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## The Practice of Self-Medication for Skin Diseases in the Department of Dermatology-STD, University Hospital of Conakry, Guinea

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### Abstract

**Introduction:** According to World Health Organization, self-medication is the selection and use of medicines by individuals to treat self-recognized illnesses or symptoms without medical prescription. This is a common practice in developing countries. The aim of this study was to describe the socio-demographic profile of patients using this practice, to identify the dermatoses that motivate this practice and to evaluate its impact on the management of these dermatoses.

**Materials and Methods:** This was a prospective study of 3 months, from January 19th to April 19th, 2014 concerning the cases of self-medication observed in the Dermatology-STD department of the University Hospital of Conakry. We included in this study, patients of all ages and all sexes, seen in the service during the study period, presenting a dermatological condition that motivated the practice of self-medication and gave their informed consent. For each patient we collected sociodemographic, clinical and therapeutic data.

**Results:** We collected 384/1374 (27.95%) cases of self-medication. The sex ratio was 0.83. The average age of the patients was 27.3 years (6 months to 85 years). Most of the pathologies that led to self-medication were infectious dermatoses in 283 (73.69%) followed by allergic dermatitis in 140 (36.45%) cases. The treatments used in self-medication were modern in 254 (66.14%) cases and traditional in 100 (26.04%) cases. These drugs were purchased on the "black market" in 203/254 (79.92%) cases. Complications were encountered in 15% of cases.

**Conclusion:** Self-medication remains a common practice in developing countries. The control of the illicit market of the drug will contribute to a certain extent to the reduction of this scourge.

**Keywords:** Self-medication; Skin diseases; Guinea

### Introduction

According to the World Health Organization, self-medication is defined as the selection and use of non-prescription medicines [1]. It is a practice that has increased significantly, which can have serious consequences on the individual and collective health of the population [2]. It is common in developing countries. In most developed countries legal dispositions have been made for these excesses which are detrimental to health. This is not the case in the majority of developing countries, where the poor means of education of the population and the socio-economic problems exacerbate the risks and danger of this phenomenon.

Guinea, like other developing countries, is facing this phenomenon, which is taking on worrying proportions. The unprecedented development of the illicit drug market, which accounts for more than 50% of the national pharmaceutical market, with the manipulation of the drug by people outside the profession but guided solely by their profit-making interests, is causing many health problems.

The dermatological health problems that motivate self-medication are numerous [3,4]. However in Africa few studies have been devoted to this subject [5]. The aim of this study was to describe the

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socio-demographic profile of patients using this practice, to identify the dermatoses that motivate this practice and to evaluate its impact on the management of these dermatoses.

## Materials and Methods

This was a prospective study of the descriptive type of 3 months, from January 19<sup>th</sup> to April 19<sup>th</sup>, 2014 concerning the cases of self-medication observed in the Dermatology-STD department of Conakry University Hospital. We included in this study, patients of all ages and all sexes, seen in the service during the study period, presenting a dermatological condition that motivated the practice of self-medication and gave their informed consent. Patients who had previously consulted at least once in the department were excluded from this study. The interview was straightforward, with the patient himself or a parent when it came to the children.

For each patient we collected sociodemographic data (age, sex, occupation, grade level); clinical data (the type of dermatoses and its duration of evolution); the therapeutic data: type of treatment used in self-medication (modern or traditional, topical or systemic), the place of supply (purchased in a pharmacy or at the market). The cutaneous complications of the treatments used in self-medication have been systematically sought.

## Results

We collected 384/1374 (27.95%) cases of self-medication seen in the department during the study period. It was 209 (54.4%) women versus 175 (45.6%) men with a sex ratio of 0.83. The average age of the patients was 27.3 years with extremes of 6 months and 85 years; 26.04% (100/384) of the patients were children under 16 years old. The majority of patients: 329 (85.67%) were educated, of which 183 (47.66%) had a secondary level.

The pathologies that motivated self-medication were infectious dermatoses in 283 (73.69%) cases, noninfectious dermatoses in 101 (26.31%) cases.

The treatments used in self-medication were very varied. Our patients had recourse not only to modern treatments in 254/384 (66.14%) cases, but also traditional in 100/384 (26.04%) cases, and both in 30/384 (7.81%) cases.

Modern treatments were administered orally in 181/254 (71.25%) cases, while traditional ones were in 33/100 (33%) cases. Antibiotics (70/181=38.67%) for general treatment and antiseptics (19/73=26.02%) in local treatment were the most commonly used. These drugs were bought on the black market in 203/254 (79.92%) cases, contrary to the legal framework of the dispensing of drugs (pharmacies) in 51/254 (20.07%).

Complications were found in 60/384 (15.74%). These complications were drug reaction in 9 (15%) cases of: maculopapular rash (2 cases), fixed pigmented erythema (3 cases), Stevens Johnson's syndrome (2 cases), overlap (1 case), Lyell's syndrome (1 case). Other complications were superinfection of lesions in 31/60 (51.66%) cases, eczematization in 11/60 (18.33%) cases, and lichenification in 9/60 (15%) cases; they were mostly due to the use of inappropriate topicals or local herbal remedies.

## Discussion

With a prevalence of 27.95% in 3 months, our study proves that self-medication is not uncommon in patients seen in the Department

of Dermatology-STD Conakry University Hospital. This prevalence, although lower than that reported in Togo (44%) [5], shows the extent of this scourge in developing countries. Indeed, in sub-Saharan Africa, self-medication seems to occupy an important place for social, economic and psychological reasons [6].

In the developed countries self-medication is also common. In France, Estève E et al. [7] reported a prevalence of 16% in patients admitted to hospital for acute dermatoses, and accounted for 43% of the treatments taken before hospitalization. A Swedish questionnaire study of the 5404 outpatients in the previous two years showed non-prescription topical use in 9.6% of the cases [8]. This self-medication would total about 10% of the turnover of the drug industry in France, without taking into account the recent development of the most often illegal sale of medicines over the internet [9]. In a systematic review of the literature Corrêa-Fissmer M et al. [4] reported very variable prevalence rates for self-medication, in the treatment of various dermatological conditions, ranging from 6.0 to 44.0%.

Although self-medication is an integral part of the self-care proposed by WHO, it is extremely important to evaluate its rationality as it is a very common practice and the inappropriate use of drugs can have serious consequences on the health of individuals as well as the community [1]. This is a real problem that cannot be underestimated.

The socio-demographic profile of our patients was that of young patients (mean age=27.3 years), predominantly female (54.4%) as reported by Mouhari-Touré A et al. [5] who reported an average age of 25 years and a female predominant of 57.2%. Eticha T et al. [10] also noted the youthfulness of patients using self-medication (mean age=28.65 years), but with a male predominance of 73.7% unlike our series. The youth of the patients of the African series, is opposed to the advanced age of the patients of the Western series as reported by Estève E et al. [7], with an average age of 44.3 years, although the predominance of women is also reported (16 women for 9 men). This female predominance is also confirmed in the Carrasco-Garrido et al. [11] which states that women consume more drugs without medical prescription than men.

Our study shows that self-medication was much more used by patients to treat infectious dermatoses (55.71%) and allergic dermatoses (22.64%). It is the same in the series of Estève E et al. [7] in France, who found that bacterial skin infections were the first reason for self-medication (37.84%) followed by allergic dermatoses (22.52%). The predominance of these infectious dermatoses in our series could be explained by their human-to-human transmission, lack of hygiene and precariousness.

The treatments used for self-medication in our study were very varied, our patients resorted not only to modern but also traditional treatments. The high proportion of infectious diseases encountered in our study partly explains the predominance of antiseptics (25.98%) used in local treatment and antibiotics (38.67%) in the general treatment but also analgesics (29.29%) as has been reported by other studies, notably that of Estève E et al. [7], that of Hugues FC et al. [12] and that of Fox JM [13].

Most of the drugs used by patients in our series were bought in the "black market" (79.66%), contrary to the legal framework of dispensing drugs (20.34%). This same observation is made in the Togolese series [5] where street drugs represent a significant source (37.9%) of self-medication in cutaneous pathologies. This could be explained in our case, by the explosion of the illicit market of the

drug despite the measures taken by the public authorities. But also by the accessibility of these less expensive illicit drugs distributed without constraint by the actors of the "black market" [5]. In a review of the literature, Corrêa-Fissmer M et al. [4] have identified a larger number of developing countries, which may be justified by the greater relevance of self-medication in these countries, due to the lack of financial resources for appropriate medical care. This fact corroborates the hypothesis of a lack of financial resources that pushes patients to look for less expensive alternatives to self-medication. It should be noted that a lower economic condition is often associated with a lower socio-cultural level, which makes self-identification of symptoms and the rational selection of an appropriate therapeutic alternative for self-medication even more difficult.

The use of traditional medicines in self-medication is also widespread in Sub-Saharan Africa, as evidenced by our study with a rate of 26.04%, and that of Mouhari-Touré et al. with a rate of use of traditional medicines in self-medication of 23.9% [5]. Indeed, in Africa traditional medicine holds an important place, it is very often the first resort of the majority of the rural population. The ancestral cults and beliefs of the medicinal virtues of plants are one of the determinants of this traditional self-medication [5].

When practiced correctly, self-medication has a positive impact on the individual system and the health care system. It empowers patients to take responsibility and build self-confidence to manage their own health, thereby empowering them. In addition, it can save time spent waiting for a doctor, and even save life in acute condition and can help reduce health care costs [14,15]. However, it remains a dangerous practice that can sometimes have serious consequences for health and sometimes even life-threatening, as illustrated by our results.

## Conclusion

Self-medication is a fairly widespread practice around the world, particularly in economically deprived communities. While the World Health Organization has emphasized that responsible self-medication can help prevent and treat diseases that do not require medical consultation and is a cheaper alternative for the treatment of common diseases, it remains a risky practice that can expose to sometimes serious complications. The information and public awareness of this practice as well as the control of the illicit market of the drug will contribute to a certain extent to the reduction of this scourge.

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