# SHORT ARTICLE

# **Depression in Adult Dermatology Outpatients**

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## **ABSTRACT**

Objective: To determine the frequency of depression in adult male dermatology outpatients.

Study Design: Cross-sectional study.

Place and Duration of Study: Combined Military Hospital, Bahawalpur, from January to March 2007.

**Methodology:** A consecutive sample was screened for depression by using Urdu version of General Health Questionnaire-12 (GHQ-12). The final diagnosis of depression was based on criteria of International Classification of Diseases-10.

**Results:** Out of the 114 adult males with dermatological disorders, 39 (34.11%) had depression. The frequency and percentage of depression in dermatological conditions was 6 (100%) in psychocutaneous disorders, 2 (66.6%) in urticaria, 3 (66.6%) in pruritis, 7 (57.5%) in acne vulgaris, 4 (50%) in psoriasis, 4 (44.4%) in vitiligo, 3 (37.5%) in melasma, 1 (33.3%) each in hyperhidrosis and alopecia areata, and 9 (20.4%) in eczema. It was not recorded in leprosy and chronic fungal infections.

**Conclusion:** Depression was frequently in adult males with dermatological disorders especially psychocutaneous disorders, urticaria, pruritis, acne vulgaris and psoriasis. Depressive symptoms should be specifically explored even at busy dermatology outdoors for early recognition and timely appropriate psychiatric referral.

Key words: Dermatology. Skin disease. Depression. General Health Questionnaire. Psychocutaneous disorders.

## INTRODUCTION

The common embryological origin of skin and central nervous system has led to assuming that their disorders affect each other. Dermatological clinics have higher prevalence of psychiatric morbidity in dermatology patients than the general population. At least one third of patients seen in dermatology clinics present with a complaint that involves a significant psychological component.1 Common psychiatric conditions seen in patients with skin diseases may present with both primary psychiatric disorders and psychiatric disorders secondary to dermatologic pathology.2 Some inflammatory dermatoses i.e. acne vulgaris, psoriasis and eczema are more commonly associated with depression than others.3-5 Psycho dermatology is a current concept combining both the sciences of dermatology and psychiatry because both clinical presentation and therapeutics tend to overlap.6 In a significant number of patients depressive features can often be uncovered provided these symptoms are specifically explored but the severity of depression is not always directly correlated with the clinical severity of the dermatologic disorder.5 Identification of psychiatric symptoms is important for management of such patients for rapid screening in a heavy dermatology outpatient department.6

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The present work aimed to detect the presence of depressive features, in patients having various dermatological diseases at the study centre.

### **METHODOLOGY**

It was a cross-sectional study conducted on a consecutive sample of adult males, who attended the Out Patient Department (OPD) of Dermatology at Combined Military Hospital, Bahawalpur, between January 2007 and March 2007. Sample size was based on prevalence of depression in Pakistan keeping P=3 using the formula n=z².pq/e². Patients using medication or known for any chronic medical or psychiatric illness were excluded.

Instruments used for psychiatric diagnosis included: The G.H.Q-12 (Urdu version), P.S.E (Present State Examination), and I.C.D-10 (International Classification of Diseases by W.H.O 1992).

Permission from the Ethical and Research Committee of the Hospital and informed consent was obtained. Demographic variables like age, gender, occupation, education and marital status were registered. Diagnosis of dermatological condition was obtained by independent opinion of two dermatologists. All patients were screened using GHQ-12 (Urdu version). Patients scoring "two" and above were selected for interview by a psychiatrist using guidelines from manual of present state examination. One patient out of 10, scoring less than 2 on GHQ-12 was also assessed on clinical interview to determine the false negative patients. Depression was diagnosed, as per I.C.D-10 (International Classification of Diseases - WHO 1992) criteria.

All queries were translated in the language best understood by the participant.

All analyses were carried out with computer software SPSS V-13. Descriptive statistics were analyzed.

#### RESULTS

Out of a total of 114 patients, depression was diagnosed in 39 subjects (34.21%). The demographic data is shown in Table I. The frequency and percentage of dermatologic conditions is depicted in Table II. The dermatological conditions more commonly found with depression were psychocutaneous disorders in 6 (100%), urticaria in 2 (66.6%), pruritis in 3 (66.6%), acne vulgaris in 7 (57.5%) and psoriasis in 4 (50%). Comparitively depression was less commonly reported in vitiligo (n=4, 44.4%), melasma (n=3, 37.5%), hyperhidrosis (n=1, 33.3%), alopecia areata (n=1, 33.3%) and eczema (n=9, 20.4%), while it was not recorded in leprosy and chronic fungal infections.

The number and percentage of symptoms in depressed patients, were loss of interest and enjoyment in

Table I: Demographic and other variables: (n=114).

Variable	Frequency (n=114)	Percentage
Age		
18-30 years	51	44.7
31-45 years	34	29.8
46-60 years	18	15.8
> 60 years	11	9.7
Gender		
Male	94	82.5
Female	20	17.5
Occupation		
In service	68	59.6
Retired	23	20.2
Student	09	7.9
Housewife	14	12.3
Education		
Illiterate	12	10.5
Primary	16	14.1
Middle	34	29.8
Matriculate	32	28.1
Graduate	20	17.5
Marital status		
Married	85	74.6
Unmarried	29	25.4

Table II: Dermatological diagnosis in all and depressed patients.

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Skin diseases	Frequency and percentage of skin disorders (n =114)	Frequency and percentage of depression in skin disorders (n = 39)	
Eczema	44 (38.6%)	9 (20.5%)	
Ch. fungal Infections	13 (11.4%)	-	
Acne vulgaris	12 (10.5%)	7 (58.3%)	
Vitiligo	09 (7.9%)	4 (44.4%)	
Psoriasis	08 (7.0%)	4 (50%)	
Melasma	08 (7.0%)	3 (37.5%)	
Psychocutaneous disorders	06 (5.3%)	6 (100%)	
Pruritis	03 (2.6%)	2 (66.6%)	
Urticaria	03 (2.6%)	2 (66.6%)	
Hyperhiderosis	03 (2.6%)	1 (33.3%)	
Alopecia areata	03 (2.6%)	1 (33.3%)	
Leprosy	02 (1.9%)	-	
Total	114	39	

31 (79.48%), depressed mood in 27 (69.23%), reduced self-esteem in 22 (56.41%), reduced concentration and attention in 22 (56.41%), diminished appetite in 15 (38.46%), ideas of guilt and unworthiness in 13 (33.33%), disturbed sleep in 12 (30.76%), ideas or acts of self-harm or suicide in 3 (7.69%) and bleak and pessimistic views of the future in 7 (17.94%).

#### DISCUSSION

In the present study, depression was identified in 34.21%. Aslam *et al.*, found depression in 24% of patients attending a dermatology clinic.<sup>7</sup> The process of establishing diagnoses was based on a single screening instrument, Hospital Anxiety and Depression Scale (HADS) and no mention has been made of the diagnostic criterion on which the diagnoses were based. Possibly because of this reason the prevalence of depression in that study was less as compared to present study. Secondly, in this study initial screening by GHQ-12 Urdu version<sup>8,9</sup> and subsequently evaluation by psychiatrist on clinical interview, based on guidelines from manual of present state examination was done. Thereby, the results of this study can be better validated.

Sanborn *et al.* cited by Whitlock,<sup>11</sup> reviewed the literature on the alleged association between depression and a number of skin disorders. Among the 64 suicides, 6 (9.3%) had skin disorders associated with depression.

Hughes<sup>12</sup> conducted the first systematic study of psychiatric disorders in 196, new out patients of a skin dermatology clinic using General Health Questionnaire-30 (GHQ-30), and 30% obtained high scores on GHQ.

In the study by Woodruff *et al.*, depressive illness accounted for 44% of the cases. <sup>13</sup> Gould and Grag, also observed depression in 41.6% of patients. <sup>14</sup> The prevalence figure for depression, in both the studies is higher than this study. The most likely reason is that in both studies the sample was drawn from a dermatology-psychiatry liaison clinic, a referral centre, and as expected tends to have a high number of patients with psychiatric disorders.

Hughes,<sup>12</sup> also observed disturbed sleep in 48%, tendency to avoid people and situations in 34%, and reduced interest in 30%, all indicative of depression and seen in patients with conditions like psoriasis. Ideas of self-harm/suicide in present work, seen in 7.6% of cases is similar to that quoted by Gupta and Gupta, who reported suicidal thoughts in 5.6-7.2%, of patients with psoriasis and acne. The only exception is the work by Wesley who also employed G.H.Q-12 on his sample of dermatological patients but found no difference in the pattern of psychiatric morbidity for various common dermatoses.

In the present study all those patients with depressive symptoms were found to have significant depression to warrant treatment with psychotropic drugs as also recommended by Lee and Koo.<sup>15</sup>

In the present work, amongst the depressed patients the commonest dermatological diagnoses were psychocutaneous disorders, urticaria, pruritis, acne vulgaris and psoriasis. Almost similar results were shown in Fried and Gupta's study, in which the skin diseases associated with depression were: acne, psoriasis, eczema, atopic dermatitis, generalized pruritis and psychocutaneous disorders. In other studies, 10-12 majority of cases were of eczema, psoriasis, alopecia and acne. The current study therefore, does not highlight any departure from the convention elsewhere.

Depression was not recorded in cases with chronic fungal infections probably due to shorter duration and treatable nature of condition. Leprosy was not associated with depression, probably false negatively due to very less number of reported cases.

It is recommended that depressive symptoms especially reduced concentration and attention, reduced self-esteem and confidence, ideas of guilt and unworthiness and bleak and pessimistic view of the future should be specifically explored even at busy dermatology outdoors for early recognition and timely appropriate psychiatric referral that may reduce the associated morbidity and mortality and can be cost effective as well.

### **CONCLUSION**

Depression is frequently found with dermatological disorders especially psychocutaneous disorders, urticaria, pruritis, acne vulgaris and psoriasis. Depressive symptoms should be specifically explored even at busy dermatology outdoors for early recognition and timely appropriate psychiatric referral.

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