

DERMATOLOGICAL MORBIDITY AMONG INPATIENTS WITH PRIMARY PSYCHIATRIC DISORDERS

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ABSTRACT

OBJECTIVE

To find the frequency and type of dermatological disease in patients with primary psychiatric conditions.

STUDY DESIGN

Cross-sectional study.

PLACE AND DURATION OF STUDY

Department of Psychiatry Bahawal Victoria Hospital, Bahawalpur, Punjab, Pakistan. We carried out this study from September to December 2020.

SUBJECTS AND METHODS

The research was conducted on 200 psychiatric patients admitted to the Psychiatry department of Bahawal Victoria Hospital, Bahawalpur. We took informed consent from study participants/ guardians before providing the questionnaire and the clinical examination. We gave autonomy to the participants and informed them that there would be no harm during the study, with an additional opportunity of health education. We collected data through a predesigned and pretested questionnaire.

RESULTS

The results showed that 82% psychiatric patients had dermatological diseases and 72% had infectious dermatological diseases.

CONCLUSION

Dermatological diseases, particularly infectious dermatological diseases, were prevalent among patients with psychiatric disorders.

KEY WORDS

Psychiatric disorders, dermatological diseases, infectious dermatological diseases.

INTRODUCTION

Psychiatric disorders or psychiatric illnesses refer to a sequence of behavioural as well as psychological symptoms which lead to high levels of stress, and affect the quality of life and the ability to function, leading to increased risk of mortality and morbidity.¹

Psychiatric disorders result from or are related to high levels of chronic stress. These cause proliferation of lymphocytes and cytotoxicity of natural killer cells, which lead to many skin problems especially infectious skin diseases. Studies have shown association of dermatological diseases with psychiatric conditions like depression and anxiety, where almost half of the dermatological manifestations in psychiatric patients are infective.²

Emotional states manifest in skin as skin reflects mind and emotions. States such as: anger, terror, fear and shame, are manifested by changes in texture, color or moisture of skin. Scientific knowledge shows that brain activity produces electrical impulses in the cerebral cortex, which are then taken to the thalamus and hypothalamus, where they release chemical substances like cortisol, catecholamines etc. which become the messengers of thought. Thus, skin manifestations reflect mind-body communication during emotional disturbances and when body adapts to such stresses, changes like ageing, pruritis and inflammation occur.³

Psychological illnesses have significant effects on skin manifestations in patients. Stress is associated with skin conditions like psoriasis, acne and atopic dermatitis.¹ These cutaneous disorders were found in patients with psychiatric illnesses, and may be attributed to the ectodermal origin of skin and nerves, and worsened by the emotional stress which these patients face throughout their lives.⁴ Another contributing factor is the lack of care and negligence in these patients, especially those of low and middle socioeconomic status where lack of access to health care services is a major factor leading to infectious skin conditions.² Also, people with psychiatric illnesses are often neglected by their families. This negligence is reflected in their health status as most of them are malnourished. Being malnourished leads to weaker immune systems and causes development of different dermatological diseases in such patients.

Infectious dermatosis was found in 36.94% of psychiatric patients and is related to lack of care, treatment and noncompliance, unhealthy living conditions, poor clothing and lack of knowledge.⁴ Most of the psychiatric patients reported self-consciousness, helplessness and embarrassment, which predisposes to several dermatological conditions like acne, rashes, alopecia and seborrheic dermatitis.⁴

A significant relationship exists between skin and psyche. This results in various skin disorders in psychiatric patients, especially as dermatitis and pruritis. It is worsened by poor hand hygiene practice, use of first-line therapies such as: antiepileptics, antipsychotics and selective serotonin antidepressants.⁵ Common skin manifestations include dermatophyte infections (13.5%), fungal infections (33.8%), parasitic (1.9%), pediculosis capitis (5.7%), seborrheic dermatitis (16.2%), psoriasis (3.4%) and pityriasis versicolor (17.6%) in psychiatry patients with majority of cases found in third to fifth decade of life.⁴ Dermatological diseases in psychiatry patients emphasize on a collective assessment of psychiatric and dermatological conditions. Further research regarding whether psychiatric intervention could decrease this high prevalence of dermatological diseases in psychiatric patients is the need of the day.

SUBJECTS AND METHODS

This was a cross-sectional study conducted from September to December 2020 in the Psychiatry ward of Bahawal Victoria Hospital, Bahawalpur. The study was started after permission of the ethical review committee. Two hundred patients admitted with psychiatric illnesses were included in the study. We took informed verbal consent from study participants and in some cases, from their relatives/guardians. We collected data through a predesigned and pretested questionnaire. The questionnaire had two parts: the first comprised demographic variables and second part comprised duration of psychiatric illness, type of skin disease and treatment. We analysed the data by using SPSS version 23, and calculated as frequencies and percentages and presented them in tables. We also maintained confidentiality of the results obtained.

RESULTS

In this study, conducted on 200 psychiatric patients admitted in the Psychiatry ward of BVH, Bahawalpur, 82 (41%) were males and 118 (59%) were females. Mean age of the psychiatric patients was 35.2 years. Out of the 200 psychiatric patients, 60 (30%) had schizophrenia, 48 (24%) bipolar affective disorder, 26 (13%) psychosis and 66 (33%) major depressive disorders (Table 1).

Among the 200 psychiatric patients, 164 (82%) were suffering from dermatological diseases, where 101 (62%) were females and 53 (38%) were males. Out of these 164

Table 1
Frequency distribution of psychiatric illnesses (n=200).

Schizophrenic	60	30%
Bipolar affective disorder	48	24%
Psychosis	26	13%
Major depressive disorder	66	33%

Table 2
Frequency distribution of infectious dermatological diseases in psychiatric patients (n=118).

Fungal Infection (46)	39%
Bacterial Infection (16)	14%
Viral Infection (15)	13%
Parasitic Infection (41)	34%

Table 3
Frequency distribution of non-infectious dermatological diseases in psychiatric patients (n=46).

Acne	22	48%
Hair Loss	06	13%
Eczema	10	22%
Seborrheic Dermatitis	08	17%

psychiatric patients with dermatological diseases, 118 (72%) were infective and 46 (28%) were non-infective.

The frequency distribution among psychiatric patients with infectious dermatological diseases, out of 118 showed that 46 (39%) were suffering from fungal infections, 16 (14%) were suffering from bacterial infections, 15 (13%) with viral infections and 41 (34%) with parasitic infections (Table 2).

The pattern of non-infectious dermatological diseases exhibited that among 46 patients, 22 (48%) had acne, 6 (13%) had hair loss, 10 (22%) had eczema and 08 (17%) had seborrheic dermatitis (Table 3).

DISCUSSION

Our study, which was conducted on psychiatric patients admitted to the Psychiatry ward of Bahawal Victoria Hospital in Bahawalpur, showed a prevalence of 82% dermatological disease in psychiatric patients. This was nearly similar to a study conducted in Cairo, Egypt where 71.5% of psychiatric patients had dermatological diseases.¹ This was also like another study conducted in Egypt where 88.4% of psychiatric patients had dermatological disorders,² and in contrast to a study conducted in Lahore where 58.5% of psychiatric patients suffered from dermatological disorders.⁶

Prevalence of our study was similar to a study conducted in India where 77% of psychiatric patients showed dermatological disorders.⁷ This study concluded that out of psychiatric patients having dermatological diseases, a majority 62% were females and 38% were males. This also

bore resemblance to studies conducted in Cairo, Egypt where the majority 61% were females,¹ in India 58.1%⁴ and in contrast to a study conducted in Lahore where female psychiatric patients having dermatological diseases were only 39.4%.⁶

This study showed that mean age of psychiatric patients with dermatological diseases was 35.2 years, which resembled the mean age of (33.4 ± 8.67) in the study from Cairo, Egypt,¹ in Egypt (33.9 ± 12.3)² and in India where majority patients were 18-50 years of age.⁴

For the prevalence of infectious dermatological diseases, our study showed that 72% dermatological diseases were infectious and 28% were non-infectious. These results were like studies conducted in Cairo, Egypt where 62.5%¹ had infectious dermatological diseases and in contrast to studies in India where 36.94%³ had infectious dermatosis, and resembled the study in Egypt where 49.8%² had infectious dermatological disorders. These may be due to the differences in socioeconomic status, hygienic conditions, and health services provision.

Regarding infectious dermatological conditions, 39% had fungal infections like the studies of Cairo, Egypt where 37%,¹ in India 33.8%⁴ and in Egypt 24%² had fungal infections.

Our study revealed that out of all dermatological infections: 14% bacterial, 13% viral, and 34% parasitic infections were present. These resembled to studies of Cairo, Egypt where 10.4% had bacterial, 9% had viral and 42.7% had parasitic infections.¹ These results were also concordant to a study conducted in Egypt where 12.7% had bacterial, 7.9% viral and 50.2% had parasitic infections² which may have resulted from a lack of care, negligence, lack of access to health services and poor quality of life in psychiatric patients all over the globe.

Regarding non-infectious dermatological conditions, our study showed that acne was most prevalent as 48% patients suffered, followed by eczema as 22%, hair loss as 13% and 17% with seborrheic dermatitis. These were in contrast to the study in Lahore where only 6.2% showed acne, 10% eczema, 5% melasma⁶ and showed similarity to the study in India where 16.2% had seborrheic dermatitis and 3.4% had psoriasis⁴ and in contrast to a study in Germany where 35.4% had psoriasis and 22.6% had atopic dermatitis.⁸ We may attribute these results to the relationship between psyche and skin disorders, and also differences in contributing factors like therapy with anti-epileptics, anti-psychotics, poor hygienic conditions and lack of access to quality health care services.

CONCLUSIONS

Dermatological diseases, particularly infectious dermatological diseases were prevalent among patients with psychiatric disorders.

Limitation and Recommendations

Since this is a hospital-based clinical study conducted in a single centre, so it may not be a true representative of the burden of disease in the community. Therefore, it is recommended that a large study in the community may be conducted, in the light of the lifestyle and societal strata, along with related laboratory investigations.

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