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*Update on Non-Communicable Disease: Global Perspective on Health Challenges and Innovation*

## Profile of Psoriasis Vulgaris in Waled General Hospital, Cirebon, Indonesia: A Retrospective Study (January 2020-December 2023)

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### ABSTRACT

**Background:** Psoriasis is a chronic skin disease that significantly impacts the quality of life. In Indonesia, it affects 2.5% of the population, with increasing cases observed in major hospitals. This study aimed to profile psoriasis vulgaris at Waled General Hospital, Cirebon, from January 2020 to December 2023.

**Aims:** To understand the profile of psoriasis vulgaris in the Dermatology and Venereology Clinic of Waled General Hospital, Cirebon Regency, for the period January 2020 to December 2023.

**Methods:** This study employed a descriptive, cross-sectional design with a retrospective approach to analyze secondary data sourced from medical records of patients treated at Waled General Hospital. The inclusion criteria focused on individuals diagnosed with psoriasis vulgaris who received treatment or consultation between January 2020 and December 2023, provided their medical records were complete. Conversely, the exclusion criteria removed patients diagnosed with other forms of psoriasis, such as guttate psoriasis, as well as those with incomplete records. The final sample size consisted of 56 patients, ensuring a focused and manageable dataset for analysis. By applying these criteria, the study aimed to provide a clear and accurate understanding of psoriasis vulgaris cases, ensuring the findings were both scientifically robust and clinically relevant.

**Results:** From January 2020 to December 2023, psoriasis vulgaris was most prevalent among the age group of 15-49 years, with a mean age of  $42.3 \pm 14.7$  years comprising 53.57% of the cases. The female sex predominated over the male sex, with 53.57% versus 46.42%. The major clinical presentation in all cases was red plaques, 100%. Hypertension was the most common comorbid condition, affecting 17.85% of the patients. The universal systemic antihistamine used was 100%, while the topical corticosteroid used was performed for 80.35% of the cases.

**Conclusion:** These findings put into perspective the need for early recognition of symptoms, standardized treatment, and integrated care for comorbidities such as hypertension in a regional hospital setting. This study thus provides important lessons that could be used to improve psoriasis management by proactively identifying specific strategies to address demographic and clinical characteristics of affected populations and ultimately improve patient outcomes and resource use.

**Keywords:** Psoriasis Vulgaris; Skin diseases; Red plaques; Systemic antihistamines treatment; Topical corticosteroids treatment.

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## 1. Introduction

Psoriasis is a chronic immune-mediated skin disease that affects around 2% of the global population and approximately 2.5% of the population in Indonesia.(Global Psoriasis Atlas) Characterized by inflammation, it significantly impacts patients both physically and psychologically, with psoriasis vulgaris being the most common form. This condition is marked by red plaques, itching, and psychological stress, such as depression.(Michalek, Loring, John, & World Health Organization) Although research on psoriasis is growing, much of it focuses on urban hospitals where specialized care is more readily available, leaving regional hospitals and their distinct healthcare challenges underrepresented.

In rural areas, such as those served by regional hospitals, patients with psoriasis often face delayed diagnoses and have limited access to specialized dermatological care. This results in underreporting of cases and less effective disease management. Environmental and socioeconomic factors prevalent in these regions, such as lower income and environmental stressors, may also contribute to a higher incidence and severity of the disease. Furthermore, the availability of treatment options in these hospitals is typically narrower compared to urban settings, potentially leading to a different clinical profile for patients.(Damiani et al., 2021)

By focusing on Waled General Hospital, this study aims to provide localized data on the prevalence, demographics, comorbidities, and treatment approaches for psoriasis vulgaris in a regional hospital setting. It will analyze factors such as age and gender distribution, comorbid conditions like hypertension and diabetes, and the types of treatments used, whether systemic or topical. This data can help improve the management of psoriasis in regional hospitals and contribute to better patient care throughout Indonesia.

## 2. Methods

### ***Study Design/Research Procedures***

This study employed a descriptive, retrospective cross-sectional design to profile patients diagnosed with psoriasis vulgaris at the Dermatology and Venereology Clinic of Waled General Hospital between January 2020 and December 2023. A total of 56 patients were included, selected through a total sampling method. All patients with a confirmed diagnosis of psoriasis vulgaris, as recorded in the hospital's medical records during the specified period, were considered for inclusion.

The inclusion criteria for the study were as follows: patients diagnosed with psoriasis vulgaris, those who received treatment or consultation at Waled General Hospital between January 2020 and December 2023, and patients with complete medical records. Exclusion criteria included patients diagnosed with other forms of psoriasis, such as guttate psoriasis, and those with incomplete medical records. No dropouts were reported as the study utilized secondary data from hospital records, ensuring the availability of complete data.

Comorbidities, such as hypertension and diabetes, were identified and verified using WHO criteria as documented in the patients' medical records. Hypertension was defined as a systolic blood pressure  $\geq 140$  mmHg and/or diastolic blood pressure  $\geq 90$  mmHg, or the use of antihypertensive medication. Diabetes mellitus was defined as a fasting plasma glucose level  $\geq 126$  mg/dL, HbA1c  $\geq 6.5\%$ , or the use of antidiabetic medication.

Several limitations of the study should be conceded. First, this is a retrospective study, and the secondary data were obtained from the medical records and are thus bounded by the usual limitations of such data in terms of inconsistencies, missing information, and incomplete documentation. The accuracy of such findings relates to the completeness and accuracy of the medical record. Second, the present study was a single-center one; hence, its findings cannot be generalized to all other settings and subjects. Besides, the number of patients who constituted the sample, 56 patients, further narrows this conclusion. In spite of these limitations, the present study gives a worthier overview of the profile of psoriasis vulgaris at the Waled General Hospital and brings to light further research opportunities, such as multicenter studies with larger, more diverse patient populations.

### ***Measurements***

This descriptive study extracted and verified data from patient medical records at Waled General Hospital, focusing on demographic characteristics (age, gender, comorbidities), clinical features (red plaques, itching, pain), and treatment modalities (systemic and topical therapies) of psoriasis vulgaris patients. Data were extracted from patient medical records, which provided details needed for this research. All data were collected and verified by

the researcher following standard medical documentation procedures. As the study relied on secondary data, no questionnaires or direct patient interactions were involved.

### ***Statistical Techniques***

Descriptive statistics were used to analyze the data. Frequencies and percentages were calculated for categorical variables, such as gender and comorbidities, while means and standard deviations were calculated for continuous variables, such as patient age. These statistical analyses were used to summarize and interpret the data effectively.

### ***Sampling Process***

This study utilized a total sampling technique, which involves including every member of the population that meets the predefined inclusion criteria. In this case, the total population consisted of 56 patients diagnosed with psoriasis vulgaris at Waled General Hospital between January 2020 and December 2023. The study population consisted of 56 patients with a confirmed diagnosis of psoriasis vulgaris who sought treatment at Waled General Hospital's Dermatology and Venereology Clinic between January 2020 and December 2023, and after applying inclusion criteria (patients diagnosed with psoriasis vulgaris during this period and with complete medical records) and exclusion criteria (excluding Patients with a history of guttate psoriasis or other types of psoriasis not classified under psoriasis vulgaris, autoimmune diseases other than psoriasis vulgaris, other skin diseases besides psoriasis vulgaris.), all 56 patients were included in the final sample, with no dropouts, and their medical records were reviewed to gather demographic, clinical, and treatment-related data.

### ***Data Analysis***

The data collected from the medical records of 56 patients diagnosed with psoriasis vulgaris were analyzed using descriptive statistics. Demographic characteristics, including age and gender, along with clinical features such as the presence of red plaques, itching, and pain, were summarized using frequencies and percentages for categorical variables. Strict verification of the data extracted from the medical records was pursued. Data extraction was checked by the researcher against original medical records for consistency and completeness. Any discrepancies or missing information were resolved by consulting with the attending physicians or medical staff involved in the patients care. Data were also verified by a second researcher to further validate the information extracted. This multi-step verification process gave the confidence needed that the data used for the study would be both accurate and reliable. Means and standard deviations were calculated for continuous variables, like patient age. The inclusion criteria ensured that only patients with psoriasis vulgaris were studied, as this is the most prevalent form of psoriasis and differs significantly in presentation and management from other types, such as guttate psoriasis. By excluding patients with other forms of psoriasis and those with additional autoimmune or dermatological conditions, the study aimed to minimize confounding factors, allowing for more reliable conclusions regarding treatment and comorbidities specific to psoriasis vulgaris.

Comorbidities such as hypertension and diabetes were identified based on recorded diagnoses in the patients' medical records. These comorbidities were classified and counted to determine their prevalence within the sample population. The most common conditions were analyzed using frequency distributions, and associations between specific comorbidities and clinical features were explored to better understand their potential influence on disease severity and treatment outcomes. For instance, hypertension was examined for its possible role in exacerbating psoriasis symptoms due to its association with chronic inflammation, highlighting the complex interplay between psoriasis and its comorbidities.

### ***Ethical Clearance***

The study obtained ethical approval from the Ethics Committee of Waled General Hospital, under reference number 000.9.2/026/KEPK/V/2024. As the study used anonymized, retrospective medical records, no direct patient consent was required. Patient confidentiality was strictly maintained throughout the research process. No private patient data, such as names, identification numbers, or other personally identifiable information, were accessed or included in the study. All data were handled with strict confidentiality to ensure patient privacy.

### 3. Results

The results of the research about the profile of psoriasis vulgaris in Waled general hospital are as follows.

**Table 1.** Characteristics Frequency of Psoriasis Vulgaris at Waled General Hospital

Category	Frequency	Percentage (%)
<b>Gender</b>		
Male	26	46.42%
Female	30	53.57%
<b>Total</b>	<b>56</b>	<b>100%</b>
<b>Age</b>		
<5 age	1	1.78%
5-14 age	5	8.92%
15-49 age	30	53.57%
50-69 age	20	35.71%
70+ age	0	0%
<b>Total</b>	<b>56</b>	<b>100%</b>
<b>Comorbidities</b>		
Hypertension	10	17.85%
Hypotension	1	1.78%
Diabetes	2	3.57%
<b>Symptoms</b>		
Itchy	51	91.07%
Pain	15	26.78%
Plaque	56	100%
Redness	54	96.42%
<b>Systemic Treatments</b>		
Antihistamine	56	100%
Antibiotic	10	17.85%
Corticosteroid	12	21.42%
Analgesic	3	5.35%
Immunosuppressant	29	51.78%
Vitamin A	5	8.92%
<b>Topical Treatments</b>		
Retinoid	8	14.28%
Corticosteroid	45	80.35%
Antibiotic	3	5.35%
Moisturizer	12	21.42%
Anti-fungal	3	5.35%

Based on Table 1, the study included a total of 56 participants, with a slight predominance of females (53.57%, n=30) over males (46.42%, n=26). The largest proportion of participants were aged 15–49 years, making up 53.57% (n=30) of the population, followed by the 50–69 years age group (35.71%, n=20). Smaller percentages were seen in the 5–14 years age group (8.92%, n=5) and the under 5 years group (1.78%, n=1), with no participants aged 70 years or older.

Comorbidities were observed in a number of participants, with hypertension being the most common, affecting 17.85% (n=10). Other comorbidities, such as diabetes and hypotension, were less frequent, affecting 3.57% (n=2) and 1.78% (n=1) of participants, respectively.

Symptoms of the condition varied, with plaques being a universal symptom reported by all participants (100%, n=56). Redness was present in 96.42% (n=54), and itchiness was reported by 91.07% (n=51). A smaller proportion of participants reported experiencing pain (26.78%, n=15).

Systemic treatments were widely utilized, with all participants (100%, n=56) receiving antihistamines. Immunosuppressants were the second most common systemic treatment, used by 51.78% (n=29). Other treatments, such as corticosteroids (21.42%, n=12), antibiotics (17.85%, n=10), vitamin A (8.92%, n=5), and analgesics (5.35%, n=3), were used to a lesser extent.

Topical treatments were also commonly prescribed, with corticosteroids being used by 80.35% (n=45) of participants. Moisturizers were utilized by 21.42% (n=12), while retinoids were prescribed for 14.28% (n=8) of participants. A small percentage of participants were treated with topical antibiotics (5.35%, n=3) and anti-fungal agents (5.35%, n=3).

Based on Table 2, the Pearson Chi-Square value is 0.286 with 1 degree of freedom, yielding an asymptotic (2-sided) significance of 0.593. This p-value is much greater than the conventional alpha level of 0.05, indicating that there is no statistically significant association between the variables under investigation. The Continuity Correction and Likelihood Ratio tests provide similar non-significant results (p-values of 0.688 and 0.592, respectively). Additionally, Fisher's Exact Test—which is especially useful when cell counts are small—also confirms this finding with a two-sided significance of 0.593 and a one-sided significance of 0.344. With 56 valid cases, these results collectively suggest that we fail to reject the null hypothesis, and therefore, there is no evidence of a significant association between the variables being analyzed.

**Table 2.** Chi-square Statistical Analysis based on Gender in Psoriasis Vulgaris at Waled General Hospital

Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	0.286	1	.593	
Continuity Correction	0.161	1	.688	
Likelihood Ratio	0.287	1	.592	
Fisher's Exact Test			.593	.344
N of Valid Cases	56			

As shown in Table 3, the Levene's Test for Equality of Variances yielded an F value of 12.177 with a p-value of 0.001, indicating that the assumption of equal variances is violated. As a result, greater emphasis should be placed on the t-test results that do not assume equal variances. In both t-test scenarios—equal variances assumed and not assumed—the results are statistically significant ( $p < 0.001$ ). Specifically, the t value is -3.654 when equal variances are assumed and -3.861 when they are not, with degrees of freedom of 54 and approximately 37.884 respectively. The mean difference between the groups is -16.00513, with the 95% confidence interval not including zero (ranging from about -24.79 to -7.22 for equal variances assumed, and -24.40 to -7.61 for unequal variances). These findings suggest that there is a statistically significant difference between the groups, with one group having a significantly lower mean compared to the other.

**Table 3.** Levene's Test for Equality of Variances and t-Test for Equality of Means Based by Age in Psoriasis Vulgaris

Test	Levene's Test for Equality of Variances	t-Test for Equality of Means
<b>Statistic</b>	F = 12.177	t = -3.654 (Equal variances assumed) t = -3.861 (Equal variances not assumed)
<b>Significance (p-value)</b>	Sig. = 0.001	Sig. (2-tailed) = 0.001 (Equal variances assumed) Sig. (2-tailed) = 0.000 (Equal variances not assumed)
<b>Degrees of Freedom (df)</b>	-	df = 54 (Equal variances assumed) df = 37.884 (Equal variances not assumed)
<b>Mean Difference</b>	-	-16.00513
<b>Std. Error Difference</b>	-	4.37978 (Equal variances assumed) 4.14516 (Equal variances not assumed)
<b>95% Confidence Interval</b>	-	Lower: -24.78605 (Equal variances assumed) Lower: -24.39740 (Equal variances not assumed) Upper: -7.22421 (Equal variances assumed) Upper: -7.61285 (Equal variances not assumed)

#### 4. Discussion

The findings of this study provide a comprehensive profile of psoriasis vulgaris cases at Waled General Hospital from 2020 to 2023. A total of 56 patients were analyzed. In comparison, a study that's been conducted by Pratiwi *et al* at Dr. Soetomo general hospital in Surabaya observed 36 patients with psoriasis vulgaris from January 2016 until December 2017. Psoriasis vulgaris in Waled general hospital revealed a slightly higher prevalence of psoriasis vulgaris in females (53.57%) compared to males (46.42%).(Departemen/Staf Medik Fungsional Kesehatan Kulit dan Kelamin Fakultas Kedokteran Universitas Airlangga/Rumah Sakit Umum Daerah Dr. Soetomo Surabaya, 2018) This gender discrepancy could be attributed to hormonal fluctuations, particularly estrogen, which can influence the immune system and skin cell behavior. Studies suggest that high estrogen levels, such as during pregnancy, tend to regulate the immune system and improve psoriasis symptoms, while hormonal changes during puberty, menstruation, and menopause may worsen the condition by disrupting immune balance. Estrogen, through its anti-inflammatory effects, improves the symptoms of psoriasis by reducing the levels of pro-inflammatory cytokines like TNF- $\alpha$  and IL-17. Progesterone exerts an immunosuppressive action and hence may be responsible for the improvement of symptoms during such phases as pregnancy.(Guillet, Seeli, Nina, Maul, & Maul, 2022) However, a sudden fall in these hormones after delivery or at the time of menopause can provoke the disease. Raised levels of prolactin, usually seen in conditions such as PCOS, exacerbate psoriasis due to increased keratinocyte proliferation and inflammation. Besides, chronic stress itself dysregulates the hypothalamic-pituitary-adrenal axis, leading to abnormalities in cortisol levels, further exacerbating psoriasis.(Cassalia *et al.*, 2025)

Furthermore, psychosocial stressors, such as depression and anxiety, which are more common in women, along with comorbidities like obesity, hypertension, and diabetes, may also contribute to the higher incidence of psoriasis in female.(Napolitano *et al.*, 2020) Stress is one of the major triggers and exacerbating factors in psoriasis vulgaris, with its mechanisms being linked to a complex interplay between the nervous, endocrine, and immune systems. Chronic stress disturbs the HPA axis, leading to abnormal cortisol production. Under normal conditions, cortisol exerts anti-inflammatory actions, but in patients with psoriasis, it fails to suppress inflammation properly, which allows the proliferation of pro-inflammatory cytokines like TNF- $\alpha$  and IL-17, aggravating symptoms.(Woźniak, Owczarczyk-Saczonek, & Placek, 2021) Stress also provokes the sympathetic-adrenal-medullary axis, leading to increased release of catecholamines such as adrenaline and noradrenaline, thus further raising the level of inflammation by stimulating pro-inflammatory cytokines and keratinocyte proliferation, one of the hallmarks of psoriasis. Stress induces the release of neuropeptides such as substance P and calcitonin gene-related peptide from sensory nerve terminals in the skin; these neuropeptides trigger immune cells and promote the production of inflammatory cytokines. Other complications of chronic stress

involve oxidative stress that induces cellular component damage and weakens the skin's antioxidant defenses, promoting further inflammation and keratinocyte hyperproliferation.(Zhang et al., 2023) Stress may also induce ER stress in keratinocytes, leading to accumulation of misfolded proteins and activation of the unfolded protein response, which in turn upregulates the expression of pro-inflammatory cytokines. More often, however, stress promotes maladaptive behavior, like smoking, consumption of alcohol, and disturbed sleeping, and a few psychic disorders, such as major depression and anxiety, enhance inflammatory factors neuroimmunologically. These mechanisms systems cooperatively enhance the facilitation of inflammation and keratinocyte proliferation, developing disease exacerbations and pointing toward two sides: the importance of psychological stress management in the treatment strategies along with systemic approaches.(Zhao et al., 2020)

In terms of age distribution, the study found that the majority of psoriasis vulgaris cases occurred in patients aged 15–49 years (53.57%), followed by the 50–69 years age group (35.71%). In comparison, a retrospective study conducted at Dr. Soetomo General Hospital in Surabaya (2016–2018) observed that the majority of outpatients with psoriasis vulgaris were over 18 years old, which is consistent with the age distribution observed in our study.(Departemen/Staf Medik Fungsional Kesehatan Kulit dan Kelamin Fakultas Kedokteran Universitas Airlangga/Rumah Sakit Umum Daerah Dr. Soetomo Surabaya, 2018) This pattern aligns with global studies, such as the meta-analysis conducted by Parisi *et al.*, which showed a higher prevalence of psoriasis in younger adults. The genetic basis for earlier onset of psoriasis has been linked to specific genetic loci, particularly HLA-C, which is strongly associated with the early onset of the disease.(Parisi et al., 2020) Environmental factors such as stress may further exacerbate the condition in this age group, as individuals in the 18–49 years age range often experience higher levels of stress, which is known to trigger psoriasis flares. Psychological stress activates neurogenic inflammation, leading to the release of neuropeptides and inflammatory mediators that contribute to the onset and severity of psoriasis.(Queiro, Tejón, Alonso, & Coto, 2014)

The study also highlighted the significant presence of hypertension (17.85%) as a comorbidity among psoriasis vulgaris patients. This finding supports previous research that suggests a strong association between psoriasis and cardiovascular conditions, particularly hypertension.(Armstrong, Lin, Chambers, Sockolov, & Chin, 2011) A very interactive complex pathophysiology seems to link psoriasis with hypertension. Chronic systemic inflammation in psoriasis is driven by the pro-inflammatory cytokines such as TNF- $\alpha$ , IL-17, and IL-23 that, by inducing damage on the endothelium, result in impaired production of nitric oxide with resultant endothelial dysfunction and increased vascular resistance.(Armstrong & Read, 2020) Immune dysregulation, particularly activation of T cells, accentuates vascular inflammation and remodeling with the outcome of arterial stiffness and raised blood pressure. Oxidative stress, mediated through overproduction of ROS, further impairs endothelial function and limits vasodilation, contributing to hypertension. There are also shared genetic pathways, including those of the RAAS, where increased angiotensin II levels promote inflammation and vasoconstriction.(Weber et al., 2021) Comorbid obesity and metabolic syndrome, common in psoriasis, further raise systemic inflammation and insulin resistance, increasing hypertension risk.(Brazzelli et al., 2021) Among them, the systemic corticosteroids promote fluid retention and can exacerbate hypertension, while biologics targeting IL-17 or TNF- $\alpha$  may elicit an improvement in endothelial function and blood pressure reduction. In the light of the mentioned mechanisms, both separately and combined underscore the multifactorial relationship between psoriasis and hypertension, and require an integrated therapeutic approach.(Dodulík et al., 2025)

. These factors contribute to both hypertension and the severity of psoriasis. Similarly, the link between psoriasis and diabetes mellitus (3.57%) observed in the study can be explained by the pro-inflammatory role of TNF- $\alpha$ , which interferes with insulin signaling, leading to insulin resistance.

The most common clinical complaint among patients was the presence of red plaques (100%), followed by itching (91.07%), redness (96.42%), and pain (26.78%). These symptoms align with the typical presentation of psoriasis vulgaris, where chronic inflammation leads to the hyperproliferation and abnormal differentiation of keratinocytes, resulting in thickened, red, scaly patches on the skin. Itching and pain are common due to the inflammatory nature of the disease, further supported by global studies on psoriasis.(Michalek et al.)

In terms of treatment, antihistamines were prescribed to all patients (100%) to manage the itching associated with psoriasis, which was consistent with the high percentage of patients (91.07%) reporting itching,

This aligns with the JAAD guidelines, which recognize itching as one of the most distressing symptoms of psoriasis and recommend antihistamines as a first-line treatment to alleviate this symptom. Additionally, immunosuppressants (51.78%) were widely used, in line with JAAD guidelines, which recommend immunosuppressive therapy for moderate to severe cases of psoriasis.(Elmets et al., 2021) Systemic corticosteroids (21.42%), while not a first-line treatment, were used in severe cases to provide rapid relief by suppressing the immune response. The JAAD guidelines recommend corticosteroids for their potent anti-inflammatory effects, which help reduce the severity of psoriatic plaques and control flare-ups. However, the use of systemic corticosteroids is cautioned against due to the risk of worsening psoriasis symptoms upon withdrawal.(Gregoire, Deruyter, & Stratman, 2021) The use of antibiotics (17.85%) suggests that bacterial infections, particularly *Streptococcus*, may play a role in triggering psoriasis in some cases, which aligns with findings from studies linking infections to psoriasis exacerbation.(Sitton, Walker, Mital, Varra, & Kaffenberger, 2024) The prescription of vitamin D and retinoids as topical therapies also aligns with established treatment protocols, as vitamin D acts as an immunomodulator, and retinoids help regulate skin cell turnover.(Brożyna, Slominski, Nedoszytko, Zmijewski, & Slominski, 2022)

Overall, the study's findings reflect current global trends in the prevalence, comorbidities, and management of psoriasis vulgaris. The results provide valuable insights for improving patient care and disease management at Waled General Hospital, emphasizing the importance of considering comorbid conditions and individualizing treatment plans. Further research could explore the genetic factors contributing to psoriasis in this population and the long-term outcomes of different treatment modalities. The high prevalence of psoriasis vulgaris in both genders aged 15-49 years, added to the high burden of comorbidities such as hypertension at 17.85%, raises the need for an integrated care model addressing dermatological and cardiovascular health. For public health policy, priority needs to be given to early detection programs in order to spot the condition of psoriasis and its comorbidities as early as possible, especially in areas with poor access to specialized services. In addition, awareness campaigns regarding symptoms such as red plaques and itching might encourage patients to seek medical consultation in a timely manner and reduce the risk of complications. Improving access to more affordable treatments, such as antihistamines and topical corticosteroids, which were the medications given in great quantities in this study, is another area policymakers should focus on. For clinical practice, it emphasizes the holistic approach in the management of psoriasis; hence, dermatologists and health care providers should always check for the presence of associated co-morbidities like hypertension and diabetes, as these may exacerbate the severity of the disease and thus affect overall health outcomes. Attention should also be directed toward patient-oriented treatment in which medical plans are precisely worked out to meet the needs of not only the physical symptoms of psoriasis but also the psychic burden-a consequence of itching and pain that severely impairs the quality of life. The high rate of prescription of systemic antihistamines (100%) and topical corticosteroids (80.35%), shown in this study, agrees with the global treatment guidelines, once again emphasizing the importance of following evidence-based protocols during clinical practice. However, systemic corticosteroids (21.42%) should be cautiously used due to rebound flares and other side effects, especially in cases of patients with at least one comorbidity. Finally, the research findings call for regional adaptations of psoriasis management strategies. In a resource-constrained setting like Waled General Hospital, healthcare providers will have more reasons to provide affordable and accessible treatments, while making good use of telemedicine or mobile health clinics in order to help those who cannot easily travel to health facilities. With integration of these insights into public health policies and clinical practice, the health systems will continue to improve management of psoriasis vulgaris, decrease comorbidity burden, and increase positive outcomes for patients in such settings.

## Limitation of the Research

This study has several limitations, including data collection from only one hospital and a relatively small sample size, which limits the depth of the psoriasis vulgaris profile. Future research should expand to multiple hospitals or healthcare centers to ensure a more comprehensive and diverse representation of cases. Multicenter studies would enhance generalizability and allow for comparisons across demographics, socioeconomic statuses, and

geographic regions. Incorporating prospective and longitudinal designs would provide deeper insights into disease progression and long-term treatment outcomes. Standardized data collection protocols across centers are essential to ensure consistency and reliability. Future studies should also focus on comorbid conditions like hypertension and diabetes, as well as patient-reported outcomes, to better understand the holistic impact of psoriasis. Exploring genetic and environmental factors could further clarify triggers and predispositions. Addressing these limitations will improve the understanding of psoriasis vulgaris, leading to better management strategies and patient outcomes.

## 5. Conclusion

The significance of these findings is critical to clinical practice and future studies of psoriasis vulgaris. The age pattern highlights the significance of heightened awareness and focused screening in the 15-49 years age group, in which the disease is most manifest. This would warn clinicians about the most vulnerable population, facilitating earlier diagnosis and treatment. Higher prevalence of psoriasis vulgaris in women suggests potential gender-related factors, possibly hormone-dependent or genetic in nature, which will have to be investigated. Treatment strategies for such patients must include these factors.

Finally, the widespread custom of combining several treatments simultaneously, both systemic and topical, suggests that a multimodal treatment plan is typically required in order to achieve adequate symptom control of psoriasis vulgaris. This emphasizes the complexity of treatment and the need for individualized care programs based on the severity of symptoms as well as on the presence of comorbidities. Further studies could address the efficacy and tolerability of such combinations, especially regarding long-term treatment results. The study conducted at RSUD Waled Cirebon provides critical insights that can inform both clinical practice and public health strategies for managing psoriasis vulgaris, particularly in regional or resource-limited settings. The study also underscores the importance of addressing comorbidities, with hypertension being the most prevalent. Dermatologists should integrate routine screening for hypertension and other cardiovascular risk factors into psoriasis management, while public health programs can promote multidisciplinary care models that facilitate collaboration between dermatologists and other specialists. In summary, this study provides a meaningful contribution toward ascertaining the demographic and clinical profile of psoriasis vulgaris, thus laying a foundation for enhancing care strategies in similar healthcare settings and informing future research efforts.

## Conflict of interest

There is no conflict of interest in this study.

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