

Prevalence of Dermatoses Treated in the Dermatological Task Force of a University Outpatient Clinic

Amanda Sabio Rodrigues¹  Ana Luiza Heleno Ferreira¹  Larissa Gonçalves Rodeghel¹  Verônica Oka Barancoski¹  Amanda Bertazzoli Diogo¹ 

¹Centro Universitário São Camilo – CUSC. São Paulo/SP, Brasil.
E-mail: rodrigues.amandasabio@gmail.com

Abstract

Dermatoses refer to pathologies that affect the skin and its appendages, many of which are initial manifestations of underlying disorders. Dermatological examination indicates various skin changes and lesions, enabling better diagnostic accuracy within the variety of diseases that affect the skin. Conditions in dermatology impact the patient's quality of life, increasing risks for psychosocial disorders and depression. However, there is negligence in public health policies related to these pathologies, due to the underestimation of their morbidity, mortality and lethality rates. The goal of this study is based on the collection of statistical data regarding the main dermatological conditions. It is a prospective cross-sectional study, whose data were collected, through anamnesis and physical examination, at the outpatient clinic of São Camilo University Center (PROMOVE), in November/2021, in São Paulo. 92 patients were treated, with primary ICD L70 (“acne vulgaris”) being the most prevalent, followed by ICDs L81 (“other pigmentation disorders”), D21 (“benign neoplasms of connective tissue and soft tissue”) and L20 (“atopic dermatitis”), respectively. Based on the distribution of dermatological diseases by age, DALYs (Disability Adjusted Life Years) peak between 10 and 20 years old, due to acne. This explains the fact that it is a disease with a great psychological impact, especially in this age group. In this way, this information can help align prevention policies; general practitioner awareness of the main dermatopathologies, encouraging the initiation of treatments for diseases such as acne and atopic dermatitis; early diagnoses and consequent improvement in quality of life.

Keywords: Outpatient Care. Health Profile. Dermatology.

INTRODUCTION

Dermatoses refer to pathologies that affect the skin and its appendages, such as hair and nails. Many of these may be early manifestations of underlying disorders^{1,2,3}. The dermatological examination is a tool capable of indicating various skin changes and lesions, enabling not only the specialist, but all doctors, to have better diagnostic accuracy within the wide variety of diseases that affect the skin^{3,4}.

Conditions in dermatology can have a major

impact on the patient's quality of life, increasing risks for psychosocial disorders and depression, especially in cases of skin diseases that are more apparent, such as acne and dermatitis, and in age groups in which the patient feels more vulnerable, such as adolescence^{2,5,6}. It is estimated that skin diseases are responsible for 2000 medical conditions, many of which have a potential physical and psychological impact¹.

There is a certain degree of negligence in pu-

blic health policies in relation to these pathologies, mainly due to the underestimation of their morbidity, mortality and lethality rates^{1,2,5,6,7,8}.

Dermatopathologies reached an estimated level in 9.8% of users who sought care in Basic Health Units (BHUs), according to a study carried out by the Dermatology discipline of the Department of Clinical Medicine of the Faculty of Medical Sciences of the State University of Campinas (FCM/Unicamp)³.

As many dermatological complaints are reasons for consultation with general practitioners, it is extremely important that they also have knowledge of the epidemiology of the main diseases that affect the population, such as acne, superficial mycoses and pigmentation disorders, aiming at early diagnosis and, consequently, improving the prognoses^{1,6,7}.

Therefore, it is important to provide guidance

to the general practitioner about the prevalence of such dermatoses, so that they can carry out diagnosis and treatment in primary care, reducing the waiting list for consultation with a specialist doctor (dermatologist)^{1,6,7,8}.

On the other hand, the number of studies to date is still scarce. Regional and sociodemographic differences in Brazil are high, directly impacting the epidemiological profile of dermatoses^{3,7}.

Given the lack of studies on the epidemiological profile and prevalence of skin diseases, this study describes the nosological profile of patients treated during the dermatological task force held at the Center for Promotion and Rehabilitation in Health and Social Integration (PROMOVE SÃO CAMILO), São Camilo University Center School Clinic, located in the city of São Paulo, on November 6, 2021.

METHODOLOGY

This is a prospective cross-sectional study, whose data were collected through anamnesis and physical examination carried out in the dermatological task force, which took place at the outpatient clinic of São Camilo University Center (PROMOVE), located at Rua Engenheiro Ranulfo Pinheiro Lima, 200 - Vila Monumento, São Paulo - SP, 04264-030, on November 6, 2021, from 8 am to 6 pm.

The research project was approved by the Ethics and Research Committee of São Camilo University Center.

The dermatological task force was planned by the service's dermatological preceptors, who selected the Medicine students who participated in the Academic League of Dermatology at São Camilo University Center. Initially, interested parties filled out a digital form that was sent to preceptors along with the academic curriculum. After analyzing these items, an online interview was carried out between doctors and students, in which 8 students were chosen.

On the day of the consultations, 5 derma-

tologists, 8 students and several employees of the service were present. There were 8 rooms for consultations, one for each student.

The target audience were patients on the waiting list at this outpatient clinic for consultations with the dermatology specialty, whether they were referred by the service itself to the specialty or as the service's first consultation, which is already relatively well known to the population in the community close to the outpatient clinic.

To collect data, for later storage in medical records, a physical care form was used, formulated by the dermatology outpatient clinic, to carry out the anamnesis and later the physical examination focused on the complaints. The consultations were conducted by academics and then discussed with dermatologist preceptors to define medical conduct.

92 patients were treated and the information collected was:

• **Demographic Data:** gender (male, female); age (0 to 10 years; 10 to 20 years; 20 to 30 years; 30 to 40 years; 40 to 50 years; 50

to 60 years; 60 to 70 years); education level;
 • **Clinical Data:** comorbidities; continuous use medications;

• **Skin Assessment Data and Annexes:** Fitzpatrick phototype (I to IV, being, according to the Brazilian Society of Dermatology, I- white skin that always burns and never tans; II- white skin that always burns and tans very little; III- light brown skin; IV- moderate brown skin; V- dark brown skin; VI- black skin); primary complaints; psychological impact of the disease (sadness, irritability, worry, discomfort, shame, low self-esteem); daily use of sunscreen; ICDs 10 (International Classification of Diseases); number of discharges (if there was an outpatient discharge or need for follow-up).

No previous medical records data were used. Subsequently, graphs were built on the

data in Microsoft Excel. The data were analyzed using SPSS 20.0 software.

The inclusion criteria were all patients who signed and agreed with the Free and Informed Consent Form (FICF), before each medical appointment, in which they clarified, provided guidance on the objectives and requested the use of clinical data for scientific studies.

The exclusion criteria were applied to patients who did not sign the FICF, which were not counted for the research.

Bibliographic searches for articles were carried out in PubMed, Scielo, VHL, Capes and LILACS databases, using the descriptors "Outpatient Care, Health Profile and Dermatology", with their correlates in English and Portuguese, to later carry out a bibliographic basis about the topic covered in the work.

RESULTS

Around 75% of patients do not apply sunscreen daily, compared to 21.5% who use it correctly. When correlating to the Sun Protection Factor (SPF), 30% of those who use the product daily use SPF 30.

The comorbidities found were systemic arterial hypertension (SAH) (23%), diabetes mellitus (DM) (11.5%), dyslipidemia (14.9%), obesity

(9.2%), smoking (9.2%), kidney disease (4.6%), liver disease (3.4%), others (24.1%).

Regarding medications for continuous use, even though approximately 35% did not use daily medications, losartan was the most used medication, followed by oral contraceptives, hydrochlorothiazide, simvastatin, atenolol and glifage.

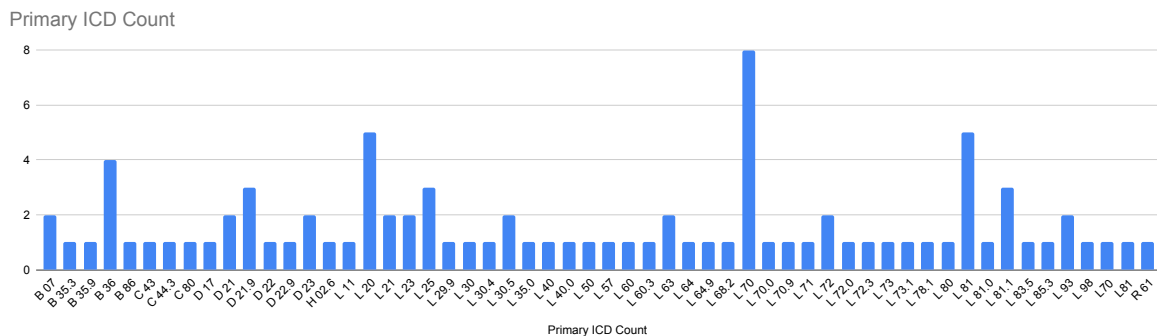


Figure 1 - Primary ICD count (in absolute numbers).

Among the consultations, the primary ICD L70 was the most prevalent, described as “Acne Vulgaris”. This diagnosis was present in 15 individuals treated (16.3% of patients), whose main age range was from 10 to 19 years old, with females prevailing in 75% of cases.

The second most common ICD was L81, which designates “other pigmentation disorders”, being diagnosed in 14 patients (15.2%) whose main age group was between 40 and 49 years old, with a predominance of females, in 7 of them. 9 cases.

The third most common ICD was D21 (“benign neoplasms of connective tissue and soft tissues”), present in 13 patients (14.1%) of which 6 were female and 4 were male, whose predominant age ranges were 50 to 59 years old, respectively.

In fourth place, ICD L20 stood out, “atopic dermatitis”, diagnosed in 12 individuals (13%), being more prevalent in individuals aged 0 to 10 years and in females.

ICD L25, “contact dermatitis”, was present in 10 patients (10.8%).

Superficial fungal infections, designated by ICD B36, were found in 5 patients (5.4%).

ICD L72, called “follicular changes”, was diag-

nosed in 5 patients (5.4%), as well as ICD L40, corresponding to “psoriasis vulgaris”, also found in 5 patients (5.4%).

“Alopecia” was found in 4 patients (ICD L63), totaling (4.3%).

Infectious diseases were diagnosed in 3 patients (3.2%), 1 with vulgar wart (ICD B07) and 2 patients with scabies (ICD B36).

“Nail changes”, ICD L62, and ICD L21, “seborrheic dermatitis”, were present in 2 patients each (2.1%).

Only 1 patient was diagnosed with the following diseases: Urticaria (ICD L50), Xanthelasma (ICD H02).

Furthermore, there was an important impact of dermatoses on patients' quality of life, being present in 58.7%. The main psychological impacts were: sadness (3.7%), irritability (3.7%), worry (9.3%), discomfort (13%), shame (14.8%) and low self-esteem (24.1%).

Of the patients treated, 4% were discharged on an outpatient basis. The need for a new consultation and return to service at the São Camilo University Center (PROMOVE) outpatient clinic, including biopsies, was of 51% and follow-up with medication and/or guidance was of 42%.

Number of People versus Age Group (In Years)

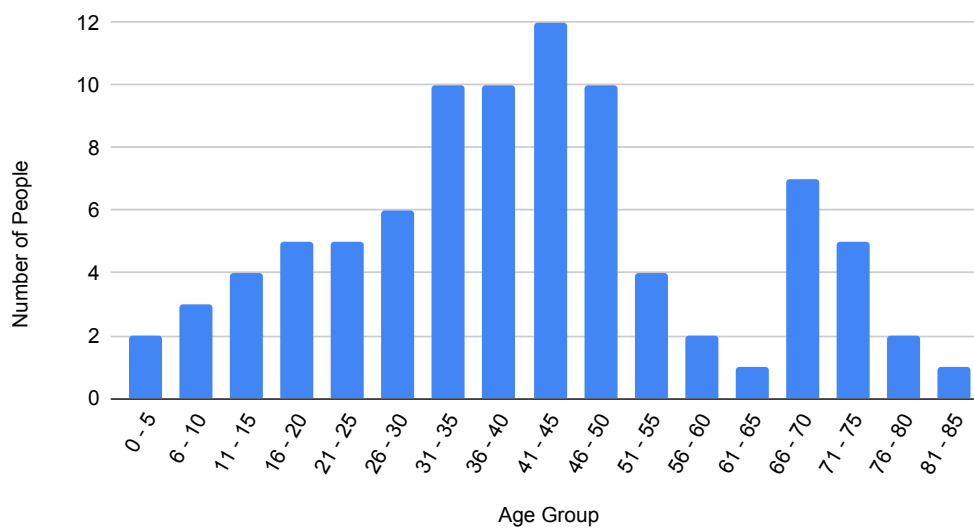


Figure 2 - Number of People versus Age Group (in years).

DISCUSSION

The Dermatological Census, carried out in 2006 by SBD, identified the most common dermatoses treated by specialists in the country: acne, superficial mycoses, pigmentation disorders, actinic keratosis and contact dermatitis².

In this work, it was observed that ICD L70 (acne) was the most prevalent, as this is in accordance with studies by SBD^{2,3,8}.

Skin is the 18th leading cause of the DALY (Disability Adjusted Life Years) indicator. Based on the distribution of dermatological diseases by age, DALYs peak between ages 10 and 20 due to acne⁵. This explains the fact that it is a disease with great psychological impact, especially in this age group, which was the most common found in our work.

This dermatosis, due to its high prevalence, easy diagnosis and low clinical complexity, despite its high psychological impact, should initially be treated by BHU clinicians. Referral to a dermatologist should only be reserved for more severe cases and/or treatments that are refractory to initial measures. This would result in a shorter waiting list with the specialist and less chance of psychological impact from the disease⁷.

The other diagnostic hypotheses frequently found in our joint effort were, respectively: pigmentation disorders; atopic dermatitis; benign neoplasms of connective tissue and soft tissues.

Some results present in this study corroborate data present in the literature, such as the incidence of acne, ranking first among the mentioned complaints^{2,3,8}.

In addition, in line with the literature, there is a predominance of adult women seeking dermatology as a specialty^{2,3,4,5,7}.

In this study, the second main diagnosis was pigmentation disorders, a finding similar to the work published by SBD in 2006, which analyzed the nosological profile of Dermatology consultations in Brazil, and reported that pigmentation changes occupied third place, in terms of prevalence⁷.

Many patients with melanoderma may require referral to a specialist doctor to carry out a differential diagnosis between benign lesions, such as melasma, and malignant lesions, such as melanoma^{1,4}.

Regarding the age group, complaints related to pigmentation disorders are also prevalent in women in adulthood. This data is found in previous studies and is justified by the influence of female hormones on the skin⁵.

Benign neoplasms occupied a prominent position in our joint effort, being the third most common disease group, with a predominance in the age group over 50 years. The high prevalence of this dermatosis is also reported in previous SBD publications¹. This shows that more complex dermatoses are referred to a specialist for differential diagnosis with malignancies.

However, there was divergence regarding the prevalence of certain conditions, such as superficial mycoses, which, according to the SBD publication, occupied second place as the most frequently treated dermatosis². In our study, only 5 patients presented this dermatosis, corresponding to 5.4%.

The reason that justifies the low prevalence of this dermatosis, as a primary complaint, in our joint effort, may be due to the correct diagnosis and treatments already established by the general practitioners at the BHU⁵.

Atopic dermatitis, which ranked fourth in our work, was only the eleventh most frequent diagnosis, according to a publication by SBD, in 2006⁷, and tenth place, in the study on the profile of dermatological consultations in Brazil, in 2018⁵. The predominance of this condition in the childhood age group (0 to 10 years) was highlighted, the age at which the disease peaks⁵.

The high prevalence of this disease can be justified by the growth in rates of allergic and atopic diseases in recent years. As atopic dermatitis is a highly prevalent disease, there must be investment of public resources for its treat-

ment, as well as incentives for initial therapeutic management by general practitioners. Important implementations include, for example, supplying public pharmacies with hypoallergenic moisturizers, as well as refresher courses for clinical doctors on the diagnosis and initial treatments of the disease⁹.

Another relevant fact, in our joint effort, was the non-use of sunscreen daily, by most patients, with 75.3% not applying the product daily, in photo-exposed areas.

In Brazil, according to data obtained from the 21st National Skin Cancer Prevention Campaign of the Brazilian Society of Dermatology

(SBD) in 2019, it is estimated that 63.05% of people expose themselves to the sun without any type of protection¹⁰.

Although many are aware of the risks of exposure without photoprotection, in Brazil, tanning is culturally established, favoring unprotected overexposure to the sun. The correct use of the protector reduces the incidence of pigmentation disorders, whether benign or malignant diseases¹⁰.

Therefore, encouraging the allocation of financial resources to raise public awareness of daily sunscreen use will ultimately be beneficial in reducing consultations with dermatologists¹⁰.

CONCLUSION

Carrying out this dermatological joint effort was important to help reduce the waiting list for services with this specialty, as it is in high demand, and, as already mentioned, there is a high rate of dermatological complaints in consultations with a general practitioner.

This study contributed to the increase in statistical data regarding the main dermatological conditions diagnosed, namely: acne, pigmentation disorders, connective tissue neoplasms and atopic dermatitis.

Such information collected through the dermatological task force can help align pre-

vention policies, such as the daily use of sunscreen; general practitioner awareness of the main dermatopathologies, encouraging them to start treatments for diseases such as acne and atopic dermatitis; early diagnoses and consequent improvement in quality of life.

The correct management of common dermatological diseases, such as acne and atopic dermatitis, can initially be carried out by the general practitioner, referring only complex and refractory cases to the specialist, reducing the waiting list for consultations with these specialists.

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REFERENCES

1. Ferreira IG, Godoi DF, Perugini ER. Nosological profile of dermatological diseases in primary health care and dermatology secondary

- care in Florianópolis (2016-2017). *An Bras Dermatol.* [Internet]. 2020 Jul-Ago [cited 2022 Jul 14]; 95(4):428-38. DOI: 10.1016/j.abd.2020.01.004. Available from: <https://www.scielo.br/j/abd/a/CtGBqZxMwtWLDNV3CYvkYdc/?format=pdf&lang=en>
2. Bernardes CA, Magalhães RF, Franca AFEC, Morcillo AM, Velho PENF. Diagnóstico e Condutas Dermatológicas em uma Unidade Básica de Saúde. *Rev Bras Educ Med.* [Internet]. 2015 Jan-Mar [cited 2022 Jul 14]; 39(1):88-94. DOI: 10.1590/1981-52712015v39n1e02782013. Available from: <https://www.scielo.br/j/rbem/a/8mThdHMfQw9xtrkMHbDfdpC/?format=pdf&lang=pt>
3. Júnior AS, Andrade MGG, Zeferino AB, Alegre SM, Moraes AM, Velho PENF. Prevalência de dermatoses na rede básica de saúde de Campinas, São Paulo - Brasil. *An Bras Dermatol.* [Internet]. 2007 Out [cited 2022 Jul 14]; 82(5):419-24. DOI: 10.1590/S0365-05962007000500004. Available from: <https://www.scielo.br/j/abd/a/xktjvVvB7BkyjfKCGpNtyqh/?format=pdf&lang=pt>
4. Alves GB, Nunes DH, Ramos LD. Prevalência das dermatoses no ambulatório de dermatologia da UNISUL. *Arquivos Catarinenses de Medicina* [Internet]. 2007 [cited 2022 Jul 14]; 36(1):65-68. Available from: <http://www.acm.org.br/revista/pdf/artigos/474.pdf>
5. Sociedade Brasileira de Dermatologia et al. Profile of dermatological consultations in Brazil (2018). *An Bras Dermatol.* [Internet]. 2018 Nov-Dez [cited 2022 Jul 14]; 93(6):916-28. DOI: 10.1590/abd1806-4841.20188802. Available from: <https://www.scielo.br/j/abd/a/Df5K3WPrQ364dzdxjCvGYhH/?format=pdf&lang=en>
6. Bertanha F, Nelumba EJP, Freiberg AK, Samorano LP, Neto CF. Profile of patients admitted to a triage dermatology clinic at a tertiary hospital in São Paulo, Brazil. *An Bras Dermatol.* [Internet]. 2016 Mai-Jun [cited 2022 Jul 14]; 91(3):318-25. DOI: 10.1590/abd1806-4841.20164495. Available from: <https://www.scielo.br/j/abd/a/LFDfd8TYvTJ4xDwCMcqbr/?format=pdf&lang=en>
7. Sociedade Brasileira de Dermatologia. Perfil nosológico das consultas dermatológicas no Brasil. *An Bras Dermatol.* [Internet]. 2006 Dez [cited 2022 Jul 14]; 81(6):549-58. DOI: 10.1590/S0365-05962006000600006. Available from: <https://www.scielo.br/j/abd/a/5RGP9HxdkppnhFtmPzw3tyb/?lang=pt&format=pdf>
8. Raposo AA, Schettini APM, Sardinha JCG, Pedrosa VL. Perfil nosológico de centro de referência em dermatologia no estado do Amazonas - Brasil. *An Bras Dermatol.* [Internet]. 2011 Jun [cited 2022 Jul 14]; 86(3):463-8. DOI: 10.1590/S0365-05962011000300007. Available from: <https://www.scielo.br/j/abd/a/jfWPHvNLCwM6xbnpwSp95Hy/?format=pdf&lang=pt>
9. Campos RA. Dermatite atópica: novos desafios. *Arq Asma Alerg Imunol.* [Internet]. 2017 Abr-Jun [cited 2022 Jul 14]; 1(2):123-7. DOI: 10.5935/2526-5393.20170016. Available from: <http://aaai-asbai.org.br/imageBank/pdf/v1n2a01.pdf>
10. Addor FAS, Barcaui CB, Gomes EE, Lupi O, Marçon CR, Miot HA. Protetor solar na prescrição dermatológica: revisão de conceitos e controvérsias. *An Bras Dermatol.* [Internet]. 2022 Mar [cited 2022 Jul 14]; 97(2):204-222. DOI: 10.1016/j.abdp.2022.01.003. Available from: <http://www.anaisdedermatologia.org.br/pt-pdf-S2666275222000030>

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