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Original Research Article

Prevalence, risk factors and management approaches for seborrheic dermatitis

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ABSTRACT

Background: Seborrheic dermatitis (SD) is a chronic inflammatory condition characterized by immune dysregulation, inflammation and disruption of the skin barrier. Despite its global prevalence, with studies indicating that up to 5% of the population may be affected, the study of the physical and emotional impact of SD on patients is limited. Furthermore, the prevalence of SD appears to be increasing over time. Therefore, this study aimed to determine the prevalence, risk factors and management approaches for seborrheic dermatitis.

Methods: This was a prospective study conducted in the Department of Skin and VD, Community Based Medical College Bangladesh, Mymensingh, Bangladesh during the period from June 2020 to June 2022. In our study, we included 150 patients with seborrheic dermatitis who visited the Department of Skin and VD at Community Based Medical College Bangladesh.

Results: Among 150 patients, 55% were male and 45% were female. Among all reported patients, 56 (71%) had a moderate level of SD, followed by mild (16%) and severe (13%). Among the HCP (Health care provider) suggested patients, 41% of them had moderate SD, followed by mild (40%) and severe (19%). Out of 150 patients, 50% of them were not allowed to miss their jobs due to the symptoms.

Conclusions: The findings of this study highlight the importance of a holistic care approach for managing seborrheic dermatitis. This approach should encompass not only the treatment of the physical signs and symptoms of the disease but also the psychological and social challenges that patients with seborrheic dermatitis face.

Keywords: Prevalence, Risk factors, Seborrheic dermatitis, Symptoms

INTRODUCTION

Seborrheic dermatitis (SD) is a chronic inflammatory condition characterized by immune dysregulation, inflammation and disruption of the skin barrier. This condition is exacerbated by metabolites produced by Malassezia yeast.[1] Despite its global prevalence, with studies indicating that up to 5% of the population may be affected, the study of the physical and emotional impact of SD on patients is limited.[2-7] Furthermore, the prevalence of SD appears to be increasing over time. Overall, epidemiological knowledge about this condition remains inadequate.[8] Seborrheic dermatitis (SD) has a significant global impact, greatly reducing the quality of life for those affected by the condition.[9,10] This impact is not evenly distributed, as it disproportionately affects certain demographics, including women, younger individuals, those with higher levels of education and patients with scalp lesions.[11,12] Research shows that anxiety levels are significantly higher among patients with SD compared to healthy individuals.[13] This aligns with findings that indicate people with chronic inflammatory skin conditions tend to experience increased symptoms of depression, general anxiety, social anxiety and insomnia in comparison to those without such conditions.[14]

The negative effects of SD span all age groups, impacting the quality of life even for infants, toddlers and preschoolers due to issues such as itching and sleep disturbances.[15] In China, nearly half of individuals living with SD reported experiencing significant emotional problems.[16] Moreover, those with SD reported a lower quality of life compared to those who only have dandruff.[12]

Patients with seborrheic dermatitis (SD) face significant psychological and social challenges, revealing a critical gap in communication with healthcare professionals (HCPs). Nearly half reported negative impacts on their physical and emotional well-being and feelings of isolation and embarrassment that can affect their professional and social lives.[17]

This dissatisfaction often drives patients to seek support and information from social media, where non-HCPs create much content and can be inaccurate.[18,19] Such reliance on misleading information can discourage patients from seeking professional care, potentially worsening their outcomes.

Therefore, HCPs need to understand the broader impact of SD beyond physical symptoms and foster open communication to encourage patients to seek reliable medical advice. The influence of SD on professional lives is notable, with many patients experiencing absenteeism and feeling less confident at work.

Nearly half of the participants reported missing work due to SD symptoms, which parallels the absenteeism seen in conditions like atopic dermatitis and carries significant economic consequences. Additionally, environmental factors in the workplace can exacerbate symptoms, leading some patients to change career paths, indicating that SD can restrict professional choices and progression.[20]

Therefore, the target of this report was to study the prevalence, risk factors and management approaches for seborrheic dermatitis. Ethical clearance was obtained and written consent was obtained from the relevant authorities. The objective of the study is to determine the prevalence, risk factors and management approaches for seborrheic dermatitis.

METHODS

Study place

This was a prospective study conducted in the Department of Skin and VD, Community Based Medical College Bangladesh, Mymensingh, Bangladesh.

Study duration

during the period from June 2020 to June 2022. In our study, we included 150 patients with seborrheic dermatitis who visited the Department of Skin and VD at Community Based Medical College Bangladesh.

These are the following criteria to be eligible for enrolment as our study participants.

Inclusion criteria:

Patients aged more than 18 years, Patients residing in Bangladesh, Patients who were willing to participate were included in the study.

Exclusion criteria

Patients diagnosed with scabies. Patients with known skin allergies and rashes. Patients with any history of acute illness (e.g., renal or pancreatic diseases, ischemic heart disease, asthma, COPD, etc.) were excluded from our study.

Statistical analysis

A well-informed written consent paper was signed by the patients All data were recorded systematically in a preformed data collection form. Quantitative data was expressed as mean and standard deviation and qualitative data was expressed as frequency distribution and percentage. Statistical analysis was performed by using SPSS 20 (Statistical Package for Social Sciences) for Windows version 10. Each survey was conducted following the principles of the Declaration of Helsinki of 1964. The study was approved by the Ethical Review Committee of Community Based Medical College Bangladesh.

RESULTS

A total of 150 adult patients were evaluated who were presented with seborrheic. They were reported directly by themselves or suggested by the healthcare provider. This research was done to determine the prevalence, risk factors and management approaches for seborrheic dermatitis. Findings are shown in tables and figures.

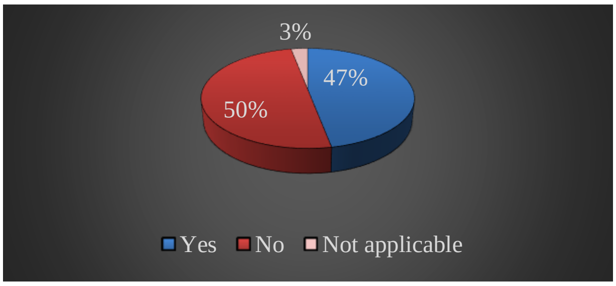

Figure 1: Missed work due to seborrheic dermatitis symptoms.

Table 1 shows that most of the patients were male (55%) and others were female (45%). The majority of the male patients (55%) reported personally to the doctors. Among all male patients, HCP was suggested in 16 (19%) patients. Out of 67 female patients, HCP was suggested in 55 (81%) patients.

Table 2 shows the seborrheic dermatitis level of our study patients. Among all reported patients, 56 (71%) had a moderate level of SD, followed by 13 (16%) and 10 (13%) had a mild and severe level of SD. Among the patients who were suggested by HCP, most of them (41%) had moderate levels of SD, followed by 40% had mild and 19% had severe SD levels.

The pie chart shows that the majority (50%) of our patients never missed work due to seborrheic dermatitis symptoms, on the other hand, 47% of patients missed their work because of SD symptoms.

Table 1: Demographic characteristics of the patients.

Sex	n=150	Frequency	Patients reported, N (%)	HCP suggested, N (%)
Male	83	55%	47 (55)	16 (19)
Female	67	45%	32 (47)	55 (81)

Table 2: Reported seborrheic dermatitis level.

Total patients	Patients reported			HCP suggested		
	Mild, N (%)	Moderate, N (%)	Severe, N (%)	Mild, N (%)	Moderate, N (%)	Severe, N (%)
150	13 (16)	56 (71)	10 (13)	28 (40)	29 (41)	14 (19)

DISCUSSION

This study highlights the significant burden of seborrheic dermatitis (SD), challenging the misconception that it is merely a superficial skin issue. It reveals important gaps between patient experiences and healthcare provider (HCP) perceptions. While HCPs treat an average of over 150 patients with SD, they often underestimate the condition’s severity and its broader implications as reported by patients.

For instance, 84% of patients described their SD symptoms as moderate-to-severe, but only 60% of HCPs classified them similarly. This pattern aligns with findings from other chronic skin conditions like atopic dermatitis and psoriasis. In these diseases, approximately one-third of patients perceive their condition's severity as greater than their physicians do, a difference that is particularly significant in psoriasis, where it often correlates with depression or anxiety. Given the substantial reports of anxiety and depression among patients with SD, this correlation emphasizes the need for a holistic treatment approach. It is essential to bridge the gap in disease perception between patients and HCPs to foster more effective and empathetic care strategies for those living with SD. Furthermore, the discrepancy between patients' and HCPs' assessments of SD severity underscores the urgent need for standardized criteria to evaluate the condition. Current grading methods vary widely and often overlook patient-reported outcomes, which may contribute to the underestimation of the condition’s impact.[21-27]

This analysis reveals that while healthcare professionals (HCPs) often recognize the broad impact of skin disorders (SD), patients tend to feel these effects more acutely, as evidenced by their higher rates of strong agreement to survey questions. Patients who experience significant impacts in areas such as physical appearance, daily hygiene routines and social interactions tend to feel these effects intensely. In contrast, HCPs, acting as observers and clinicians for a diverse range of patients, may capture a more averaged perspective that reflects a combination of multiple patient experiences, leading them to rate these impacts as lower. Nearly half of the patients reported that their skin disorder significantly affected their daily hygiene routine.[28]

This can be especially burdensome for certain patient populations whose hair type or cultural practices involve less frequent shampooing. Additionally, hair care regimens that include chemical relaxers and hair extensions may exacerbate symptoms further.[29] These insights highlight the importance of recognizing the depth and variability of SD’s effects on individual patients. They underscore the need for a tailored approach to treatment and support, acknowledging that while some patients may not feel severely impacted, others may experience profound disruptions to their quality of life. This variability necessitates a sensitive, patient-centered approach in clinical practice, where the individual experiences, needs and perceptions of patients are considered alongside clinical observations.

Recent findings highlight a significant need to better understand and address the stigma and social perceptions associated with seborrheic dermatitis (SD). Patients have expressed deep concerns, a sentiment echoed by healthcare professionals, regarding common misconceptions and the lack of understanding about SD, particularly related to perceived hygiene issues. A recent study involving over 3,000 patients across Europe found that individuals with SD experienced a stronger connection between the intensity of itching and feelings of stigmatization, anxiety and depression compared to other itchy skin conditions, such as psoriasis and atopic dermatitis.[30] Additionally, another study focused on patients with facial SD indicated that social anxiety related to the appearance of their condition is prevalent.[31] These findings underscore the urgent need for targeted efforts to dispel myths surrounding SD, especially those linked to hygiene and to foster a more accurate understanding of the comprehensive impact of the condition.

Patients with seborrheic dermatitis (SD) face significant psychological and social challenges, highlighting a critical gap in communication between patients and healthcare professionals (HCPs). Nearly half of the patients surveyed reported substantial negative impacts on their physical and emotional well-being. Many expressed feelings of isolation and embarrassment, which can hinder both professional advancement and social interactions. This sense of dissatisfaction and isolation may lead patients to seek alternative sources of information and support, particularly through social media.[32-36]

One study indicated that most patients with SD are dissatisfied with their current treatment plans and often turn to social media for advice on managing their condition. This trend towards self-education through social media, where much of the content about SD is created by non-HCPs and may be inaccurate, reflects broader patterns in dermatology. Patients frequently seek online resources to address their conditions. Such reliance on potentially misleading information may deter them from seeking professional medical care, leading to self-treatment strategies that can worsen outcomes. Therefore, HCPS must recognize the significant impact of SD beyond its physical symptoms. Encouraging open and empathetic communication can help patients seek accurate and reliable medical advice, thereby reducing their dependence on unverified online resources.

Data also show the considerable influence of SD on patients' professional lives, supporting previous research indicating that it has a more harmful effect on employment compared to dandruff, although specific work-related aspects affected were not detailed. The present study reveals a high rate of absenteeism among participants, with approximately half reporting missed work due to SD symptoms. This absenteeism mirrors challenges faced in conditions like atopic dermatitis and indicates significant indirect costs related to lost productivity and hindered personal economic growth in the United States.

Missed workdays, combined with patients feeling less confident and less inclined to engage in social interactions at work, may explain why many perceive their career progression as hindered by their symptoms. Furthermore, workplace environmental factors, such as air conditioning, dry or damp conditions and sun exposure, can significantly influence the severity of symptoms for many patients. Nearly half of the participants reported that their SD motivated them to pursue a different career path, suggesting that these factors may lead to changes or limitations in their professional choices and advancement.[12,37-39]

Our study was a single-center study with a small sample size for a longer period. These may cause data loss and not provide the overall scenario of the county. After evaluating those patients, we did not follow up with them for the long term and did not know other possible interference that may happen in the long term with these patients.

CONCLUSION

The findings of this study highlight the importance of a holistic care approach for managing seborrheic dermatitis. This approach should encompass not only the treatment of the physical signs and symptoms of the disease but also the psychological and social challenges that patients with seborrheic dermatitis face. So further study with a prospective and longitudinal study design including a larger sample size needs to be done to validate the findings of our study.

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