



### Original article

## Médicaments et effets secondaires de l'automédication dans le service de dermatologie-vénérologie du Centre Hospitalier Universitaire Départemental du Borgou/Alibori en 2022 (Bénin)

Drugs and side effects of self-medication in the dermatology and venereology department of the Borgou/Alibori Departmental University Hospital in 2022 (Benin)

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### Résumé

**Introduction :** L'automédication est un problème de santé publique, responsable de complications graves, parfois mortelles. Cette étude a été initiée au sein du Service de Dermatologie-Vénérologie du Centre Hospitalier Universitaire Départemental Borgou/Alibori en 2022 pour recenser les médicaments utilisés par les patients en automédication et leurs effets secondaires.

**Méthodologie :** Il s'agit d'une étude observationnelle, descriptive et transversale du 17 mars 2022 au 31 juin 2022. Tous les patients vus en consultation et ayant donné leur consentement libre et éclairé ont été inclus. Les données ont été saisies à l'aide de Epi data 3.1 et analysées à l'aide d'IBM SPSS Statistics 21.

**Résultats :** Au cours de la période d'étude, 305 patients ont été interrogés. L'automédication était pratiquée par 138 patients (45,2 %). La phytothérapie était la classe thérapeutique la plus utilisée (28,3 %). Le principal médicament trouvé était une association topique de dermocorticoïde, d'antifongique et d'antibiotique (5,1 %), et 22,5 % des médicaments utilisés étaient

inconnus. Parmi les automédicants, la notion d'effets indésirables était retrouvée chez 21 %.

**Conclusion :** L'automédication est une pratique courante chez les patients du service de Dermatologie-Vénérologie du CHUD B/A. La régularisation de la sortie des médicaments en pharmacie pourrait contribuer à réduire la fréquence de cette pratique.

**Mots-clés :** Automédication, médicaments, effets secondaires, Parakou.

### Abstract

**Introduction:** Self-medication is a public health problem, responsible for serious and sometimes fatal complications. This study was initiated in the Dermatology-Venerology Department of the Centre Hospitalier Universitaire Départemental Borgou/Alibori in 2022 to list the drugs used by patients in self-medication and their side effects.

**Methodology:** This was an observational, descriptive, cross-sectional study from March 17, 2022 to June 31, 2022. All patients seen in consultation and having given their free and informed consent were included.

Data were entered using Epi data 3.1 and analyzed using IBM SPSS Statistics 21.

Results: During the study period, 305 patients were surveyed. Self-medication was practised by 138 patients (45.2%). Phytotherapy was the most commonly used therapeutic class (28.3%). The main drug found was a topical combination of dermocorticoid, antifungal and antibiotic (5.1%), and 22.5% of the drugs used were unknown. Among self-medicators, the notion of adverse effects was found in 21%.

Conclusion: Self-medication is a common practice among patients in the Dermatology-Venerology department of CHUD B/A. Regularizing the discharge of medicines from pharmacies could help reduce the frequency of this practice.

Keywords: Self-medication, drugs, side effects, Parakou.

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## Introduction

Self-medication is the practice of treating oneself without the advice of a doctor. It is becoming increasingly frequent and widespread in Africa. Razakanary found a frequency of 56.8% in the Dermatology Department of the Joseph Raseta Befelatanana University Hospital in Antananarivo. [1]. In Cotonou, this frequency was 68.4% according to Adégbidi et al. in the Dermatology - Venereology Department of the Centre National Hospitalier et Universitaire Hubert Koutoukou MAGA [2]. This practice is responsible for a number of serious and sometimes fatal complications. Given that the Dermatology-Venerology Department of the CHUD-B/A is the referral center for the whole of northern Benin, it was important to know the particularities of this practice in this department. The present study therefore focused on drugs used for self-medication and their side-effects among consultants to the Dermatology- Venerology Department of the Centre Hospitalier Universitaire Départemental Borgou/ Alibori (CHUD-B/A).

## Methodology

This was a descriptive, cross-sectional observational study from March 17, 2022 to June 31, 2022 in the Dermatology-Venerology Department of CHUD-B/A. It consisted of an exhaustive census of all new patients who came for consultation in the Department during the study period and who had given their free and informed verbal consent to participate in the study. The consent of the parent or guardian for minor patients was obtained prior to inclusion. All subjects who fulfilled the inclusion criteria but were unable to answer the questions asked because of a neurosensory handicap such as deafness were excluded from the study. Patients who were mute or for other specific reasons and who decided to stop the survey were also excluded from the study. The data collection tool was a pre-established questionnaire (Appendix). Data were entered using EPIDATA 3.1 Fr and analyzed using IBM SPSS Statistics 21.

## Results

### *Frequency and socio-demographic characteristics*

During the study period, 305 new patients were seen in the Dermatology-Venerology Department of the Centre Hospitalier Universitaire Départemental du Borgou/Alibori. Self-medication was practised by 138 patients (45.2%). Self-medicators were mostly aged between

15 and 25 (29.7%), university graduates (35.5%), self-employed workers (34.1%), pupils/students (31.2%) and civil servants (15.9%). Females predominated, with a sex ratio of

0.84. Single patients (48.6%) were the most frequent self-medicators, as were those living in a couple with children (47.1%). The majority of self-medicators (89.9%) had no health insurance coverage.

### *Therapeutic classes of drugs*

Several therapeutic classes were used by patients. Of these, the most commonly used by patients surveyed were herbal medicines (28.26%), followed by

antibiotics (18.84%) and antifungals (9.42%) (Table I). Herbs (phytotherapy), cream combinations (Bethametasone, Gentamycin, Tolnaftate) and griseofulvin were the main drugs used, at 28.3%, 5.1% and 4.3% respectively. The drugs used were unknown in 22.5% of cases (Table II).

*Undesirable effects*

At the end of the survey, adverse reactions were found in 21% of patients surveyed who were self-medicating. Several undesirable effects were found. Among the most frequent were lesion extension in 44.8% of patients, followed by lesion aggravation in 27.6%, depigmentation in 6.9% and fever in 6.9% (Table III).

Table I: Distribution of self-medicating patients according to the most commonly used therapeutic classes in the Dermatology-Venerology Department of CHUD-B/A from March 17 to June 31, 2022.

	<b>Workforce</b>	<b>Percentage</b>
Phytotherapy	39	28,26
Antibiotics	26	18,84
Antifungals	13	9,42
Antibiotic + antifungal + anti-inflammatory	7	5,07
Antihistamines	6	4,35
Analgesics	5	3,62
Antibiotic + antifungal	4	2,90
Antibiotic + antiseptic	3	2,17
Antiseptics	2	1,45
Antibiotic + corticosteroid	2	1,45
Antimalarials	2	1,45
Emollients	2	1,45

Table II: Distribution of self-medicating patients according to most commonly used drugs in the Dermatology-Venerology Department of CHUD-B/A from March 17 to June 31, 2022.

	<b>Workforce</b>	<b>Percentage</b>
Phytotherapy	39	28,3
Unknown drugs	31	22,0
Combination (Bethametasone, Gentamycin, Tolnaftate)	10	5,1
Griseofulvin tablets	6	4,3
Paracetamol	5	3,6
Heating balm	5	3,6
Amoxicillin	4	2,9
Sivoderm	4	2,9
Cloxacillin	3	2,2
Shea butter	3	2,2
Cotimoxazole	3	2,2
Saint jean powder	3	2,2
Soap	3	2,2

Table III: Distribution of patients self-medicating according to adverse effects in the Dermatology-Venerology Department of CHUD-B/A from March 17 to June 31, 2022.

	Workforce	Percentage
Extension of the dermatosis	13	44,8
Worsening of the dermatosis	8	27,6
Fever	2	6,9
Depigmentation	2	6,9
Hyperpigmentation	1	3,4
Tingling	1	3,4
Wounds	1	3,4
Pruritus	1	3,4

## Discussion

### *Frequency and socio-demographic characteristics*

This study showed that 45.2% of patients surveyed practiced self-medication. This frequency is quite high, as found in the literature [[1, 2, 3]. This high frequency of self-medication in the population studied could be explained by the fact that dermatoses are considered commonplace ailments. What's more, this population has no health insurance to cover dermatological care. Patients aged 15 to 25 (29.7%) were more likely to self-medicate. Soumah et al. found an average age of 27.3 years in Conakry, Guinea. [4]. Indeed, young people are the most active subjects and may be more inclined to try out solution approaches that don't encroach on their time. It may be that the phenomenon of unemployment in this age group does not allow these young people to have the necessary means to seek first-line treatment. Kombaté et al., on the other hand, found that patients aged between 35 and 60 (72.5%) were more likely to self-medicate. [5]. In Parakou, as in the literature, self-medication is predominantly practised by women (54.3%). [1, 6]. This may be explained by the fact that women are more concerned about their health than men.

### *Therapeutic classes*

The results show that the therapeutic classes most frequently used for self-medication are phytotherapy (28.3%), antibiotics (18.8%) and antifungals (9.4%).

Several studies have reported that phytotherapy is more frequently used for self-medication. Razakanary found in his study that the majority of patients (24%) made more use of phytotherapy in their practice [1] and Kombaté et al. [5]. In Africa, most dermatological conditions are considered to be "curses", hence the frequent use of traditional medicine. Beliefs and easy access to these medicinal plants also explain their use. However, the results of this study are diametrically opposed to those of Adégbidi et al., who found that antifungal agents (22.1%) are the most widely used, followed by antibiotics (17.9%) and phytotherapy (17.5%). [2].

### *Side effects*

It was noted that 21% of patients in the present study experienced adverse effects, including lesion extension in 44.8% and lesion aggravation in 27.6%. Razakanary in Madagascar found side effects in 48.8% of cases, including worsening of lesions in 29.48%. [1]. In France, Estève et al. reported contact dermatitis, eczema and cutaneous necrosis as side-effects linked to self-medication. [6]. Adégbidi et al. in Benin found that 12.5% of patients experienced complications such as impetiginization in 7.7%, toxidermia in 2.9% and eczematization in 1.9%. [2]. In a study carried out in Cotonou, Benin, by Atadokpèdé et al., it was found that 49.2% of patients presenting with toxidermia had self-medicated with the drugs responsible. [8]. Kouassi et al. in Côte d'Ivoire also

found in their study that 44% of patients with bullous toxidermia hospitalized in Dermatology at the CHU de Treichville resorted to self-medication [9]. Self-medication is not without risk. The most feared complication is the occurrence of toxidermia, given the poor prognosis often associated with it. In the present study, the respondents noted cases of tingling and pruritus following self-medication, which are minor forms of toxidermia. Most practitioners engage in this practice without much knowledge of the precautions to be taken and what to do in the event of adverse effects.

### **Conclusion**

Self-medication is a public health problem. The complications most often encountered were local and benign, but serious and even fatal complications have been described in the literature. The drugs most often used were herbs, triple combinations (dermocorticoids, antibiotics and anti-fungals) in cream form, and griseofulvin. In order to reduce this phenomenon for the well-being of the population, it is essential to regulate the outflow of medicines from the various pharmacies.

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**Conflict of interest** : None

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