

## Knowledge of nursing students about psoriasis and considerations about nursing care


## Conhecimento de estudantes de enfermagem sobre a psoríase e considerações sobre o cuidado de enfermagem

Isaque Souza da Silveira<sup>1</sup> 

Júlia Nunes Reyner<sup>2</sup> 

Bárbara Estéla Gonçalves Senter<sup>3</sup> 

Jaqueline Ribeiro de Barros<sup>4</sup> 

Déborah Machado dos Santos<sup>5</sup> 

Adriana Bispo Alvarez<sup>6</sup> 

<sup>1</sup>Autor para correspondência. Universidade Federal do Rio de Janeiro (Macaé). Rio de Janeiro, Brasil. isaque-souza@hotmail.com

<sup>2,5-6</sup>Universidade Federal do Rio de Janeiro (Macaé). Rio de Janeiro, Brasil.

<sup>3</sup>Universidade Federal de Santa Maria (Santa Maria). Rio Grande do Sul, Brasil.

<sup>4</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho" (Botucatu). São Paulo, Brasil.

**ABSTRACT | OBJECTIVES:** To identify the knowledge of nursing students about psoriasis and their respective nursing care. **METHOD:** Descriptive qualitative study performed virtually, from June to November 2021, with nursing students from a public university, analyzed through Content Analysis. **RESULTS:** Responses were collected from 22 students from the 7th to the 10th period of the nursing course. Regarding psoriasis, 91.5% (n=21) of the students reported knowing about it. Analyzing the responses, it was possible to identify that the participants knew the main signs and symptoms of psoriasis. As the main results, there is the report of the participants about the importance of the nursing professional in observing adherence to treatment, which directly affects the manifestation of the disease, as well as supporting the biopsychosocial needs that concern the care of the individual. **CONCLUSION:** Nursing students have different degrees of knowledge about psoriasis, acquired during graduation or related to personal experiences. It is recommended that universities, in particular the curriculum of nursing courses, deal with property about the subject in question, its signs, symptoms, and forms of treatment in order to guarantee quality training for future nurses.

**KEYWORDS:** Nursing. Primary Nursing Care. Knowledge. Education Nursing. Psoriasis.

**RESUMO | OBJETIVOS:** Identificar os conhecimentos de estudantes de Enfermagem sobre a psoríase e seus respectivos cuidados de Enfermagem. **MÉTODO:** Estudo descritivo de caráter qualitativo realizado de maneira virtual, no período de junho a novembro de 2021, com estudantes de Enfermagem de uma universidade pública, sendo analisado através da Análise de Conteúdo. **RESULTADOS:** Foram coletadas respostas de 22 estudantes que cursam entre o 7º e 10º período do curso de Enfermagem. Em relação à psoríase, 91,5% (n=21) dos estudantes relataram conhecer. Analisando as respostas, foi possível identificar que os participantes conhecem os principais sinais e sintomas da psoríase. Como principais resultados tem-se o relato dos participantes acerca da importância do profissional de Enfermagem em observar a adesão ao tratamento, que impacta diretamente a manifestação da doença, bem como dar suporte às necessidades biopsicossociais que tangem o cuidado ao indivíduo. **CONCLUSÃO:** Os acadêmicos de Enfermagem possuem distintos graus de conhecimentos sobre a psoríase, sendo adquirido durante a graduação ou relacionado às vivências pessoais. Recomenda-se que as universidades, em especial as grades curriculares dos cursos de Enfermagem, abordem com propriedade o assunto em questão, seus sinais e sintomas e formas de tratamento, a fim de garantir uma formação de qualidade aos futuros enfermeiros.

**PALAVRAS-CHAVE:** Enfermagem. Cuidados Básicos de Enfermagem. Conhecimento. Educação em Enfermagem. Psoríase.

## Introduction

Psoriasis is a chronic, inflammatory, non-transmissible disease characterized by scales on the skin surface.<sup>1,2</sup> In Brazil, it has a prevalence of 1.31%, 1.15% for women, and 1.47% for men. As much as it can manifest at any age, the prevalence increases with age, reaching 2.29% in people over 60 years. The differences in occurrence in the national territory are related to ethnic diversity, increased longevity of the population, in addition to climatic factors, and solar irradiation.<sup>3</sup>

Psoriasis causes psychological impacts to the individual, such as anxiety and depression, social and economic<sup>4,5</sup>, leading to an effect on the quality of life through social exclusion, stigmatization, and reduced productivity. In addition, it is associated with several comorbidities, such as metabolic syndromes (cardiovascular disease, increased body mass index) and psoriatic arthritis<sup>1,2</sup>.

Psychiatric/psychological comorbidities have high rates in this population and generate a negative impact on their social, sexual, and economic environment. Compared to individuals with other chronic diseases, such as diabetes and cancer, the person with psoriasis may have higher or equal physical and mental impairment.<sup>6</sup>

In 2014, the Member States of the World Health Organization recognized psoriasis as a serious non-transmissible disease and that there is suffering for people affected due to diagnostic, treatment, and care problems.<sup>5</sup> The Protocolo Clínico e Diretrizes Terapêuticas - PCDT (Clinical Protocol and Therapeutic Guidelines) of Psoriasis was updated in Brazil in 2021, which aims to clarify health professionals in its management, explaining that the objective of treatment is not the cure, but remission.<sup>6</sup>

Psoriasis, directly and indirectly, affects the person's life and, taking into account the importance of nursing professionals in the context, it is indispensable that students in this area get knowledge during their formation in order to provide assistance that promotes quality of life, self-care, and reduction of injuries, besides to expanding the research inherent to the context. This study aims to identify in this panorama the knowledge of nursing students about psoriasis and their respective nursing care.

## Method

This is a descriptive study with a qualitative approach, accomplished with nursing students at a Multidisciplinary Center of a Public University located in the countryside of the State of Rio de Janeiro, from June to November 2021.

The approach to the academics was performed by electronic means (e-mail and messaging application), containing information about the research, the responsible researchers and the link to access the Termo de Consentimento Livre e Esclarecido - TCLE (Free and Informed Consent Form) on the Google Forms (Google™) platform. The form had a field for acceptance or refusal of the TCLE; when accepted, the participant was forwarded to the data collection questionnaire.

Data were collected from June to November 2021. The applied form contained 18 semi-structured questions, divided into participant characterization and knowledge about psoriasis, not being mandatory to fill in all the questions, respecting the Ethical and Legal principles of the research. There was no time limit for the participant to answer the questionnaire.

The inclusion criteria adopted were: nursing students, over 18 years old, with active enrollment in the Higher Education Institution (HEI) that were studying from the 7th period. It is worth mentioning that the chosen period of graduation was due to the contents about nursing care for skin lesions, being taught in a discipline of the 6th period of the course at the chosen institution. As exclusion criteria, no access to the internet was considered since the research was performed through a virtual platform.

The research followed the provisions of Resolutions nº 466/2012 and 510/2016 of the National Health Council/MS, besides the recommendations of the Conselho Nacional de Ética em Pesquisa - CONEP (National Council for Research Ethics) on conducting research in virtual environments. The project was submitted and approved by the Research Ethics Committee of the Multidisciplinary Center in UFRJ-Macaé under opinion no. 4.781.179.

After collection, the data were processed in a spreadsheet of Microsoft® Office Excel 2016 program, organizing individuals into groups according to the

answers provided, being analyzed based on Content Analysis. The anonymity of the participants was ensured by the identification of statements with an alphanumeric term from P1 to P22.

Regarding Content Analysis, Bardin<sup>2</sup> points out that, in order to perform the pre-analysis, it is necessary that the material be organized to form the research corpus. Thus, documents must be selected, hypotheses formulated, and indicators constructed that will help in the interpretation and realization of inferences. The second stage consists of assigning codes, performing dismemberments or enumerations, through selected units, related samples, and defined categories. At the end of the exploration, the data are encoded with the cataloging in record units. The third stage consists of performing operations in order to organize the results, revealing the essence of the analysis.

## Results

A total of 22 answers were collected from students from the 7th to 10th period, whose 40.9% (n=9) of the participants were in the 7th period, while 9.1% (n=2) of the other participants studied the 8th period, 18.2% (n=4) the 9th period, and 31.8% (n=7) the 10th period. Among the participants, 27.3% (n=6) completed some course in the health area previously in the research, and 50% (n=11) had friends or family members with the disease.

**Table 1.** Characterization of participants according to period, and previous course in the health area. Macaé, RJ, Brazil, 2021

Variables		Frequency (n=22)	Percentage (100%)
Period that are studying in graduation	7th period	9	40.9%
	8th period	2	9.1%
	9th period	4	18.2%
	10th period	7	31.8%
Completed a course in the health area previously	Yes	6	27.3%
	No	16	72.7%

Source: The authors (2023).

The participants who reported having completed a course in the health area before graduation were of a technical and training level. The knowledge constructed can be influenced by both personal experiences and acquired during professional formation, thus, the participants were divided into two large groups: those who had previously taken a course in the health area (Group 1) and those that did not take courses in the health area (Group 2).

In Group 1 (n=6), 16.7% of the participants reported that had contact with a patient with psoriasis in practical classes or in a pre-graduation course internship, while 33.3% had contact in practice or in the current graduation internships. In Group 2 (n=16), 6.2% reported that had contact in practice or in the current graduation internship, while 12.5% answered "perhaps". These data show an overview of the interviewees, as well as their insertions/ approaches to the theme, being important in understanding the phenomena that will emerge.

The participants of Group 1 (n=6) answered that they knew what psoriasis is, while in Group 2 (n=16), one participant preferred not to answer if he knew about psoriasis, and the others answered that they knew. When asked what psoriasis is for them, the reports of the participants in Group 1 connected the disease to the immune system, although one participant in this group did not relate it to the immune system.

*"It is an autoimmune disease that generates clinical appearances on the skin and is not contagious". (P10)*

*"It is an autoimmune disease, which from moments of stress triggers its symptoms". (P12)*

*"A neurological disease that causes a characteristic lesion of dermatitis in some parts of the body". (P13)*

About what psoriasis was for them, the participants in Group 2 mentioned the main signs and symptoms, as well as the etiology itself, approaching immunological issues in some answers. However, a part of this group addressed psoriasis as a matter of inflammation or irritation without correlating with immune aspects, signs, and symptoms.

*"An autoimmune disease that reaches epithelial cells". (P01)*

*"Inflammatory reaction on the scalp". (P05)*

*"Skin disease that causes stain and itch". (P21)*

When asked about the origin of knowledge about Psoriasis, Group 1 and Group 2 demonstrated that knowledge came mainly from interpersonal, personal experiences or during the current graduation.

*"I have an acquaintance who has this disease, and then I researched what it was". (P10) (Group 1)*

*"During graduation". (P12) (Group 1)*

*"During classes about BioSau" (Discipline of the curriculum of the Basic Cycle of Health of the course participants, corresponding to Biology for Health]. (P03) (Group 2)*

*"Contact with people who have the disease. (P07) (Group 2)*

*"Personal internet search". (P17) (Group 2)*

In Group 1 (n=6), 83% stated that they knew the signs and symptoms of psoriasis, while in Group 2 (n=16), 75% of participants responded positively to the question, reporting some examples of signs and symptoms.

*"Red spots and with scaling on the skin, dryness, irritation, and itching". (P06) (Group 2)*

*"Scaly lesion, may be dry or reddish due to scratching. It affects specific regions of the body such as the head, limbs, and others". (P12) (Group 1)*

*"Peeling skin, itching, redness". (P19) (Group 1)*

From the perspective of nursing care for people with psoriasis, the participants responded about how they see the role of nursing in this context, what is the importance of the nurse's assessment and what their practice would be.

*"We must treat the person as a whole, besides looking at the skin problem. See the emotional issue that can influence and treat this beyond the blemishes and peeling on the skin". (P03)*

*"Nursing is very important, especially in being attentive to the signs and symptoms for the prior initiation of treatment". (P04)*

*"Care prescription, health education, user follow-up as therapeutic". (P13)*

*"Health education and guidance about this autoimmune disease". (P16)*

*"The care is provided through guidance on the quality of life to reduce stress; encouraging adherence to treatment according to therapeutic indications; provide guidance regarding clinical manifestations and repercussions for health". (P17)*

When asked if participants believe that psoriasis is a disease that affects beyond the skin, 91% (n=20) of participants said yes, justifying their answer.

*"Psoriasis can also affect the nails and joints, not just the skin, but there is also the psychological aspect of having a disease that is so visible and can be embarrassing when others do not understand the condition". (P06)*

*"I believe that psoriasis is very much linked to psychological changes in the person with the disease, since I have observed numerous situations in which my*

*acquaintance had worsening of her symptoms after episodes of intense stress". (P10)*

*"Like any wound, the social stigma factor is very present. Many people feel excluded from society because they suffer from this disease. The signs on the skin reflect on self-esteem and how society interprets such a person". (P15)*

## Discussion

Regarding what psoriasis is, the participants in Group 1 related the disease to the immune system, which shows a broader knowledge of the subject since the characterization is related to Kamiya et al.<sup>8</sup> and Madden et al.<sup>9</sup>, who present psoriasis as a chronic inflammatory skin disease with an autoimmune profile. In Group 2, it is possible to see a change in the groups formed, which is repeated in the other responses collected, showing heterogeneity in the participants.

Analyzing the origin of knowledge in Group 1, it is evident that it comes mainly from interpersonal and personal experiences or during the current graduation, presenting the same information in Group 2. Thus, the previous realization of a course in the health area did not influence the responses. These answers demonstrate that the topic is mentioned during graduation classes, but the depth in which the subject is treated is unknown, which can be evaluated by the absence of similar responses by the other participants.

Although there was no report if the knowledge about psoriasis was acquired in a previous graduation course, more participants in Group 1 had contact with people with psoriasis during the course/graduation, while in Group 2, participants were unable to be sure of the contact. Psoriatic lesions have several phenotypic changes, from individual to individual, and may not have been identified by academics during these activities of direct contact with the patient; thus, it is important to know about the signs and symptoms of the disease.

When qualitatively evaluating the signs and symptoms reported by the participants from both groups, we can realize that they were unanimous, they reported

the main signs and symptoms of classical psoriasis, but they did not report systemic signs and symptoms or related to other types of psoriasis that present differently from classic psoriasis.

It is important to consider that there are several types of psoriasis, which manifest in different ways, the most common being vulgar or plaque psoriasis, characterized by reddish and delimited lesions, in addition to whitish scaling.<sup>10</sup> The other phenotypic presentations of psoriasis are guttate, pustular, and erythrodermic, which are not being reported by academics.

Guttate psoriasis is characterized by small papules; pustular is a severe form, which can be local or generalized, in which the individual has pustules accompanied by fever. Erythrodermic psoriasis is the least common and most severe manifestation, in which scaling and erythema are generalized. In addition, psoriasis can affect specific areas of the body, such as joints, folds, scalp, nail bed, palms, and soles of the feet.<sup>11</sup>

In relation to having friends or family members with the disease, the data do not corroborate studies of the prevalence of psoriasis in Brazil, which is 1.31%, being 1.15% for women and 1.47% for men<sup>3</sup>; however, it understands that having friends and personal contact with the disease can influence the results due to a greater interest in answering the survey.

From the perspective of nursing care for people with psoriasis, it is possible to observe that the participants report the importance of the nursing professional in observing adherence to treatment, which directly influences the manifestation of the disease, as well as supporting the biopsychosocial needs that relate to the care of the individual. This view reinforces the idea of the nurse as a prescriber of nursing care, with actions that affect the appearance of lesions and their treatment.<sup>12</sup>

Psoriasis is a disease that affects beyond the skin; however, only one report brought up the issue of comorbidities, such as joints impact, but did not report the other diseases correlated with psoriasis, as shown in the studies by Wu et al.<sup>2</sup> and Michalek et al.<sup>5</sup> that, besides joint involvement, pointed out that psoriasis is related to metabolic syndromes, such as diabetes and arterial hypertension.

Although psychosocial disorders are found in people with the disease, since the social stigma is linked to skin lesions, as one participant reported. The study by Zhang et al.<sup>13</sup> points out that the level of social stigma is related to several factors in society, such as low education, lack of professional knowledge, and living in cities in the countryside. Thus, the importance of the knowledge of nursing professionals, active in their work scenarios, to know and advocate for/with patients with psoriasis.

## Conclusion

Nursing students have different degrees of knowledge about psoriasis, acquired during college or related to personal experiences. The nursing professional must appropriate of this knowledge to institute care for those individuals, reinforcing family and social support, since it has a fundamental role because they are the ones who live and suffer from the difficulties faced in a biopsychosocial way and participate in the care process, being able to act as supporters of their quality of life.

It is recommended that universities, in particular the curricula of nursing courses, approach with more propriety the subject in question, its signs, symptoms, and forms of treatment in order to ensure the quality formation of future nurses and that they can provide better assistance to individuals with psoriasis, as well as the early identification, directing the individual to an early diagnosis, reducing the impact that this morbidity has on the person as a whole.

Additionally, it is necessary to encourage broad discussions and reflections to stimulate scientific nursing productions on the subject, structuring the Nursing Process for these individuals and elucidating their role in care for people with psoriasis.

The present study has important limitations regarding its sample, since it obtained a low number of participants in the research and because it only took place in a single institution with online collection, due to the social distance necessary during the COVID-19 pandemic.

## Authors' contribution

Silveira IS and Alvarez AB participated in the conception of the research question, methodological delineation, data collection and interpretation, search and statistical analysis of research data, interpretation of results, and writing of the scientific article. Reyner JN and Senter BEG worked on data interpretation, search and statistical analysis of research data, interpretation of results, and writing of the scientific article. Barros JR and Santos DM participated in the interpretation of the data, search and statistical analysis of the research data, interpretation and review of the results of the scientific article, as well as in the writing of the scientific article. All authors reviewed and approved the final version and are in agreement with its publication.

## Conflicts of interests

No financial, legal or political conflicts involving third parties (government, companies and private foundations, etc.) were declared for any aspect of the submitted work (including, but not limited to grants and financing, participation in advisory boards, study drawing, preparation of manuscript, statistical analysis, etc.).

## Indexers

The Journal of Contemporary Nursing is indexed by [DOAJ](#) and [EBSCO](#).



## References

1. Galante CM. Supporting young adults with psoriatic arthritis. *Nursing*. 2020;50(11):24-31. <https://doi.org/10.1097/01.nurse.0000718032.41238.db>
2. Wu JJ, Kavanaugh A, Lebwohl MG, Gniadecki R, Merola JF. Psoriasis and metabolic syndrome: implications for the management and treatment of psoriasis. *J Eur Acad Dermatol Venereol*. 2022;36(6):797-806. <https://doi.org/10.1111/jdv.18044>.
3. Romiti R, Carvalho AVE, Duarte GV, editors. Consenso Brasileiro de psoríase 2020: algoritmo de tratamento da Sociedade Brasileira de Dermatologia [Internet]. 3rd. ed. Rio de Janeiro: Sociedade Brasileira de Dermatologia; 2020. Available from: [https://www.biosanas.com.br/uploads/outros/artigos\\_cientificos/152/770a01deea02365ae98071043abd3f12.pdf](https://www.biosanas.com.br/uploads/outros/artigos_cientificos/152/770a01deea02365ae98071043abd3f12.pdf)

4. Pollo CF, Miot HA, Matos TDS, Souza JM, Jorge MFS, Miot LDB, et al. Prevalence and factors associated with depression and anxiety in patients with psoriasis. *J Clin Nurs*. 2020;30(3-4):572-80. <https://doi.org/10.1111/jocn.15577>
5. World Health Organization. Global report on psoriasis [Internet]. Geneva: World Health Organization; 2016. Available from: <https://apps.who.int/iris/handle/10665/204417>
6. Ministério da Saúde (Brasil), Secretaria de Ciência, Tecnologia, Inovação e Insumos Estratégicos em Saúde, Departamento de Gestão e Incorporação de Tecnologias e Inovações em Saúde, Coordenação de Gestão de Protocolos Clínicos e Diretrizes Terapêuticas. Protocolo Clínico e Diretrizes Terapêuticas da Psoríase [Internet]. Brasília: Ministério da Saúde; 2021. Available from: [https://www.gov.br/conitec/pt-br/midias/relatorios/2021/20211021\\_relatorio\\_652\\_pcdt\\_psoriase.pdf](https://www.gov.br/conitec/pt-br/midias/relatorios/2021/20211021_relatorio_652_pcdt_psoriase.pdf)
7. Bardin L. Análise de Conteúdo. 1st. ed. São Paulo: Edições 70; 2016.
8. Kamiya K, Kishimoto M, Sugai J, Komine M, Ohtsuki M. Risk Factors for the Development of Psoriasis. *Int J Mol Sci*. 2019;20(18):4347. <https://doi.org/10.3390/ijms20184347>
9. Madden SK, Flanagan KL, Jones G. How lifestyle factors and their associated pathogenetic mechanisms impact psoriasis. *Clin Nutr*. 2020;39(4):1026-40. <https://doi.org/10.1016/j.clnu.2019.05.006>
10. Flytström I. Different Aspects of Psoriasis Etiology and Treatment [tese] [Internet]. Suécia: University of Gothenburg; 2012. Available from: <http://hdl.handle.net/2077/28949>
11. Menter A, Gottlieb A, Feldman SR, Van Voorhees AS, Leonardi CL, Gordon KB, et al. Guidelines of care for the management of psoriasis and psoriatic arthritis. *J Am Acad Dermatol*. 2008;58(5):826-50. <https://doi.org/10.1016/j.jaad.2008.02.039>
12. Mittag BF, Krause TCC, Roehrs H, Meier MJ, Danski MTR. Care of Skin Injuries: Nursing Actions. *Estima*. 2017;15(1):19-25. <https://doi.org/10.5327/z1806-3144201700010004>
13. Zhang H, Yang Z, Tang K, Sun Q, Jin H. Stigmatization in Patients With Psoriasis: A Mini Review. *Front Immunol*. 2021;12:715839. <https://doi.org/10.3389/fimmu.2021.715839>