RESEARCH ARTICLE

CHARACTERISTICS OF DERMATOLOGICAL AND VENEREOLOGICAL DISEASES IN OUTPATIENTS AT FATMAWATI HOSPITAL FROM 2022 TO 2024.

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ABSTRACT

Background: This research aimed to assess the characteristics and prevalence of dermatological and venereological diseases among outpatients at Fatmawati Hospital in Jakarta during the 2022-2024 period.

Method: A retrospective descriptive approach was employed, utilizing the total sampling method.

Results: The findings reveal a consistent pattern in the ten most common diseases over the three-year period, including Dermatitis (31.22%), Morbus Hansen (17.03%), Psoriasis (11.70%), Acne Vulgaris (6.86%), Condyloma Acuminata

(6.80%), Vitiligo (6.83%), Scabies (5.77%), Syphilis (5.17%), Tinea (4.73%), and Seborrheic Keratosis (3.87%).

Conclusion: The research highlights the importance of Fatmawati Hospital as a key teaching institution for both general practitioners and specialists, due to the high number of dermatological and venereological cases observed during the research period. The presence of cases that could be managed at lower-level healthcare facilities also underscores the need for more effective referral systems.

Keywords: Dermatology, venereology, prevalence, demography, outpatients

INTRODUCTION

Skin diseases constitute a significant global health concern, contributing to 1.79% of the global disease burden.

Indonesia ranks 29th among 195 countries in Asia in terms of skin disease prevalence, with a substantial number of reported cases.

However, the availability and quality of epidemiological data on skin diseases in Indonesia remain limited, necessitating improvements in data collection and reporting mechanisms.

According to the Decree of the Minister of Health No. 294/Menkes/SK V/1984, Fatmawati Hospital was designated as a referral center for South Jakarta.

As the sole government hospital in the area, it experiences a high patient volume, partly due to inefficiencies in the referral system.

To enhance healthcare service delivery, a national competency-based referral system has been implemented.

Subsequently, Fatmawati Hospital was designated as a Teaching Hospital under the Minister of Health Decree No. HK.02.02/Menkes/275/2016. Furthermore, it was officially recognized as the Main Teaching Hospital for the Faculty of Medicine at Syarif Hidayatullah State Islamic University through Decree No. HK.01.07/Menkes/1352/2022. Additionally, Fatmawati Hospital is integrated into the Academic Health System (AHS) of the University of Indonesia and collaborates with Dr. Cipto Mangunkusumo

National Central General Hospital and the Faculty of Medicine at Syarif Hidayatullah State Islamic University. 9,10

This research seeks to address this gap by identifying the ten most prevalent dermatological and venereological diseases among outpatients. The findings will contribute to assessing the hospital's effectiveness as a teaching institution, evaluating the alignment of cases with the referral system, generating valuable epidemiological data for healthcare services, and serving as a reference for future research.

METHODS

This retrospective descriptive research regarded secondary data derived from patient medical records and outpatient visit data from the Dermatology and Venereology Polyclinic at Fatmawati Hospital over a three-year period (January 2022–December 2024). The research employed a total sampling method to include all relevant cases within the specified timeframe. The collected data were processed using Microsoft Excel and presented in the form of tables and diagrams, illustrating frequencies and percentages.

ETHICAL APPROVAL

Ethical approval was obtained from the Ethics Committee of RS Fatmawati Jakarta (Approval Number: PP.08.02/D.XXI.18/21/2025)

RESULTS

Demographic data were recorded for 3,382 patients who visited the Dermatology and Venereology Polyclinic at Fatmawati Hospital between 2022 and 2024. The collected variables included the year of visit, gender, age, religion,

marital status, and education level (Table 1). The majority of patients were adult Muslim women who were married. Most patients had attained a high school education (45%) and were employed in the private sector (21.44%). The mean age of patients attending the polyclinic was 39.52 ± 19.7 years.

Table 1. Demographic Data on Patients Visiting the Dermatology and Venereology Polyclinic of Fatmawati Hospital (2022-2024)

	Frequency	Percentage (%)	
Number of Patients	3,382	100	
Year of Visit			
2022	907	26.82	
2023	1,257	37.17	
2024	1.218	36.01	
Sex			
Male	1.661	49.11	
Female	1.721	50.89	
Age			
Neonatal and infant (0-1 years)	31	0.91	
Toddler (1-5 years)	69	2.04	
Preschooler (5-6 years)	22	0.65	
Children (6-10 years)	58	1.71	
Adolescent (10-19 years)	361	10.67	
Adult (19-44 years)	1.409	41.66	
Pre-senior (45-59 years)	799	23.62	
Senior age (≥60 years)	633	18.71	
Mean age (± SD)	39.52 ± 19.		
Religion	33.32 ± 13.	, rears	
Islam	3.117	92.16	
Christianity	189	5.59	
Hinduism	6	0.18	
Catholicism	59	1.74	
Buddhism	11	0.33	
Marital Status			
Not Married	1.526	45.12	
Married	1.773	52.42	
Divorced	71	2.10	
Divorced due to death	12	0.35	
Education Background			
No formal education	382	11.30	
Elementary school	350	10.35	
Junior high school	296	8.75	

1.522	45
668	19.75
164	4.85
458	13.54
565	16.71
195	5.77
446	13.19
725	21.44
5	0.15
8	0.24
468	13.84
2	0.06
89	2.63
421	12.45
	668 164 458 565 195 446 725 5 8 468 2

Tabel 2. Top 10 Cases Based on Patient Visits in 2022-2024

No	Type of Disease	2022 Case (%)	2023 Case (%)	2024 Case (%)	Total Case (%)
1	Dermatitis	270 (29.77)	448 (35.64)	338 (27.75)	1056 (31.22)
2	Morbus Hansen	200 (22.05)	192 (15.27)	184 (15.11)	576 (17.03)
3	Psoriasis	69 (7.61)	134 (10.66)	193 (15.85)	396 (11.71)
4	Acne Vulgaris	81 (8.93)	78 (6.21)	73 (5.99)	232 (6.86)
5	Vitiligo	47 (5.18)	66 (5.25)	118 (9.69)	231 (6.83)
6	Condiloma Acuminata	52 (5.73)	83 (6.60)	95 (7.80)	230 (6.80)
7	Scabies	79 (8.71)	75 (5.97)	41 (3.37)	195 (5.77)
8	Syphilis	41 (4.52)	69 (5.49)	65 (5.34)	175 (5.17)
9	Tinea	42 (4.63)	53 (4.22)	65 (5.34)	160 (4.73)
_10	Seborrheic keratosis	26 (2.87)	59 (4.69)	46 (3.78)	131 (3.87)

DISCUSSION

Over the three-year research period (January 2022–December 2024), a total of 3,382 patient visits were recorded at the Dermatology and Venereology Polyclinic of Fatmawati Hospital. The highest number of visits occurred in 2023 with 37.17% of cases. The number of female patients exceeded that of male patients, with a female-to-male ratio of 1.03:1. The ten most prevalent dermatological and venereological diseases identified during the research period were Dermatitis (1,056 cases; 31.22%), Morbus Hansen (576 cases; 17.03%), Psoriasis (396 cases; 11.71%), Acne Vulgaris (232 cases; 6.86%), Condyloma Acuminata (230 cases; 6.80%), Vitiligo (231 cases; 6.83%), Scabies (195 cases; 5.77%), Syphilis (175 cases; 5.17%), Tinea (160 cases; 4.73%), and Seborrheic Keratosis (131 cases; 3.87%).

According to the 2024 Indonesian Doctor Competency Standards (SKDI), most dermatology and venereology cases observed in outpatients at Fatmawati Hospital fall within competency levels levels 4A, 3A, and 2. Level 4A indicates competence to diagnose and manage independently, level 3A refers to competence in initial management of nonemergency cases and appropriate referral, and level 2 involves diagnosing and making appropriate referrals. This indicates that Fatmawati Hospital remains an appropriate educational institution for both general practitioners and specialist training programs, as the case complexity aligns with the competency levels required at the completion of medical education.11 However, an analysis of the ten most frequently diagnosed dermatological and venereological diseases suggests that many cases should have been managed at lower-tier healthcare facilities. This finding highlights ongoing inefficiencies in the referral system between primary health facilities and referral hospitals. Furthermore, challenges in implementing the back-referral system, such as limited availability of medications at primary health facilities, further contribute to inefficiencies in patient management. ¹²

In this research, skin disorders were most prevalent among adults (41.66%). The most common category of dermatology and venereology diseases was non-infectious dermatology (33.83%), followed by infectious dermatology (29.83%), dermato-allergo-immunology (20.09%), venereology (12.97%), dermatology, cosmetics, and aesthetics (7.43%), and tumors and skin surgery (4.19%). These findings align with a research conducted in Pakistan by Taibah (2017), which reported that the most common skin disorders were eczema (31.07%), infections (28.16%), acne vulgaris (11.03%), drug allergy eruptions (6.74%), urticaria (4.06%), and skin pigmentation disorders (3.82%). 13

Dermatitis was the most frequently diagnosed condition among the ten most common diseases recorded during the research period (2022–2024). In Asia, particularly in high-income countries, the burden of inflammatory dermatoses is substantial. Seborrheic dermatitis is one of the most prevalent forms of dermatitis in Asia, with an estimated prevalence of 26.5% in Indonesia. The most common types of dermatitis identified in this research were seborrheic dermatitis (20.74%), atopic dermatitis (13.45%), irritant contact dermatitis (12.88%), nummular dermatitis (8.24%), allergic contact dermatitis (7.95%), neurodermatitis (5.59%), and stasis dermatitis (1.70%).

The most frequently diagnosed form of Hansen's disease in this research was the borderline lepromatous (BL) type (58.85%), which was often accompanied by complications such as erythema nodosum leprosum (ENL), reversal reactions, grade II disabilities, and neuritis. According to the 2023 Special Capital Region of Jakarta Health Profile, the prevalence of Hansen's disease increased from 2022 to 2023. This research recorded 49 new cases of Hansen's disease, a figure lower than the 542 new cases reported in the Special Capital Region of Jakarta Health Profile, which aggregates data from all healthcare facilities in the region. The research findings are consistent with the 2023 Special Capital Region of Jakarta Health Profile, which reported that new cases of Hansen's disease were more frequently detected in men than in women and were predominantly found in adults rather than children.

One key indicator of early leprosy detection is the grade II disability rate. In this research, only 1 out of 49 (0.02%) new Hansen's disease cases presented with grade II disability, a significantly lower rate compared to the 1.1% reported in the Special Capital Region of Jakarta Health Profile. This suggests that the Dermatology and Venereology Polyclinic at Fatmawati Hospital plays a crucial role in detecting Hansen's disease at an earlier stage, thereby reducing the risk of severe complications. Psoriasis

vulgaris was the most prevalent type (61.36%), followed by guttate (9.09%), pustular (8.33%), and psoriatic arthritis (1.01%). These findings align with studies at West Nusa Tenggara Provincial Hospital (75%)¹⁶ and Dr. Cipto Mangunkusumo National General Hospital (73%). More women (102 cases) than men (78 cases) were affected, consistent with Lisa et al.'s findings at NTB Provincial Hospital, though incidence rates vary across studies.^{16,17}

Condyloma acuminata was more common in men (70%) than women (30%), predominantly among those aged 19–44 years (61.3%) with a high school education (42.2%). Unlike Aswadi et al., who found a higher prevalence in women (62.5%) aged 25–44¹⁸, this research suggests that the disease's distribution may be influenced by marital status and occupational factors, as most affected men were unmarried (76.59%) and private employees (49.60%). Scabies, classified as a Neglected Tropical Disease under WHO's 2021–2030 elimination program, remains a significant public health concern in Indonesia, where prevalence ranges from 5.6% to 12.95%. Of the 195 scabies cases recorded at the polyclinic from 2022–2024, 95.9% were from Special Capital Region of Jakarta¹⁹.

Vitiligo was the fifth most common disease (6.83%), predominantly affecting individuals aged 19-44 (34.6%), with a higher prevalence in women (56.3%). The most common education level was high school (30.7%), with many patients being married (48.1%) and housewives (16%). Similar findings were reported at Dr. Soetomo Hospital in Surabaya, where vitiligo was more common in women, particularly students and housewives, likely due to greater awareness of skin changes affecting aesthetics²⁰. Secondary syphilis was the most common type (39.43%), followed by latent (29.71%), primary (2.29%), and tertiary syphilis (1.71%). HIV comorbidity was present in 26.2% of cases, with secondary syphilis being the most frequent among HIV-positive patients. Surva et al. found syphilis was more prevalent in men (85.7%), with secondary syphilis (54.3%) being the most common, followed by late latent (20%), early latent (14.3%), and primary syphilis $(11.4\%)^{21}$.

Acne vulgaris accounted for 232 cases (6.86%), mainly affecting those aged 19–44 (54.3%), with a higher prevalence in women (71.55%). Students were the most affected group (30.6%), and most patients were from Special Capital Region of Jakarta (60.8%), Depok (17.2%), and Tangerang (16.8%). This aligns with research at the University of North Sumatra Hospital (2020–2022), where acne vulgaris was the most common cosmetic dermatology condition, affecting 527 patients (29.4%)²². The most common tinea infections at the Fatmawati Hospital Dermatology and Venereology polyclinic (2022–2024) were tinea cruris (38.13%), tinea corporis (22.5%), tinea pedis (5%), tinea incognito (3.75%), tinea manus (2.5%), and tinea facialis (2.5%), with no cases of tinea barbae or tinea imbricata.

Most patients were from Special Capital Region of Jakarta (68.1%), Depok (11.9%), and Tangerang (11.9%), predominantly female (55.6%), aged 19–44 (33.8%), married (63.7%), with a D1–D4 education (36.3%), and housewives (21.3%). These findings align with a research in Manado, where tinea cruris was the most common (35.3%)²³. Seborrheic keratosis was diagnosed in 131 cases (3.87%), mainly in women (60.3%), aged 45–59 (29.8%), married (70.2%), with high school (34.4%) or D1–D4 education (34.4%). Most were housewives (26%) from Special Capital Region of Jakarta (37.1%), Depok (9.1%), and Tangerang (8.2%). Similar trends were reported at Hasan Sadikin Hospital, where 41% of cases occurred in individuals aged 40–59²⁴.

CONCLUSION

This research presents the characteristics and prevalence of dermatological and venereological diseases in outpatients at Fatmawati Hospital from 2022 to 2024. The findings reveal a consistent pattern in the top ten diseases each year, including dermatitis, Hansen's disease, psoriasis, acne vulgaris, condyloma acuminata, vitiligo, scabies, syphilis, tinea, and seborrheic keratosis. The research highlights the suitability of Fatmawati Hospital as a Teaching Hospital for General Practitioners and Specialist Doctor Education Programs, based on the prevalence of these diseases. However, it also suggests that many cases should be managed at lower-level health facilities, indicating inefficiencies in the referral system.

IMPLICATION

This study highlights the role of Fatmawati Hospital as an important teaching institution for both general practitioners and specialist trainees. It also analysed patient demographics and diagnosis distribution in detail, which served to describe the characteristics of the study population, identify potential risk factors, and enable relevant subgroup analyses that may inform future research, as well as the development of clinical and public health interventions. Most of the cases found in this study can be managed at the primary care level, suggesting that Fatmawati Hospital provides suitable exposure for clinical training. However, the high number of such cases in a referral hospital also indicates inefficiencies in the referral system. These findings support the need to improve coordination between health facilities and to strengthen services at the primary care level.

STRENGTHS AND LIMITATION

One of the strengths of this study is the use of total sampling over a three-year period, providing a comprehensive overview of dermatological and venereological disease patterns in a large outpatient population. The data were drawn from a national referral and teaching hospital, enhancing the relevance of the findings for both clinical education and healthcare planning. The large number of cases also contributes to the reliability of the results. However, this study has several limitations. It relied on secondary data obtained from medical records, which may be subject to documentation errors or missing information.

CONFLICT OF INTEREST

The authors have no conflicts of interest to declare.

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DECLARATION OF USING AI

Professional translation services assisted in the preparation of this manuscript. AI tools (e.g., Grammar Checker) were used for language enhancement purposes, such as grammar checking, paraphrasing, and improving clarity, without any involvement in analysing data or interpreting research findings.

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