

REVIEW ARTICLE

Psychological Comorbidities in People Living with Eczema: A Mini Review

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ABSTRACT

Eczema (atopic dermatitis) is a chronic skin condition that adversely affects the quality of life due to physical changes and subsequent mental health consequences of eczema. There is a need to highlight the psychological comorbidities of eczema and their impact on quality of life. Most of the emerging detail requires testing findings of recent studies in addition to further exploration that can be taken together, it might be sensible to monitor the general health of individuals with eczema. This mini review briefly discusses the psychological comorbidities such as sleep disturbance, psychological distress and suicidal ideation in eczema patients. Further researches need efforts to address the short and long term mental health consequences and how novel treatment options may potentially be helpful in improving of the quality of life of eczema patients.

Keywords: Atopic Dermatitis, Eczema, Psychological Distress, Sleep Disturbance, Suicidal Ideation.

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INTRODUCTION

Atopic dermatitis (eczema) is a chronic, relentless disease characterized by dry, inflamed and itchy skin; also people with this disease describe eczema as a distressing and painful condition that interferes with activities of their everyday life.^{1,2} Eczema patients often have a personal history of skin issues or family history of other diseases such as asthma which is most commonly diagnosed in eczema patients. The estimated prevalence of eczema in children at school going age is 5% to 10% and in adults is 2% to 15%.³ In adults, persistence has been reported with approximately 50% of people have diagnosis of eczema in their childhood which spectrum on moderate to severe and has a considerable negative psychological impact on the quality of life of patients.⁴ This spectrum is effected by eczema symptoms; pruritus and lichenification on skin that influence physical (sleep, fatigue, body pain) and mental (restlessness, anxiety, stress) health of patients and make them more vulnerable to have psychosocial difficulties which may cause long-term consequences and poorer quality of life.⁵

A community based survey that included 559 eczema patients reported that eczema disease is actually limiting people to do daily routine activities and worsen their quality of life by evidence of findings: 35% patients reported eczema interfered in their choice of clothing, education and job, 32% patients believed that due to eczema there is difficulties in wearing makeup, shaving and cooking.⁶ Such disturbance in social, physical and

emotional profile was found in both children and adults with atopic dermatitis (eczema) but adults have difficulties in workplace, intimate relationships and social interactions.⁷ Another common factor is sleep disturbance that leads to the severity of condition such as sleep disorders and psychological distress. Poor sleep is related to exacerbating eczema symptoms such pruritus, pain intensity and increase in the effected skin area.⁸ The main contributing symptom of sleep disturbance is increased pruritus that leads to disease severity which is associated with insomnia and impaired quality of life.⁹ Moreover, a study found that low self-esteem, frustration, suicidal thoughts, social withdrawal and anger are the psychosocial consequences of sleep disturbance and psychological distress.¹⁰ People with eczema mostly avoid situations where they need to have social interaction because of their skin appearance and pruritus difficulties in doing their daily based activities.¹¹ Therefore, young adults and adolescents with eczema condition are more vulnerable to have psychological issues; for example, they are more likely to experience higher levels of anxiety, stress, depression and social isolation which lead to suicidal ideation as compared to people without eczema condition.¹² Growing evidence is focusing on psychosocial concerns among people with atopic dermatitis (eczema) in different age groups to assess their psychological wellbeing such as adolescents and adults with eczema reported depression, anxiety as contributing factors in their poorer quality of life and

they are more likely to have suicidal behaviors due to psychological distress and social stigmatization.^{13,14}

The evidence explain the substantial impact of pruritus, lichenification, sleep disturbance, stress, anxiety, depression on wellbeing and overall quality of life of patients diagnosed with eczema. However, these findings have been highlighted various contemporary models and theories in past research. Numerous important models and theories emphasize the considerable role of optimal sleep as a key driver of human mental health, impact of psychological distress on quality of life and factors related to suicidal ideation such as Model of Quality of Life, theory of Unpleasant Symptoms, health related Quality of Life Model and Inter-personal theory (IPT) of suicidal behaviour.¹⁵⁻¹⁸

These methodologies explain consequences of physical health issues on mind and behavior functioning among natural, mental, physical and social factors that affect the quality of life. People with eczema express inconstancy in encountering symptoms or side effects that lead to negative thinking and psychological problems. Here, we briefly discuss the sleep disturbance, psychological distress and suicidal ideation in people having eczema in the light of evidence of growing number of studies. Though, it is imperative to identify the interactional nature of these behaviors with each other and that changes in one domain are expected to result in collateral changes in others within this framework.¹⁹

The primary sources of search engines were Google and Google scholar for this review. The psychological databases: PsycINFO, Researchgate, Sciencedirect, ERIC, Wiley online library, nih.gov, Web of Knowledge, APAPsychNet and Elsevier Inc were searched. An inclusion criterion was applied for the selection of papers: 1. Due to time constraints, current systematic review was restricted to include studies which are published in English. 2. Cross-sectional and longitudinal studies, Meta-analysis, systematic reviews, case studies and experimental studies from 2015 to till date were included, whereas randomized controlled trials, pilot studies were excluded. Studies on the participants with comorbidities with other disorders were also excluded. Population not restricted to Pakistan but papers published from all over the world were included.

SLEEP DISTURBANCE

Sleep disturbance in eczema patients is caused by intense pruritus which further leads to functional impairment such as disturbed thinking patterns, decreased motor performance, daytime fatigue and

irritability that affect the quality of life (QOL) in people living with eczema condition.⁹ Eczema (atopic dermatitis) causes significant psychosocial problems such as psychological distress, stigmatization, social embarrassment and sleep impairment.²⁰ Patients less than 18 years old and young patients (age range from 19 to 34 years), especially in male and patients living in cold weather (having dry skin) had a higher risk of obstructive sleep apnea.²¹ However, adults (above 18 years old) with eczema reported delayed sleep and difficulty in falling sleep because of stress as compared to those without eczema disease.¹⁴ Insomnia was the most commonly reported by those eczema patients who are not involved in any kind of job.²² Whereas, sleep disordered breathing, more bedtime resistance and parasomnias were the most commonly reported sleep problems by patients with eczema as compared to healthy individuals in control group.⁸

Number of studies reported significant influence of sleep disturbance on physical as well as mental health of adults with eczema. Difficulty in falling sleep significantly linked with major attention on visible spots of disease on skin, in results poor health consequences reported by patients with eczema.²³ Sleep disturbances (shorter sleep duration, low sleep efficiency, difficulties in falling asleep and early morning awaking) are associated with psychological distress (depression, panic disorder, generalized anxiety disorder) and both are significantly correlated with itching having eczema.²⁴ A case study results indicated that unnecessary daytime sleepiness, self destruction, suicidal ideation, depression were most common issues in eczema patients and noticed that sleep-apnea seemed to prompt the symptoms of depression and anxiety.²⁵

In adults with eczema sleep disturbance/disorders linked with number of doctor's clinic visits, number of sick days, poor health status and negative health perceptions which are significantly and negative associated with quality of life of eczema patients.²⁶ In term to daily routine activities, sleep disturbance associated with difficulties in concentrating on work, calculating finances, driving, performing hobbies and leisure activities and social functioning that negatively affects the mental health wellbeing.²⁵ Due to the burden of disease, sleep disturbance in adults associated with sensitivity, feelings of insecurity, anxiety, dependence and depression.²⁷ Because of all these consequences, sleep problems have adverse effects on quality of life of people living with this condition which makes it as a substantial area of investigation for researchers and grasps the interest of psychologists to develop the preventive measures and

intervention plans to improve quality of life of eczema patients.²⁸

PSYCHOLOGICAL DISTRESS

Stress, depression and anxiety together are accounting for a great part in leading the issues of the disease burden. Depression is marked as a loss of pleasure, joy and interest in normal things and affect 4.4% of the worldwide population with eczema, while Anxiety or anxiety disorders are characterized as avoiding the threatening situations, excessive fear, anxiousness or nervousness, and affect 3.6% of the population.²⁹ Both depression and anxiety are related with high level of morbidity and increased rate of mortality.³⁰

People affected by eczema reported depression and anxiety associated with itching, social stigmatization and deformation.³¹ Sleep disturbance identified in people with eczema found as a predictor of psychological distress (anxiety, depression).³² Skin inflammations are also found as mediators for the development of depression and anxiety in patients living with eczema was found a predictor. Also, it revealed the significant negative effect of psychological distress (depression & anxiety) on quality of life.³³

Cross-sectional research indicated that patients who are suffering from moderate to serious eczema reported their treatment with antidepressants than control subjects; however, depression was significantly and more frequently found in female patients with eczema as compared to men because of appearance concerns and social stigmatization.^{34,35} A recent survey found that twins suffering from eczema are believed to be at higher risk of having depression, anxiety disorders and sleeping problems in order to their own eczema condition and severity.³⁶ A systematic review and meta-analysis which included 106 studies found that eczema patient showed depressive symptomology as compared to healthy population such as it was significantly correlated with use of antidepressants, depression symptoms, clinical depression and suicidal ideation.²⁵

Longitudinal evidence is limited and contradictory; a study found the replace with a significant relationship between atopic eczema and depression symptomology, but the changes in this relationship due to severity of eczema symptoms is uncertain.³⁷ Moreover, Personality characteristics also play a substantial role in depression and anxiety such as helplessness, emotional disturbance, dependence, strain, forcefulness, hyperactivity, and trouble in expressing emotions, which are characteristics of depressive symptomology

and many anxiety disorders.³⁸ Another recent longitudinal study revealed that anxiety, depression and sleep disorders found as significant predictors of suicidal ideation in adolescents and adults suffering from eczema.¹³

SUICIDAL IDEATION

Suicidality includes the associated components: suicidal ideation, suicidal attempts and committed suicide. Self-destructive ideation is defined as the repetitive thoughts or readiness to attempt suicide. Suicide attempt indicates demonstrations of committing suicide but the person survives. The committed suicide by an individual includes complete suicide which leads to patient's death.¹¹ Suicidal ideation is a leading psychological issue in people having eczema that requires more prominent consideration. Center for Disease Control and Prevention reported that suicidality is the subsequent leading reason for death among adolescents and the 10th leading reason for death among patients, with the rate of death coming to approximately 45000 yearly.³⁰

The frequency of suicidal ideation in people with serious, moderate and mild eczema (atopic dermatitis) between the ages of 15 to 49 years was 19.6%, 6% and 0.21%, respectively.³⁹ This is because most of the individuals with eczema have a significant psychosocial burden of disease. In light of the visibility of the infection, patients may encounter stigmatization, shame and embarrassment.⁴⁰ Adolescents with eczema are facing social comparison, bullying, negative comments, dropout from institutes and stigmatization in academic domain that cause frustration in adolescents with eczema as compared to healthy students.⁴¹ Whereas adults having eczema found difficulties at work place; worse performance in tasks and get less number of job opportunities instead of healthy individuals which leads to exhaustion and suicidal thoughts.⁴²

The two main factors which are associated with suicidal ideation in eczema patients are bullying and teasing due to the visible infection areas.⁴³ Among adolescents, psychological effects of bullying was found to be long lasting and more severe such as anxiety, body dissatisfaction, low level of self-esteem, depression, poor self-image, push an individual toward suicidal thoughts.⁴⁴ Bullying and teasing about appearance linked with eczemic skin condition.³² Moreover, disturbing and prodding comments identified with eczema were found to be connected with respondents' self-image, embarrassment, self-regard, reluctance,

and negative thinking about to die.⁴³

A cross-sectional study consolidated information from a huge number of data, with a sample of 146 patients with moderate and severe eczema. This investigation discovered around 2.7% of individuals affected by this disease reported self-destructive ideation.¹⁴ There was no contrast with control group having healthy individuals, in this research. However, research by Wei et al.⁴⁴ Involved healthy participants as control group and suicidal thoughts found here were much higher with 18.7% than those participants involved in Gupta study.¹⁴ Increased risk of suicidal ideation, negative beliefs about self and plans to commit suicide were found in eczema patients who have infections on visible areas of body and have higher level of psychological distress and bullying experiences.^{13,38,42,43,45}

ASSESSMENT MEASURES

Psychological distress (depression, anxiety) was assessed by number of scales and assessment tools in eczema patients which are Generalized Anxiety Disorder Questionnaire (GAD-7), Hospital Anxiety and Depression Scale (HADS), Patient Health Questionnaire (PHQ-9), Beck Depression Inventory and Depression scale (CES-D).^{25,28,30-38} Whereas suicidal Ideation was measured by numerous assessment scale/tools including the Carroll Rating Scale for Depression, DanFunD questionnaire, DNPR (Danish version of the ICD codes), *Diagnostic and Statistical Manual of Mental Disorders (DSM-5)* Questionnaire, Korea Youth Risk Behavior Web-Based Survey, German Pöldinger Scale, mortality records, Primary Care Evaluation of Mental Disorders and Beck Depression Inventory.^{11,13,14,30,39-43,44} Though various studies measured sleep disturbance by using qualitative assessments based on subjective questions but recent research also assessed sleep problem by following assessment measures such as Pediatric Sleep Questionnaire (PSQ), SCORAD questions about sleep and Pittsburg Sleep Quality Assessment (PSQI).^{8,20-28}

CONCLUSION

The growing literature emphasizes on the behavioral and mental health problems in people affected by eczema. It is essential to produce an overall picture of psychological comorbidities such as sleep disturbance, psychological distress, suicidal ideation and their impact on quality of life of eczema patients. Health professionals need to promote multidisciplinary treatment options for eczema patients who are at risk

to develop psychological comorbidities. More research is needed to identify the additional short term and long term consequences that may play a substantial role in developing intervention plans for these psychological comorbidities in eczema patients.

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