

# Prevalence of Skin Disorders in Primary Psychiatric Outpatients in a Tertiary Care Hospital in India

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## ABSTRACT

### BACKGROUND

Skin diseases and psychiatric illnesses are frequently found in the same patient. Although the psychiatric comorbidity of patients with dermatological conditions have been frequently studied, the prevalence of skin diseases in patients with primary psychiatric illnesses in India has not yet been extensively analysed. We hope to shed some light on the topic through this study and to gain insights into the co-morbidity of skin disorders in primary psychiatric outpatients.

### METHODS

We have utilised a cross-sectional descriptive design for estimating the prevalence of skin disorders in primary psychiatric outpatients attending the outpatient department of a tertiary medical college hospital in India during the period from October 2019 to January 2020. Patients over the age of 18 years had been recruited for the study. Informed consent was obtained from all the patients.

### RESULTS

A total of 135 patients were recruited for the study. 70 were males and 65 were females. The mean age of the participants was 38.6 years. A total of 88 patients of whom 46 were females had a co-existing dermatological condition that amounts to a prevalence rate of 65.1 %. Around 94 cutaneous manifestations were found among the 88 patients who had a dermatological disorder.

### CONCLUSIONS

Skin disorders were highly prevalent in patients attending the psychiatric outpatient department. This points to a need for an inquiry and examination into skin related ailments in all psychiatric patients.

### KEYWORDS

Psychodermatology, Comorbidity in Psychiatry, Skin Diseases in Psychiatry

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*DOI: 10.18410/jebmh/2020/612*

*How to Cite This Article:*

*Kumar JKVA, Maikandaan CJB, Rajesh R, et al. Prevalence of skin disorders in primary psychiatric outpatients in a tertiary care hospital in India. J Evid Based Med Healthc 2020; 7(50), 2997-3000. DOI: 10.18410/jebmh/2020/612*

*Submission 03-09-2020,  
Peer Review 11-09-2020,  
Acceptance 01-11-2020,  
Published 14-12-2020.*

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## BACKGROUND

The co-occurrence of dermatological and psychiatric disorders has been recognised widely in many countries across the globe. This paved the way for the evolution of the field of psychodermatology which is gradually gaining prominence over the last few decades.<sup>1</sup> Skin diseases, by virtue of its capacity to alter both the external and self-image of an individual, can potentially have a profound impact on the patients' mental health. In addition, a subset of patients with psychiatric illnesses can become prone to neglect their self-care related activities resulting in skin-related ailments.<sup>2</sup>

There have been numerous studies analysing the psychological morbidity of patients with primary skin conditions and they have been able to decipher the association between poor quality of life, sleep, mood and anxiety disorders with skin diseases<sup>2-4</sup>. However, the reverse association of skin disorders in primary psychiatric patients has a lot of scope for further inquiry and research. Only few previous studies have been conducted in patients with primary psychiatric illness with undetected or comorbid skin disorders and hence, we aim to address the problem above with our study.

## METHODS

Patients attending the psychiatric outpatient department of a tertiary medical college hospital and diagnosed with a psychiatric disorder were recruited into the study. Informed consent was obtained from all the participants of the study before the patients were subjected to further examination. A total of 135 patients were included following the above procedure. The study was conducted in the period between October 2019 to January 2020.

The psychiatric diagnosis was made by a psychiatrist after eliciting relevant information and examination. The treatment for the psychiatric disorder was initiated and subsequently, the patients were referred to the dermatology outpatient department and the skin related complaints or lesions if any were noted and an appropriate clinical diagnosis was made by the dermatologist. In the event of the detection of a dermatological disorder, relevant treatment was started and advice regarding the same was given to the patients.

The study included both male and female participants and patients aged less than 18 years were excluded in our study. In addition, patients with severe behavioural and psychiatric disturbance such as aggressiveness or severe alcohol withdrawal at the time of presentation to the outpatient department were also excluded since it would have prevented the patient from giving consent and excluded the possibility of detailed examination.

## RESULTS

Out of the 135 participants who had consented to be part of the study, there were a total of 70 female and 65 male

patients who were examined for the presence of dermatological conditions.

Sex	Number	Percentage
Female	70	51.9
Male	65	48.1
<b>Total</b>	<b>135</b>	<b>100.0</b>

*Table 1. Gender Distribution*

The mean age of the study population was 38.65 years. The age distribution of the sample has been tabulated below. It is clear that the study population predominantly consisted of middle-aged patients who constitute the majority of the patients attending the psychiatric outpatient department of the hospital otherwise.

Age Distribution	Males	Females	Total
18 to 20	2	4	6
21 to 30	14	15	29
31 to 40	24	22	46
41 to 50	14	21	35
51 to 60	9	7	16
More than 60 years	2	1	3

*Table 2. Age Distribution*

Although the psychiatric diagnosis of the patients were made based on standard clinical guidelines derived from ICD-10 and DSM-5, for the purpose of this study the psychiatric diagnosis of the patients were broadly classified under the headings of psychotic, neurotic and substance use disorders.

Psychiatric Disorders	Frequency	Percent
Neurotic Illnesses	82	60.7
Psychotic Illness	45	33.3
Substance Use Disorders	8	5.9
<b>Total</b>	<b>135</b>	<b>100.0</b>

*Table 3. Psychiatric Disorders Classification*

Among the neurotic spectrum, 33 patients (24.5 %) had depression and related disorders. In patients with depression the severity ranged from mild to moderate and patients diagnosed with adjustment disorder were also included under this category. As mentioned before, patients who presented with severe depression with suicidal behaviour needing patient care were not included in the study.

A total of 49 patients who comprised 36.3 % of the study population were diagnosed with anxiety and related disorders. Generalised anxiety disorder, mixed anxiety and depression and panic disorder were the most common diagnoses under this category apart from a few patients who were diagnosed with obsessive compulsive disorder.

Among the 45 patients grouped under the psychotic illness category, a total of 7 patients were diagnosed with bipolar disorder (5.2 %) whereas the rest of 38 patients had a primary psychotic illness (28.1 %). The patients under this category were not exhibiting florid psychotic symptoms and were under remission.

All the patients diagnosed under substance use disorders (8 patients, 5.9 %) had been diagnosed with alcohol dependence syndrome. These are the patients who completed initial detoxification regimen and were noted to have minimal withdrawal symptoms. None of the patients

under this category had any symptoms or signs suggestive of decompensated liver disease.

A total of 47 patients (34.8 %) examined did not have any dermatological disorder and hence, the number of patients with dermatological disorders was 88. Therefore, the prevalence of skin disorders in our study of primary psychiatric patients was found to be 65.2 %. 50 patients out of the 82 patients (60.9 %) diagnosed with a neurotic illness had a comorbid skin disorder whereas 33 patients out of the 45 patients (73 %) with a psychotic illness were found to have a skin disorder. 5 patients out of the total of 8 patients with substance use disorder were also found to have a skin disease.

We had noted that a few patients exhibited symptoms of more than a single skin disease and therefore the total cutaneous manifestations were 94 despite the total number of patients with skin disorder being only 88. Out of these 88 patients with skin manifestations, 46 patients turned out to be females (52.27 %) and the remaining 42 patients were males (47.73 %). Dermatological conditions diagnosed under this study were classified based on their aetiology and the results are tabulated below.

Sl. No.	Aetiology	Frequency	Percentage
1	Infections	27	28.72 %
2	Eczemas	22	23.40 %
3	Appendageal disorders	14	14.89 %
4	Incidental dermatoses	13	13.82 %
5	Papulosquamous disorders	10	10.63 %
6	Pigmentary disorders	8	8.51 %
7	<b>Total</b>	<b>94</b>	<b>100 %</b>

**Table 4. Broad Classification of Cutaneous Disorders**

Under the category of infections, Tinea corporis accounted for the most common manifestation with 15 patients (15.95 %) exhibiting its symptoms followed by verruca which was found in around 6 patients (6.38 %).

Appendageal disorders included androgenic alopecia and female pattern hair loss comprising of 3 patients each (3.19 %) and in addition 2 patients (2.12 %) presented with telogen effluvium.

Pigmentary disorders comprised of post inflammatory hyperpigmentation which was found in 8 patients (8.51 %) of the study whereas vitiligo was diagnosed in a total of 4 patients (4.25 %) contributing to the spectrum. Another 3 patients (3.19 %) were diagnosed with seborrheic keratosis grouped under incidental dermatoses and a further 2 patients (2.12 %) were assessed to have acrochordons.

## DISCUSSION

The prevalence rate of 65 % found in our study is close to the rate of 71.5 % obtained by Moftah et al in an Egyptian hospital based analytical cross-sectional study.<sup>5</sup> However, infectious skin diseases accounted for almost 70 % of skin manifestations in their study compared to only 28.7 % in ours. However, in a retrospective study done in Germany infectious-parasitic diseases in patients hospitalised with a mental illness turned out to be only 13.2 %.<sup>6</sup> Closer home, the focus of the research has been on patterns of dermatological conditions in patients with comorbid

psychiatric illnesses and psychiatric manifestations of patients attending dermatology outpatient clinics<sup>7-9</sup> In that sense, this study has been one of the few studies concentrating mainly on patients attending the psychiatric outpatient clinic.

The high prevalence rate of skin diseases warrants more co-ordination between the two fields to effectively understand and manage the overall care of the patients. Interestingly, in our study, a few patients with palmoplantar psoriasis (4.24 %) and hand and feet dermatitis (5.31 %) who normally present to dermatological outpatient department first, had not previously obtained any skin consultation possibly due to low levels of awareness and less than optimal self-care. A shared embryological origin of the skin and the brain has also been hypothesised as a common factor for co-existence of these conditions although patient related factors and treatment with psychotropic medication can also lead to skin related conditions in psychiatric patients<sup>10,11</sup>. These factors should help in establishing more liaison between the two departments and lead to starting of dermatology-psychiatry clinics as has been observed in a few pioneering efforts.<sup>12,13</sup>

The setting of the current study was a psychiatric outpatient unit of a tertiary care hospital and it can be argued that the prevalence might potentially be higher in chronic psychiatric patients in a tertiary psychiatric facility. We had not utilised a control group in our study and a wider study with a larger sample size will be required that takes into account other confounding factors. Despite the limitations mentioned above, we hope that our study has given insight and impetus for further inquiry into skin diseases in psychiatric patients in India.

## CONCLUSIONS

Skin diseases are highly prevalent in patients with primary psychiatric illnesses and they can potentially compound the distress and stigma faced by them. Considering the fact that more than half the patients were found to have a skin disease in our study, we need to emphasize that every patient with psychiatric illness needs to be evaluated for skin related conditions by verbal and physical examination and timely interventions will go a long way in reducing the morbidity.

Data sharing statement provided by the authors is available with the full text of this article at jebmh.com.

Financial or other competing interests: None.

Disclosure forms provided by the authors are available with the full text of this article at jebmh.com.

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