

TREATMENT SEEKING DELAY IN PATIENTS WITH PSORIASIS ATTENDING TO DERMATOLOGY CLINIC IN 2023 AND ASSOCIATED FACTORS

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ABSTRACT

Psoriasis is a chronic inflammatory condition that causes rapid skin cell production, leading to scaling on the skin's surface. It's characterized by red, inflamed patches covered with silvery-white scales, and the skin typically appears dry, cracked, and can be itchy or painful. Psoriasis patients often face significant delays in diagnosis and treatment, leading to worsened physical and psychological outcomes. These delays are largely driven by social stigma, the use of traditional remedies, and a lack of awareness about the chronic nature of psoriasis and its associated comorbidities, such as psoriatic arthritis. Many patients, particularly in regions with low psoriasis awareness, feel embarrassed by visible lesions, leading to social isolation and reliance on ineffective home treatments. Economic hardships also play a major role, as expensive treatments and limited access to healthcare facilities prevent timely intervention. Additionally, healthcare delivery issues, especially in peripheral areas like Sri Lanka, further exacerbate these challenges, with barriers such as transport difficulties, inadequate referral systems, clinic overcrowding, and long waiting times. Together, these factors emphasize the need for increased awareness, improved healthcare access, and addressing socioeconomic barriers to ensure timely and effective psoriasis treatment. Early intervention in psoriasis management offers numerous benefits, including slowing disease progression, preventing complications, improving psychological well-being, and increasing treatment adherence. With advancements in treatments such as biologics and systemic therapies, early detection and management are crucial to transforming psoriasis into a more manageable condition, ultimately enhancing patient outcomes. However, in Sri Lanka, access to timely dermatological care is hindered by limited-service availability in rural areas, transportation difficulties, inefficient referral systems, and clinic overcrowding. Addressing these service delivery challenges is essential to ensuring equitable healthcare access and improving outcomes for psoriasis patients.

INTRODUCTION

Psoriasis is a chronic inflammatory skin disorder characterized by the hyperproliferation of keratinocytes and underlying immunological changes. This condition, which manifests as erythematous plaques covered with silvery scales, affects approximately 2-3% of the global population, making it one of the most common chronic skin diseases worldwide (1). The prevalence of psoriasis shows variations based on geographical regions and ethnic backgrounds, with studies indicating higher rates in North European populations compared to those in Asia and Africa (2).

The morbidity associated with psoriasis extends beyond the skin, as it is linked to several comorbid conditions, including psoriatic arthritis, cardiovascular disease, metabolic syndrome, and mental health disorders such as depression and anxiety (3). The physical manifestations can significantly impact the quality of life, leading to social stigma and emotional distress. As a result, effective management strategies are crucial for mitigating these negative health outcomes. Various treatment options are available for managing psoriasis, including topical therapies like corticosteroids and vitamin D analogs, phototherapy, and systemic treatments such as methotrexate, cyclosporine, and biologics that target specific pathways in the immune response (4). The effectiveness of treatment is considerably enhanced when initiated at the early stages of the disease, as early intervention can help control symptoms more effectively and prevent long-term complications (5). Therefore, healthcare providers emphasize the importance of early diagnosis and treatment planning.

Psoriasis can evolve into more severe forms, such as psoriatic arthritis (PsA), which affects around 30% of psoriasis patients (6). Early intervention helps in controlling the initial skin symptoms and reducing the likelihood of developing joint inflammation, which can lead to permanent joint damage and disability(7). Detecting early signs of PsA and other complications associated with psoriasis, such as cardiovascular disease, is vital to avoid long-term consequences(8). Psoriasis is not just a skin condition; it is associated with several comorbidities, such as metabolic syndrome, cardiovascular disease, diabetes, and depression(9). Early management of psoriasis with systemic treatments or biologics can reduce the systemic inflammation that contributes to these conditions (10). By targeting the disease early, the inflammatory burden on the body is minimized, reducing the risk of life-threatening complications(11).

Treatments tend to be more effective when psoriasis is in its early stages. Topical therapies, phototherapy, and systemic treatments like methotrexate or biologics work best when the disease has not yet escalated to severe levels(12). Early intervention prevents the build-up of thick plaques, widespread skin involvement, and severe inflammation, making the disease

more manageable with lower doses of medications(13). Moreover, early treatment helps avoid drug resistance or the need for more aggressive treatments, which may carry higher risks of side effects(14). Early treatment reduces the psychosocial burden that psoriasis patients often experience. When psoriasis is not well-controlled, it can cause severe anxiety, depression, social isolation, and low self-esteem due to the visible nature of the lesions(15). By managing the disease early, patients can avoid or lessen the emotional distress that comes with visible flare-ups and stigmatization(15). Early intervention helps to stabilize symptoms, allowing patients to maintain a better quality of life and avoid the psychological downward spiral that untreated or late-treated psoriasis can cause(16).

Patients who are diagnosed early and provided with effective treatments are more likely to adhere to their treatment regimens (17). The unpredictability of psoriasis flare-ups can lead to frustration, causing some patients to stop treatment if they do not see results. Early control of symptoms often leads to better patient satisfaction, and this encourages consistent use of therapies, resulting in better long-term outcomes(18). Additionally, healthcare providers can better educate patients about the chronic nature of the disease and the importance of ongoing management from the start(19).

Early treatment of psoriasis prevents significant damage to skin tissues and reduces the risk of secondary infections caused by cracked or bleeding skin(20). For patients with scalp psoriasis, early intervention prevents hair loss and scarring(21). In cases of nail psoriasis, which affects about 50% of people with psoriasis, early treatment helps reduce the risk of permanent nail deformities(22). Early diagnosis allows healthcare providers to tailor treatment based on the patient's type of psoriasis, severity, and overall health(23). This personalization leads to more effective management. For example, early mild psoriasis can be controlled with topical treatments or light therapy, whereas more severe cases may require early initiation of systemic therapies or biologics to prevent disease progression(24).

METHODOLOGY

A descriptive cross-sectional study was conducted among patients attending the dermatology clinic at Provincial General Hospital Badulla. From the clinic attendees diagnosed with psoriasis, a total of 224 patients were selected using systematic random sampling techniques. Only first-time visits were considered for evaluation. Data were collected through patient interviews during clinic visits, with the extracted information recorded on an unstructured data collection sheet. Frequencies and percentages were calculated based on the selected variables.

RESULTS

The majority of psoriasis patients experience significant delays in diagnosis and treatment, which can worsen their condition over time and lead to more severe physical and psychological complications. Several factors contribute to these delays, with social stigma and the use of native or traditional treatments being notable contributors. Many patients, especially in regions where psoriasis awareness is low, are reluctant to seek medical help due to the embarrassment caused by the visible skin lesions. This stigma can lead to social isolation, preventing individuals from visiting healthcare professionals and instead pushing them toward home remedies or alternative treatments, which may not be effective and can delay the initiation of evidence-based medical interventions.

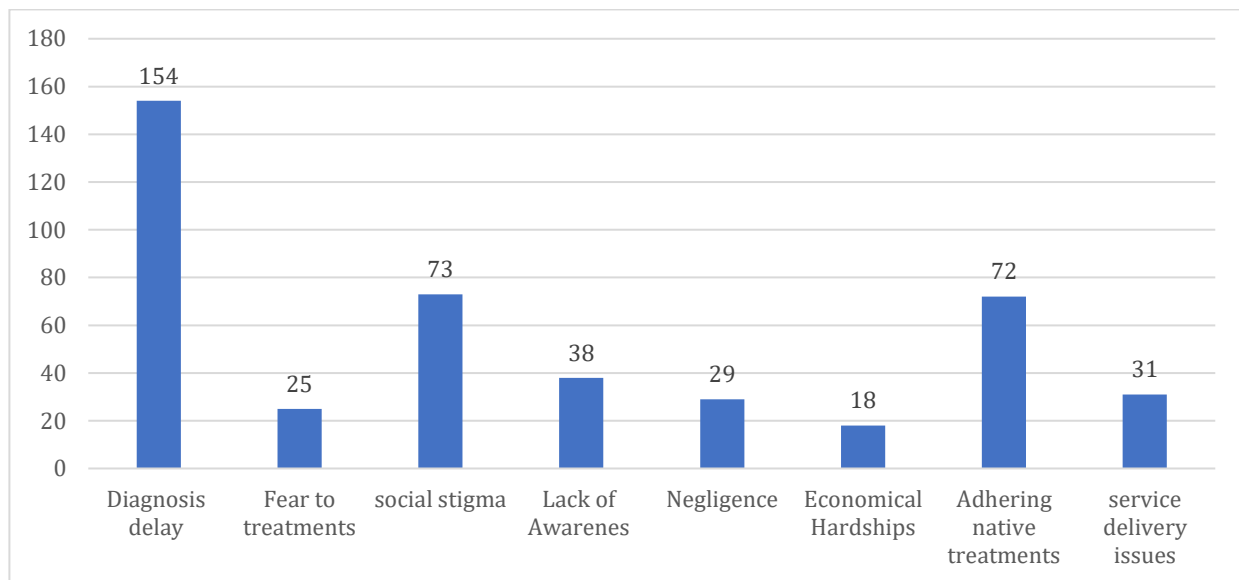


Figure 1 : Distribution of reasons identified for treatment delay among patients with Psoriasis

Additionally, lack of awareness about the illness plays a crucial role in delayed treatment. Psoriasis can be mistaken for other skin conditions such as eczema or fungal infections, causing patients to attempt self-treatment or use over-the-counter creams rather than seeking professional care. In many cases, individuals are unaware that psoriasis is a chronic autoimmune disease requiring long-term management, and they may not realize the potential severity of untreated psoriasis or its associated comorbidities, such as psoriatic arthritis.

Economic hardships also act as a significant barrier to timely treatment. Psoriasis treatments, particularly newer options like biologics, can be expensive, and many patients may not have adequate access to healthcare facilities, insurance coverage, or financial

resources to afford proper treatment. As a result, some patients may delay seeking medical help, opting for cheaper, less effective remedies, which can lead to the progression of the disease and the development of complications. Furthermore, regular follow-ups and long-term treatment regimens can strain the financial resources of those already struggling, contributing to further delays in receiving appropriate care.

Together, these factors create a cycle of delayed treatment that worsens the prognosis for patients, highlighting the need for increased awareness, better healthcare access, and addressing social and economic barriers to ensure timely intervention for psoriasis.

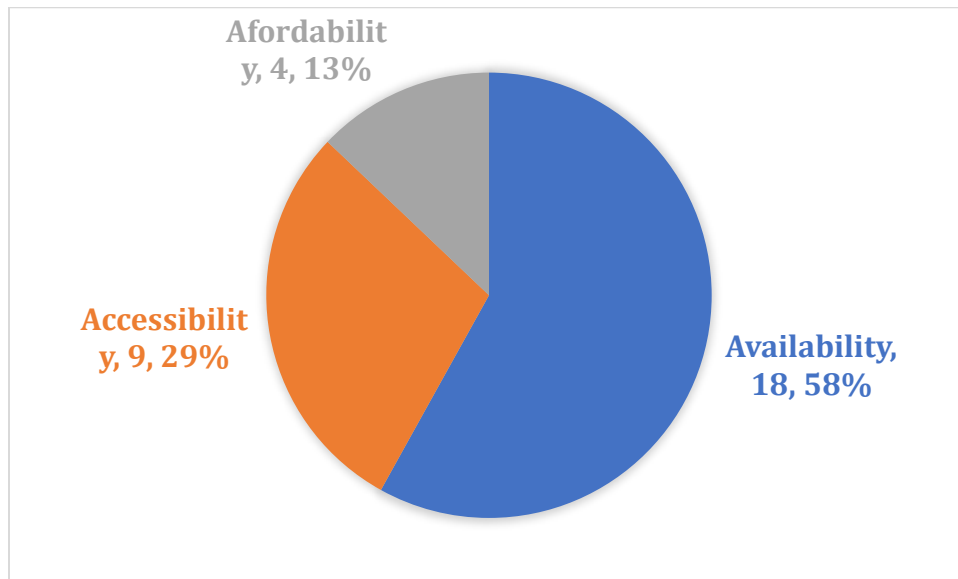


Figure 2 : Health care system delivery deficiencies for treatment delay among patients with Psoriasis

In examining issues related to service delivery, the availability of services for dermatological conditions in peripheral regions of Sri Lanka was found to be limited. This was one of the key findings identified in the current analysis. Several barriers to access were noted, including transportation challenges, inadequacies in referral systems, overcrowding in clinics, and significant delays in obtaining appointments. Although a small proportion of patients did not seek treatment due to economic constraints, these factors collectively contribute to delayed access to care for many individuals.

DISCUSSION

Psoriasis can sometimes be misdiagnosed or underdiagnosed, especially in cases of mild symptoms or in populations less familiar with the condition. Increased awareness among healthcare providers about the various forms of psoriasis, especially non-plaque variants

(such as guttate or inverse psoriasis), can lead to early recognition and management. Prompt diagnosis ensures the patient starts on a treatment plan before the disease worsens. New treatments, particularly biologics that target specific immune pathways involved in psoriasis (like IL-17, IL-23, and TNF-alpha inhibitors), have shown dramatic success in early-stage disease. Early use of these targeted therapies can quickly bring the disease under control, sometimes achieving almost complete remission of symptoms. Patients who receive these treatments early may experience fewer long-term effects of psoriasis and lower risk of complications like PsA. A multidisciplinary approach is essential for early intervention. Involving dermatologists, rheumatologists (for PsA), psychologists, and other specialists helps address the wide range of complications associated with psoriasis. Patients benefit from holistic care that targets the disease from various angles, leading to a more effective management strategy from the onset. Educating patients about the chronic nature of psoriasis, its triggers, and the importance of adhering to treatment is critical. Patients who understand their condition are more likely to seek early intervention, avoid potential flare-up triggers (such as stress, infections, and skin injuries), and be proactive about managing their condition.

When evaluating the challenges related to service delivery for dermatological conditions, the availability of specialized services in peripheral or rural areas of Sri Lanka is significantly limited. This was one of the key issues identified in the present analysis. Dermatological care, particularly for chronic conditions like psoriasis, is often concentrated in urban centers or tertiary care hospitals, leaving patients in rural regions with minimal access to necessary treatment. This lack of availability in peripheral settings results in delayed diagnosis and treatment, exacerbating the condition for many patients.

Several accessibility challenges compound this problem. Transport difficulties are one of the primary barriers for patients living in remote areas. Reaching urban or regional healthcare facilities often requires long travel times, which is both physically taxing and financially burdensome, particularly for individuals in lower-income brackets. These transport-related issues discourage regular follow-ups, leading to interruptions in treatment, which is especially detrimental for chronic conditions requiring consistent management.

Another significant issue is the inefficiency of referral systems. Patients who first seek care at primary health centers often face difficulties in being referred to specialized dermatological services. A lack of clear referral pathways, combined with limited coordination between healthcare providers, results in patients experiencing delays in accessing the appropriate level of care.

Furthermore, overcrowding in dermatology clinics is a pervasive problem in Sri Lanka's public healthcare system. Due to the high patient load and limited number of specialists, clinics are often overwhelmed, leading to long waiting times for patients who need

consultation and treatment. As a result, many patients face delays in receiving an appointment, with waiting periods stretching out over several weeks or even months. This delay can worsen the condition of patients with progressive skin diseases like psoriasis, where early intervention is critical to prevent complications.

In addition to these systemic issues, it is noteworthy that economic hardships prevent a small but significant proportion of patients from accessing care. Although healthcare services in Sri Lanka are largely free or low-cost, many patients still face indirect costs related to treatment, such as travel expenses, lost wages due to time taken off work, or costs for medications not covered by public health services. These financial constraints further hinder patients' ability to seek timely care, especially for chronic diseases that require ongoing treatment and follow-up visits.

CONCLUSION

Early intervention in psoriasis management leads to a multitude of benefits, from slowing disease progression and preventing complications to improving psychological well-being and increasing treatment adherence. The evolving landscape of psoriasis treatments, including biologics and systemic therapies, highlights the importance of catching and managing the disease early. Early and consistent treatment can transform psoriasis from a life-disrupting disease into a manageable condition, significantly improving the overall health outcomes for patients.

The combination of limited service availability in rural areas, transportation difficulties, inefficient referral systems, and clinic overcrowding creates substantial barriers to accessing timely dermatological care in Sri Lanka. Addressing these service delivery challenges is essential to improving outcomes for patients with conditions like psoriasis and ensuring equitable healthcare access across the country.

REFERENCES

1. Papp KA, et al. The epidemiology of psoriasis: understanding the prevalence, incidence, and risk factors. *J Invest Dermatol.* 2016;136(3):21-27.
2. Parisi R, et al. Global epidemiology of psoriasis: a systematic review of prevalence data. *J Eur Acad Dermatol Venereol.* 2013;27(2):262-270.
3. Griffiths CEM, et al. Psoriasis and mental health: a comprehensive review. *Acta Derm Venereol.* 2020;100(4):1-6.
4. Menter A, et al. Guidelines of care for the management of psoriasis and psoriatic arthritis: Section 1. Psoriasis: patient assessment and diagnosis. *J Am Acad Dermatol.* 2011;65(1):137-142.

5. Gottlieb A, et al. Early intervention in psoriasis: opportunities and challenges. *J Dermatolog Treat.* 2012;23(4):280-287.
6. Schmitt J, et al. Barriers to seeking care for dermatologic conditions: a qualitative study. *J Am Acad Dermatol.* 2013;69(5):766-773.
7. Álvarez J, et al. The impact of psoriasis on the psychological well-being and quality of life of patients. *Psoriasis (Auckland) Journal.* 2019;9:1-16.
8. Ogdie A, Weiss P. The epidemiology of psoriatic arthritis. *Rheum Dis Clin North Am.* 2015;41(4):545-568.
9. Gladman DD, Chandran V. Observational cohort studies: Lessons learnt from the University of Toronto psoriatic arthritis program. *Rheumatology.* 2011;50(1):25-31.
10. Mehta NN, Yu Y, Pinnelas R, et al. Attributable risk estimate of severe psoriasis on major cardiovascular events. *Am J Med.* 2011;124(8):775.e1-775.e6.
11. Armstrong AW, Harskamp CT, Armstrong EJ. Psoriasis and the risk of diabetes mellitus: A systematic review and meta-analysis. *JAMA Dermatol.* 2013;149(1):84-91.
12. Ritchlin CT, Colbert RA, Gladman DD. Psoriatic arthritis. *N Engl J Med.* 2017;376(10):957-970.
13. Neimann AL, Shin DB, Wang X, Margolis DJ, Troxel AB, Gelfand JM. Prevalence of cardiovascular risk factors in patients with psoriasis. *J Am Acad Dermatol.* 2006;55(5):829-835.
14. Takeshita J, Grewal S, Langan SM, et al. Psoriasis and comorbid diseases: Epidemiology. *J Am Acad Dermatol.* 2017;76(3):377-390.
15. Papp KA, Langley RG, Lebwohl M, et al. Efficacy and safety of ustekinumab, a human interleukin-12/23 monoclonal antibody, in patients with moderate-to-severe psoriasis: 52-week results from a randomized, double-blind, placebo-controlled trial (PHOENIX 2). *Lancet.* 2008;371(9625):1675-1684.
16. Menter A, Strober BE, Kaplan DH, et al. Joint AAD-NPF guidelines of care for the management and treatment of psoriasis with biologics. *J Am Acad Dermatol.* 2019;80(4):1029-1072.
17. Rapp SR, Feldman SR, Exum ML, Fleischer AB, Reboussin DM. Psoriasis causes as much disability as other major medical diseases. *J Am Acad Dermatol.* 1999;41(3):401-407.
18. Fortune DG, Richards HL, Griffiths CE. Psychologic factors in psoriasis: Consequences, mechanisms, and interventions. *Dermatol Clin.* 2005;23(4):681-694.
19. Kimball AB, Jacobson C, Weiss S, Vreeland MG, Wu Y. The psychosocial burden of psoriasis. *Am J Clin Dermatol.* 2005;6(6):383-392.
20. van Cranenburgh OD, Smets EM, de Rie MA, et al. Predictors of adherence to systemic therapy in patients with psoriasis: A prospective multicenter cohort study. *J Dermatolog Treat.* 2017;28(1):27-33.
21. Richards HL, Fortune DG, Griffiths CE, Main CJ. The contribution of perceptions of stigmatization to disability in patients with psoriasis. *J Psychosom Res.* 2001;50(1):11-15.

22. Lebwohl M, Callis Duffin K, Bourcier M, et al. Psoriasis in adults: Clinical practice guidelines. *J Am Acad Dermatol.* 2020;82(2):589-609.
23. Gudjonsson JE, Elder JT. Psoriasis: epidemiology. *Clin Dermatol.* 2007;25(6):535-546.
24. Shapiro J, Cohen J. Scarring alopecia in psoriasis. *J Am Acad Dermatol.* 1997;36(2):327-328.
25. Tan ES, Chong WS, Tey HL. Nail psoriasis: A review. *Am J Clin Dermatol.* 2012;13(6):375-388.
26. Strober BE, Payette MJ, Merola JF, et al. Clinical guidelines on the use of biologics in psoriasis. *J Am Acad Dermatol.* 2019;80(4):1020-1028.
27. Nast A, Spuls PI, van der Kraaij G, et al. European S3 guidelines on the systemic treatment of psoriasis vulgaris. *J Eur Acad Dermatol Venereol.* 2015;29(12):2277-2294.