
Tumor Dermatoses	4	3,2
Dermatoses Cosmetics	4	3,2
Genodermatoses	2	1,6

Table 2: Breakdown of patients according to pathologies in causes.

Class of medications	Staff (N)	Percentage (%)
Several associated classes	48	38,4
Herbal medicine	30	24
Corticosteroids	9	7,2
Unknown	8	6,4
Other	8	6,4
Antifungal	6	4,8
Painkillers	6	4,8
Antiseptic	5	4
Antibiotics	3	2,4
Antiinflammatory Drugs (NSAIDs)	1	0,8
Antihistamines	1	0,8

Table 3: Distribution of patients according to the classes of drugs used.

Sources of information	Staff (N)	Percentages (%)
Own initiative	42	33,6
Entourage	42	33,6
Family	30	24
Internet	7	5,6
Various	3	2,4
Books	1	0,8

Table 4: Distribution of patients according to their source of information.

Discussion

In Africa, self-medication is widely used in acute benign conditions of all kinds. In dermatology few studies have been devoted to it [10]. In Madagascar, this behavioural aspect was noted as responsible for the progression of dermatological diseases in 2017 [11].

In our study, self-medication was very common during dermatological pathologies with a frequency of 56.82%. This figure is consistent with the African literature on self-midfrequency dermatology, being average compared to figures previously found. According to a study by Mouhari-Toure., *et al.* in 2010, the frequency of self-medication in dermatology in Lome, Togo, is 44% [3]. In a study on the responsibility for self-medication in Stevens-Johnson syndrome and toxic epidermal necrolysis in Lomé (Togo), it is 47% and in this area self-medication occupies an important place in Sub-Saharan Africa in 2012 [7]. In Cotonou, Benin in 2012, self-medication is practiced by 68.42% of the population studied [8]. According to Saka., *et al.* in the same year, the frequency of self-medication is 66.87% [12]. However, according to our study, the frequency of self-medication is higher compared to European literature. A prospective study of 111 hospitalized patients in Orléans in 2005 notes that it is 22% [2]. The frequency of self-medication in dermatology in Africa, especially in sub-Saharan Africa in 2012, as well as in Madagascar, is much higher than that noted in France [7]. Several reasons explain these concordances and discordances of results compared to the data of the literature. In particular, ease of access to care [3,5]. The extreme age observed was 1 year at 86 years old. For authors it oscillates between 10 months and 99 years in 2012 [7]. The average age of 22 years is identical to those described by many articles in 2001 and 2008 [13,14] but differs from the French data seen in 2005 with a significantly higher average age of 44.3 years [2] As in our series the practice of Self-medication is of particular interest to women [3]. We found that academics accounted for 32.8% of the study group. This result is consistent with the literature because self-medication is of particular interest to students at different levels [6,15]. According to our results, the socio-demographic profiles of the patients surveyed (age, gender, level of education) did not have a significant influence on the practice of self-medication. This result matches to that found in France [16] and Spain respectively in 2014 confirming that there are no determinants of self-medication [17].

In addition, another study conducted in Madagascar by Sendrasoa, *et al.* in 2016 notes that self-medication is linked to the profession [18]. According to our study, the majority of the diseases concerned by the self-medication in dermatology were autonomic dermatoses are 31.2% followed by infectious dermatoses with a rate of 26.4% and allergic dermatoses with a rate of 19.2%. In the literature, it is the infectious dermatoses which take the first place [6,8]. According to the data of the literature which reveal that the local treatment is mainly practiced compared to the general treatment and the associations of these two ways [2,8,19], in our series 84% of our patients had opted for a topical treatment. Several classes of drugs dominated by herbal medicine and corticosteroids had been identified. This fact joins those of other African countries, particularly in Benin in 2012 [8] and Togo in 2010 and 2012 [3,7], but differs from those of France in 2005 [2] and Conakry in 2013 [6] where antiseptics are the most used. Like other studies [3,6,15]; the drugs came from the illicit market for a significant percentage of our study population or 23.2%. The reasons for self-medication are rather disparate, the most frequently encountered being negligence [8], the problem of accessibility to care, the absence of health insurance and the availability of drugs outside the pharmacy and healthcare facilities care [7]. And that, in identical fashion with those of the other series previously carried out, our result shows that the entourage plays a predominant role in 33.6% of cases as a source of information on self-medication [7,8].

Conclusion

Self-medication is a public health problem of international importance. Skin disorders are among the five most common causes of morbidity and loss of work capacity, and self-medication plays a very important role in this area [1,8]. Our results are only representative of the patients who came for consultation in the service and shows that there is little difference between Malagasy and African patients, more compared to Europeans, as much on the socio-demographic profiles of practitioners of self-medication as on the dermatoses concerned as well as the modalities of this self-medication in dermatology.

Author's Contribution

All authors contributed to this study. All authors have read and approved the final version of the manuscript

Conflicts of Interest

None.

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