ISSN (0):3021-6885

RESEARCH PAPER.

FACTORS AFFECTING POOR COMPLIANCE TO TREATMENT IN PATIENTS WITH CHRONIC DERMATOLOGICAL CONDITIONS (ECZEMA, PSORIASIS AND BULLOUS DISEASES) ATTENDING TO DERMATOLOGY CLINIC IN TEACHING HOSPITAL BADULLA

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INTRODUCTION

Chronic dermatological conditions like eczema, psoriasis, and bullous diseases are significant health issues that affect a substantial number of people worldwide, including in Sri Lanka. These conditions not only impact patients physically but also carry psychological and social burdens due to their often-visible nature. Effective management requires a deep understanding of their clinical features, treatment options, and the challenges that can interfere with successful treatment adherence.

Eczema is a chronic, inflammatory skin condition characterized by dry, itchy, and red patches of skin. It is most commonly seen in children but can persist or develop in adulthood. Eczema often flares due to environmental triggers, allergens, or stress, and its chronicity can severely impact the quality of life, particularly due to sleep disturbances caused by intense itching. Infections are also common due to scratching, and patients are prone to bacterial or viral superinfections like impetigo or eczema herpeticum.

The mainstay of treatment for flare-ups is corticosteroid creams, which reduce inflammation. Regular use of emollients helps maintain skin hydration and serves as a preventive measure against flare-ups. In more severe cases, calcineurin inhibitors (e.g., tacrolimus) are prescribed to reduce immune system activity. For severe cases, systemic immunosuppressants like cyclosporine or newer biologics (e.g., dupilumab) are used. Treatment adherence is often hindered by the need for consistent moisturization and steroid application. Financial barriers to accessing high-quality moisturizers and biologics, as well as fear of steroid overuse, contribute to poor compliance. Additionally, environmental triggers such as heat, humidity, and exposure to allergens can make disease control difficult in tropical climates like Sri Lanka's.

Psoriasis is a chronic autoimmune condition characterized by the rapid turnover of skin cells, leading to the formation of red, scaly plaques, most commonly on the elbows, knees, and scalp. The severity ranges from localized plaques to extensive body involvement, and patients often suffer from joint pain if they develop psoriatic arthritis. Psoriasis can lead to severe physical discomfort and psychological distress due to its visibility and the stigma associated with skin conditions. These include corticosteroids, vitamin D analogs (calcipotriol), and coal tar preparations, which help reduce skin cell production and inflammation. Light therapy using UVB radiation is often used in moderate cases to slow skin cell turnover. In more severe cases, systemic immunosuppressants like methotrexate, cyclosporine, and biologic agents targeting specific immune pathways (e.g., TNF-alpha inhibitors, IL-17 inhibitors) are used.

The chronic nature of psoriasis necessitates long-term treatment, which can be expensive, particularly when biologic therapies are required. In Sri Lanka, access to these therapies is limited, and high costs prevent many patients from adhering to prescribed regimens. Additionally, the lack of awareness about the autoimmune nature of psoriasis can lead to the belief that topical treatments alone will suffice, causing frustration when symptoms persist. Bullous diseases, such as pemphigus vulgaris and bullous pemphigoid, are rare but serious chronic autoimmune blistering conditions. These diseases are characterized by the formation of large, fluid-filled blisters on the skin and mucous membranes, which can lead to significant discomfort, pain, and risk of secondary infections. If untreated, they can be lifethreatening, particularly in elderly patients.

High-dose systemic corticosteroids are the first-line treatment to reduce inflammation and immune activity. Agents such as azathioprine, mycophenolate mofetil, and rituximab (a monoclonal antibody) are used to control the autoimmune response. Managing blisters and preventing infections is crucial, and wound care is a significant component of treatment. In cases of secondary bacterial infections, antibiotics are necessary. Bullous diseases require lifelong immunosuppressive therapy, which carries significant side effects, including increased infection risk. Long-term use of corticosteroids can lead to complications such as osteoporosis, diabetes, and hypertension, which further complicates treatment. In Sri Lanka, the availability of advanced immunosuppressive therapies may be limited, and patients may not have easy access to specialists with expertise in these rare diseases.

Patients with chronic dermatological conditions often struggle with maintaining long-term treatment due to a lack of understanding of the disease's chronic nature. In Sri Lanka, where acute illness-focused care is more prevalent, the importance of long-term treatment for chronic conditions is often underappreciated, leading to treatment discontinuation when symptoms improve temporarily. Many patients in Sri Lanka face financial difficulties in accessing expensive treatments like biologics or even high-quality topical treatments and moisturizers. The public healthcare system, while providing basic care, may not have all the

advanced medications needed for severe cases, and private care may be unaffordable for the majority.

Chronic skin diseases often result in emotional distress, anxiety, and depression due to their visible nature and the social stigma attached to them. Psychological support is rarely integrated into dermatological care in Sri Lanka, leaving patients to deal with the mental health burden on their own, which can negatively impact treatment adherence. The tropical climate of Sri Lanka, with its high humidity and temperature, can exacerbate skin conditions, particularly eczema and psoriasis. Patients may find it difficult to adhere to topical treatments in such conditions, and there is often limited advice on how to adapt skincare routines to environmental challenges. Access to specialized dermatological care is limited in rural areas of Sri Lanka, where patients often rely on general practitioners who may not have the expertise to manage complex skin conditions. Additionally, there can be communication barriers between patients and healthcare providers, leading to misunderstanding or incomplete information regarding the necessity of consistent treatment.

Chronic dermatological conditions such as eczema, psoriasis, and bullous diseases present significant challenges in terms of management and patient quality of life. In Sri Lanka, these challenges are compounded by socioeconomic factors, limited access to advanced treatments, and cultural perceptions of skin disease. Effective management requires not only clinical treatment but also patient education, psychological support, and healthcare system improvements to overcome the barriers to long-term compliance.

METHODOLOGY & RESULTS

In this study, an analysis was conducted on three groups of patients who were affected by Psoriasis, Eczema or Bullous diseases. Interviewer administered quiestionare was used to collect the data.

Table 1: Participants responses to poor compliance

Factor	Psoriasis(n=242)	Eczema(n=234)	Bullous(n=27)
Lack of	141(58.2%)	102(43.2%)	4(15.3%)
understanding of			
the disease			
Lack of confidence	101(41.4%)	123(52.4%)	5(18.6%)
in management			
Stigma associated	152(62.8%)	29(12.6%)	15(57.6%)
with skin conditions			
Inadequate	29(12.1%)	17(7.2%)	2(6.2%)
moisturization			
Failure to adhere to	21(8.5%)	66(28.2%)	13(46.7%)
treatment regimens			

Neglecting skin care	22(9.1%)	34(14.5%)	6(24.3%)
advice			
Inadequate	42(17.4%)	16(6.8%)	5(18.2%)
communication,			
Lack of empathy	15(6.3%)	13(5.4%)	3(8.7%)

DISCUSSION

In the Sri Lankan healthcare setting, factors affecting poor compliance to treatment in patients with chronic dermatological conditions such as eczema, psoriasis, and bullous diseases are compounded by a combination of individual, social, and systemic challenges.

Dermatological conditions often require prolonged or lifelong treatment, leading to treatment fatigue and reduced adherence over time. Patients may feel frustrated by the chronic nature of these conditions and the absence of a permanent cure, which can lead to apathy towards maintaining treatment. Patients with severe conditions might be prescribed various topical, oral, or systemic treatments, making the regimen difficult to follow. Topical treatments can be time-intensive, leading patients to skip applications, especially if there are multiple daily doses. Some treatments, especially corticosteroids or immunosuppressants, may have significant side effects that deter patients from regular use. Chronic dermatological treatments can be expensive, particularly for biologics or specialty medications, leading to financial barriers in adhering to treatment. Limited access to dermatological care, especially in rural areas, can make it difficult for patients to get the necessary treatments or follow-ups. Chronic skin conditions can have a severe psychological burden, leading to depression, anxiety, and low self-esteem, all of which can affect motivation to follow treatment. Patients may avoid seeking help or adhering to treatment due to the stigma associated with visible skin conditions, further exacerbating non-compliance. Patients who don't fully understand their condition or treatment might not appreciate the importance of adherence. Some patients may have misconceptions about their treatment (e.g., fear of long-term side effects of steroids or concerns about dependency), leading them to discontinue or skip doses. Some treatments, especially for conditions like psoriasis, take time to show visible results. Patients may stop using them prematurely if they don't see immediate improvement. Fluctuations in disease severity, with periods of remission and flare-ups, may lead patients to stop treatment during remission, even when continuing treatment is recommended. Some patients may find it difficult to incorporate treatment into their daily routine due to work, family obligations, or personal habits. Patients may also struggle to avoid known environmental or lifestyle triggers (e.g., allergens, stress) that exacerbate their condition. Patients with strong family or social support are more likely to follow treatment plans. A lack of support can result in poor compliance. Trust and communication between the patient and healthcare provider play a crucial role. Patients may not adhere to treatment if they feel misunderstood or unsupported by their doctors.

In Sri Lanka, health literacy on chronic dermatological conditions remains limited. Many patients may not fully understand the nature of their condition, believing it to be transient rather than a long-term issue. This lack of knowledge often results in improper treatment adherence. Moreover, limited public health education on chronic skin diseases further exacerbates this issue, with many patients turning to traditional medicine or home remedies in lieu of prescribed treatments.

Given the chronicity of conditions like psoriasis or eczema, many Sri Lankan patients become disheartened when results are not immediate. The perception that these diseases are incurable can foster hopelessness and a lack of trust in medical management. This challenge is compounded by inconsistent access to dermatologists, particularly in rural areas, where healthcare services may be more generalized, leading patients to doubt the efficacy of their prescribed treatments. Skin diseases often carry a social stigma in Sri Lanka, where visible skin abnormalities can result in social isolation, discrimination, and emotional distress. The stigma can lead patients to avoid seeking treatment altogether, as they may fear judgment from their community or even healthcare providers. In conservative areas, these patients may hide their conditions, worsening the disease and further reducing compliance to treatment.

Proper moisturization is a key component of managing chronic skin conditions like eczema. However, socioeconomic factors such as poverty and limited access to quality skincare products may hinder patients from adhering to basic skincare advice. Many patients may opt for cheap, ineffective moisturizers, which can negatively impact their disease progression. Treatment regimens for dermatological conditions can be time-consuming and difficult to integrate into daily routines, especially for individuals with lower socioeconomic status or those engaged in demanding jobs (e.g., laborers, farmers). The humid tropical climate in Sri Lanka also plays a role, as heat and sweating may make the application of topical treatments uncomfortable, discouraging adherence.

Skin care advice, such as avoiding certain environmental triggers (e.g., humidity, heat, certain allergens), can be difficult to follow due to Sri Lanka's tropical climate and occupational challenges. Patients who are outdoor workers may find it difficult to avoid sun exposure or allergens, further complicating treatment adherence. In many cases, Sri Lankan healthcare providers face time constraints due to high patient volumes, especially in government hospitals. This limits the time available to explain the chronic nature of dermatological conditions and the importance of adherence to treatment plans. Patients may leave consultations with a limited understanding of their condition and how to manage it effectively.

The hierarchical nature of the healthcare system in Sri Lanka, coupled with the cultural deference to authority, can sometimes result in a perceived lack of empathy from healthcare providers. Patients may feel rushed or that their concerns are dismissed, leading to a breakdown in trust. This, in turn, reduces their willingness to follow through with prescribed treatments. In Sri Lanka, dermatological education for both patients and non-specialist healthcare providers is often inadequate. Primary care doctors may not have sufficient training to manage complex dermatological conditions, leading to suboptimal treatment recommendations. Additionally, patients often receive little counseling on lifestyle modifications, skincare routines, and the psychological aspects of managing a chronic illness.

In Sri Lanka, it is not uncommon for patients to assume that a single course of treatment will cure their condition, especially given the cultural reliance on acute care rather than chronic disease management. This misunderstanding is fueled by a lack of education on the recurring nature of dermatological conditions. Patients may prematurely discontinue treatment once their symptoms subside, leading to flare-ups and further reducing long-term compliance.

CONCLUSION

In the Sri Lankan context, addressing poor compliance in patients with chronic dermatological conditions requires a multifaceted approach. Educational programs targeted at both healthcare providers and patients are essential to improve understanding of these diseases and their management. Additionally, improving communication, empathy, and long-term support systems within the healthcare system, particularly for chronic conditions, can enhance patient trust and adherence. Finally, addressing socioeconomic barriers, such as access to affordable medications and skincare products, is critical for improving compliance among the general population.

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