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Original Research Paper

A STUDY ON THE PREVALENCE OF PSYCHIATRIC COMORBIDITIES ASSOCIATED WITH DERMATOLOGICAL DISORDERS

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ABSTRACT:
Background: The association between dermatological diseases & psychiatric disorders has long been known. Some of the dermatological conditions have an impact on the quality of day to day life and self-confidence, and may be associated with psychiatric comorbidities like anxiety, depression and other psychosocial problems. Among various dermatological diseases, the ones that are commonly associated with psychiatric comorbidities are psoriasis vulgaris, acne vulgaris, alopecia areata, chronic urticaria and vitiligo. **Methods**: It is a tertiary hospital-based cross-sectional study done over a period of 18 months. HAM-A & HAM-D scales were used for screening of anxiety and depression respectively. This study was done to find the prevalence of psychiatric comorbidities in patients with chronic dermatological conditions such as psoriasis vulgaris, acne vulgaris, alopecia areata, chronic urticaria and vitiligo, and to study the demographic characteristics among those patients. **Results**: In our study, the prevalence of psychiatric morbidity associated with dermatological disorders was 39%. The prevalence of psychiatric comorbidity associated with dermatological conditions in a descending order is Vitiligo (27%), Acne vulgaris (25%), Alopecia areata (18%), Psoriasis (15%) & Chronic urticaria (15%). **Conclusion**: The psychiatric morbidity of 39% indicates a need for early psychiatric treatment intervention along with the management of chronic dermatological conditions.

Keywords: Psychodermatology, Anxiety, Depression, Mixed Anxiety Disorder, Chronic Dermatoses

INTRODUCTION:
The association between dermatological diseases and psychiatric disorders has long been known. Dermatological diseases have an impact on the quality of daily life, self-confidence, and self-respect, which may lead to the question one`s self-image thus creating a problem of identity. Among various dermatological conditions, the common skin diseases that may be associated with psychiatric comorbidities are psoriasis, acne, alopecia areata, chronic urticaria and vitiligo. The appearance of skin lesions, the sites involved and the chronic course of the disease with relapse and remission may often affect the quality of social and professional life of patients; consequently psychiatric morbidity may arise. [1] The prevalence of psychiatric comorbidities like anxiety and depression, which directly affect the quality of life in patients with the dermatologic disease and necessitate proper management of the causative skin conditions. Among common dermatological diseases, Psoriasis has a bimodal age distribution, which peaks in the 20`s and 60`s. [2] Psoriasis, unlike acne and vitiligo, can affect the palms and soles consequently interfering with their daily function. Patients most often suffer impairment of their daily routine due to pain on using their fissured hands and feet. Acne vulgaris is a common skin condition that is associated with a considerable psychological burden. Acne has a peak incidence during adolescence when they are greatly concerned about their appearance and body image. Acne and its sequelae can affect many domains of life, leading to social dysfunction and psychiatric issues. Overall, depression and anxiety in patients with Acne are multifactorial and may vary with gender and duration of the disease. [3] Alopecia areata most commonly involves scalp and beard areas. Because of the impaired cosmetic role of human hair, one can expect significant psychological distress when alopecia areata fails to respond or is recalcitrant to treatment. Vitiligo

can arise at any age and demonstrates no sexual predilection. Depigmentation often causes psychological distress, social stigmatization, low self-esteem, sleep disturbances, disability in social functions and adverse emotions such as anger and low mood/sadness. [4] The urticarial lesions may be intensely pruritic, and the angioedema may present with mild pain and burning sensation [5] ; these symptoms may affect the patient's quality of life significantly and may cause stress, negative self-image, when urticaria takes a protracted course or recurs at frequent intervals. [6,7,8] Because each age group differs with respect to priorities and social activities, the psychosocial effects of these skin diseases vary with their age. [9] By recognizing the psychosocial aspects of these skin conditions, dermatologists can take cognizance of the impact on the patient's physical, mental, and emotional domains. Thus, a holistic approach, by treating the cause and the accompanying comorbidities with support and appropriate referrals, results in better patient care.

METHODOLOGY:

This was a tertiary hospital-based analytical & observational study conducted with a sample size of 220 patients over a period of 18 months after obtaining institutional ethical committee clearance. With prior consent and dermatological assessment, depression & anxiety were screened with the help of HAM-D & HAM-A, respectively. Hamilton anxiety rating scale (HAM-A), is used to measure the severity of anxiety symptoms. [14] The scale consists of 14 items, and each item is scored on a scale of 0 (not present) to 4 (severe) with a total score of 0-56, where <17 indicates-mild 18-24 –moderate and 25-30, moderate to severe. Hamilton depression rating scale (HAM-D), is used to measure depression symptoms, it consists of 17 items, score of 0-7 normal range, 8-13–mild depression, 14-18 –Moderate, 19-22 severe and >23 –very severe. Patients with ages between 18-65 years and both sexes were included in the study. Patients with a known history of psychiatric illness, pregnancy and those with severe medical conditions were excluded. Statistical analysis was performed using SPSS version and the p-value was calculated to determine the statistical significance of the present study. A p-value of <0.05 was considered statistically significant.

RESULTS:

A total of 220 patients were included in the study, with an age distribution of 18 to 65 years. They present with illness duration ranging between <6 to >48 months.

Table 1 - Age:

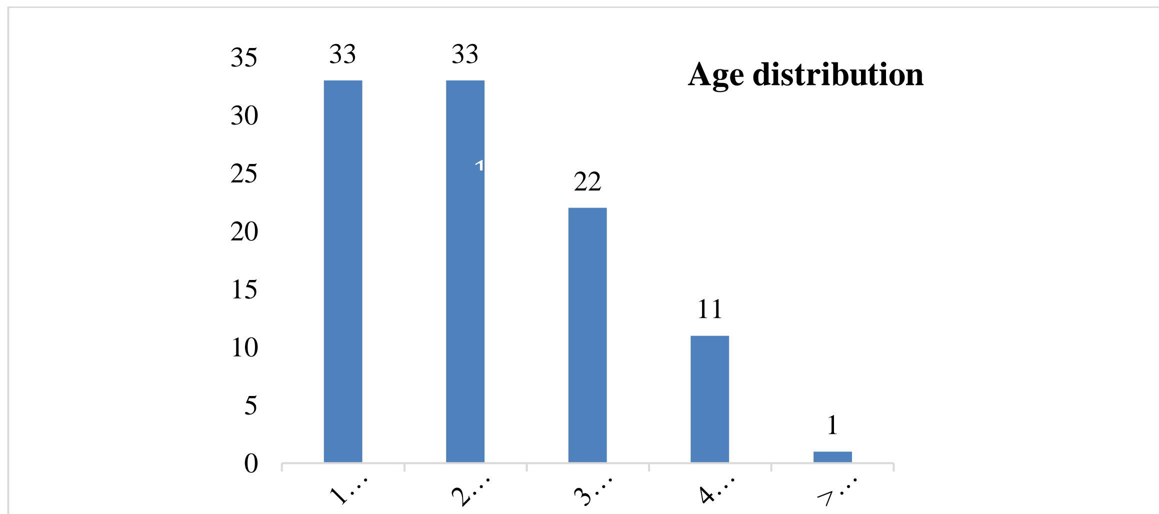


Table 2 – Gender:

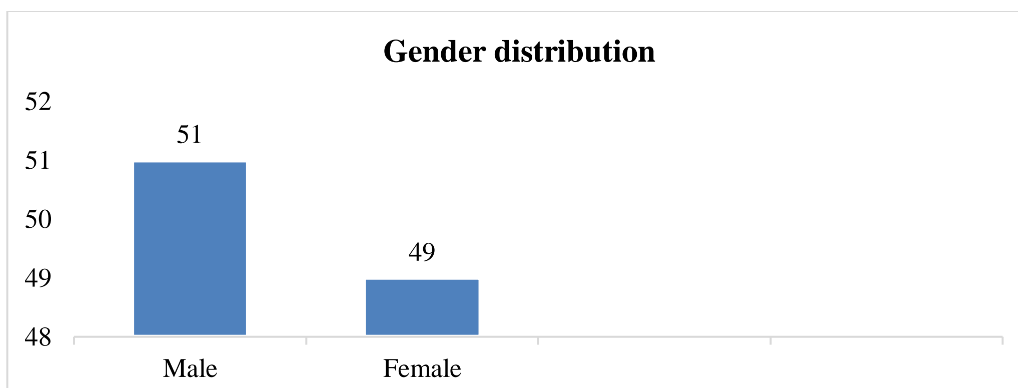


Table 3- marital status:

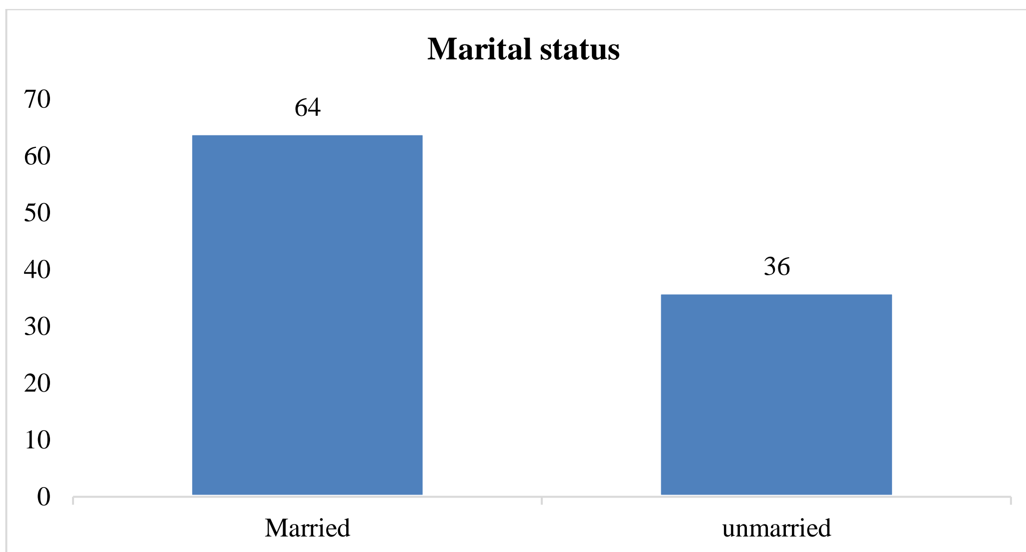
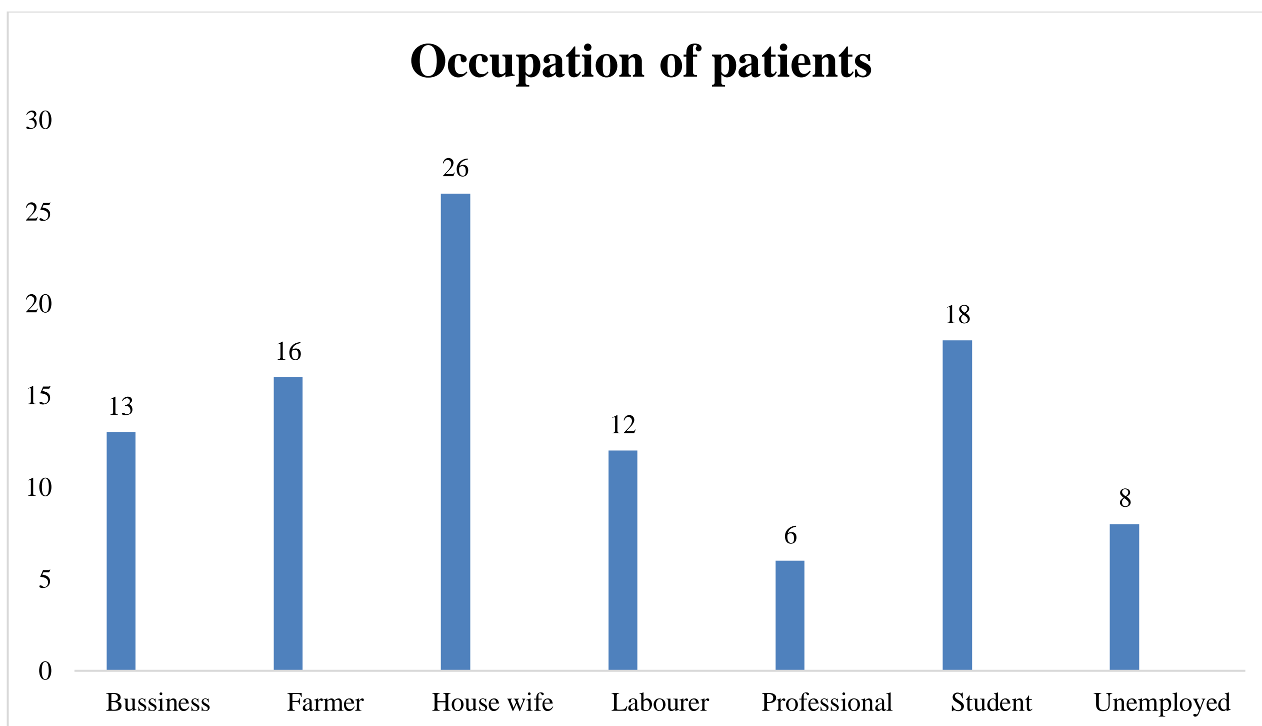


Table- 4 occupation:



The details of the demographic profile, which includes gender, occupation, and marital status are mentioned in **table 1, 2, 3, 4**. Of 220 patients recruited, 51 patients had vitiligo vulgaris(23%) followed by 49 patient with psoriasis (22.3%), 49 patients with chronic urticaria (22.3%), 46 patients with Acne vulgaris (21%) and 25 patients of Alopecia areata (11.4%). In the present study, among 220 patients, 85 were found to have psychiatric morbidity and thus the prevalence of psychiatric morbidity in this study was 39%. Among these patients, anxiety in 38%, depression in 35% and mixed anxiety and depression in 27% were noted. In this study, dermatological diseases with psychiatric morbidity in the order of Vitiligo (27%), Acne (25%), alopecia areata (18%) followed by Psoriasis (13%) and chronic urticaria(13%).

Table- 5 – prevalence of various psychiatric morbidities among dermatological diseases:

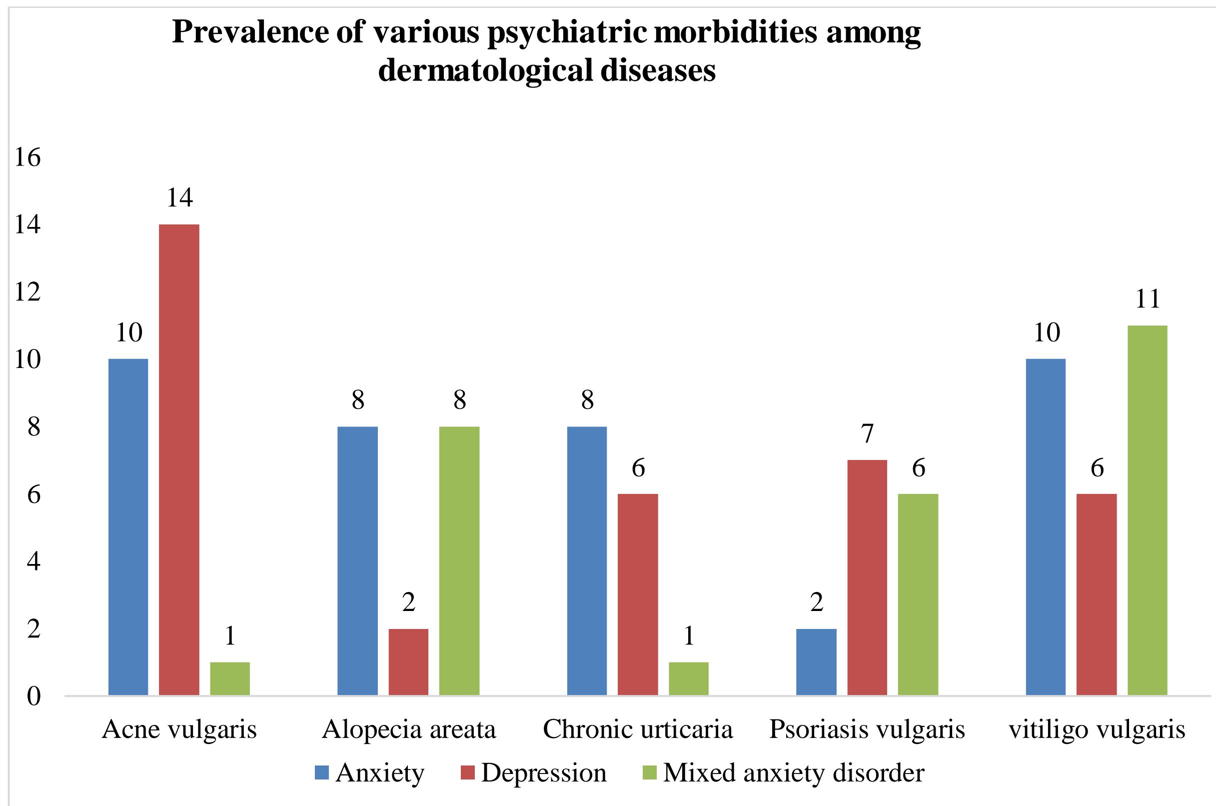
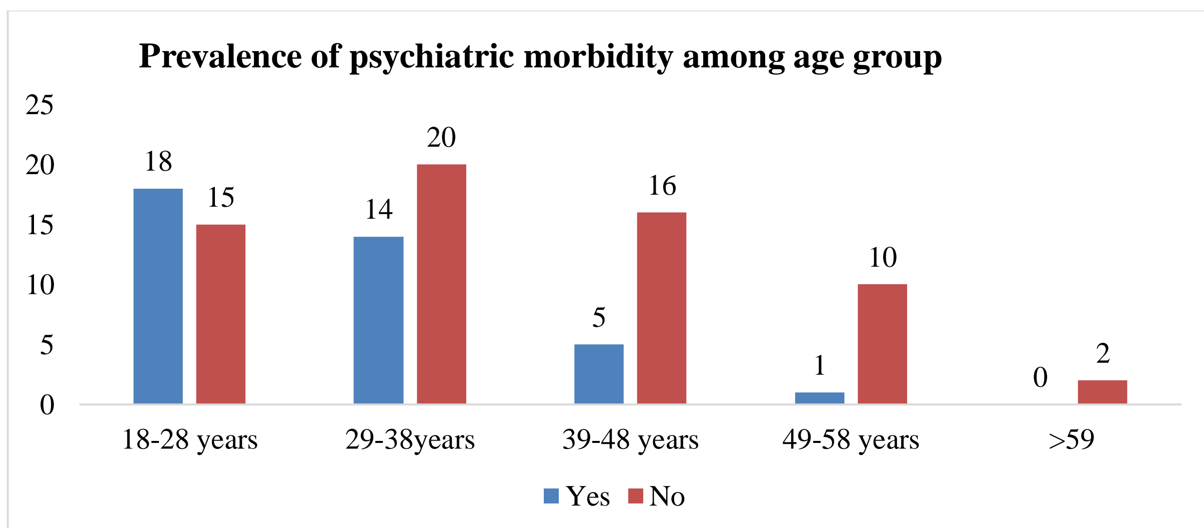
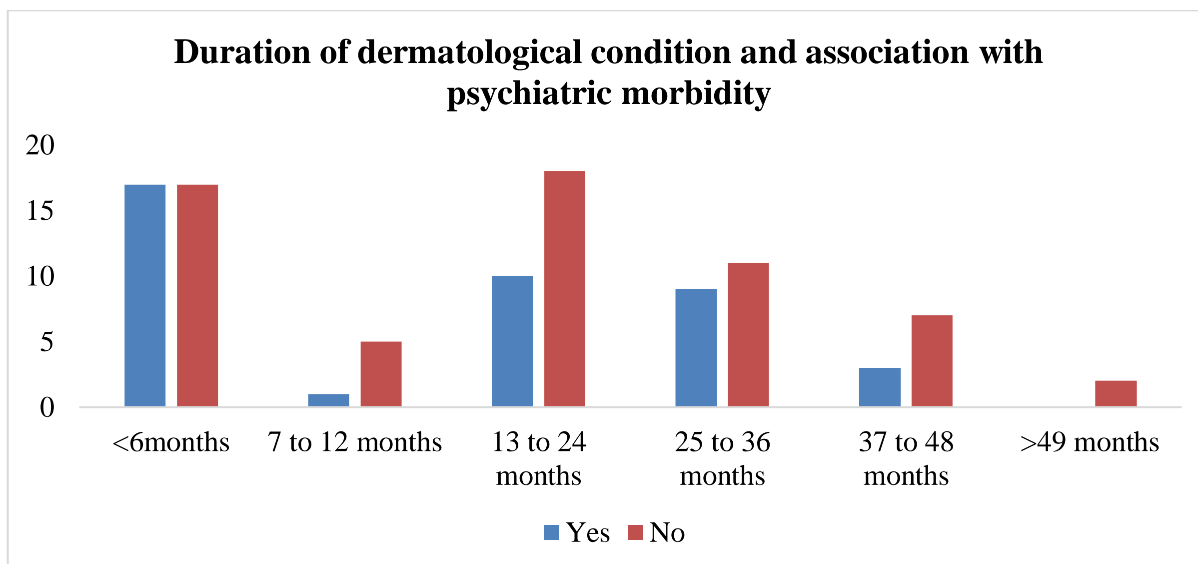


Table 6 – prevalence of psychiatric morbidity among age group:



In the present study population with various dermatological diseases, the prevalence of psychiatric morbidity as per age distribution is as follows; 40 patients (18%) seen in the age group of 18-28 years, 30 patients (14%) in 29-28 years, 12 patients (5%) in 39-48 years and 3 patients (1%) in 49-58 years. Higher prevalence of psychiatric morbidity is seen in patients with ages between 18-38 years i.e. 32% with mean age of 28 years.

Table 7- duration of dermatological condition and association with psychiatric morbidity:



220 patients were recruited into our study, males were 113 (51%) and females were 107 (49%). Higher prevalence of psychiatric morbidity is seen in 47 males (21%) than in 38 females (18%). The distribution of males and females among various dermatological conditions is as follows.

Table 8- gender:

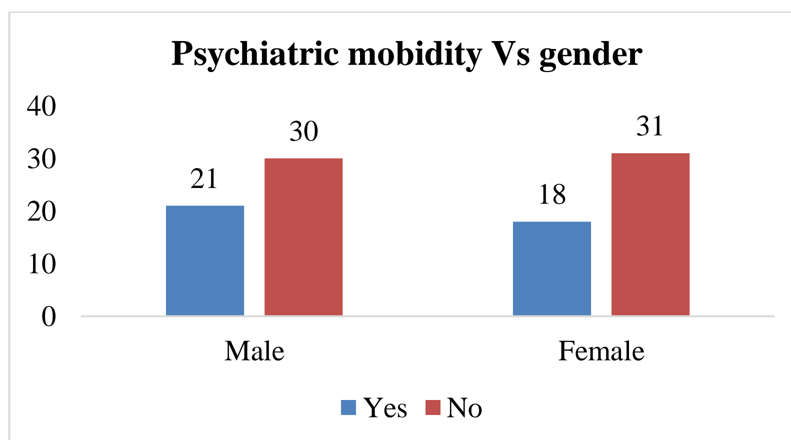
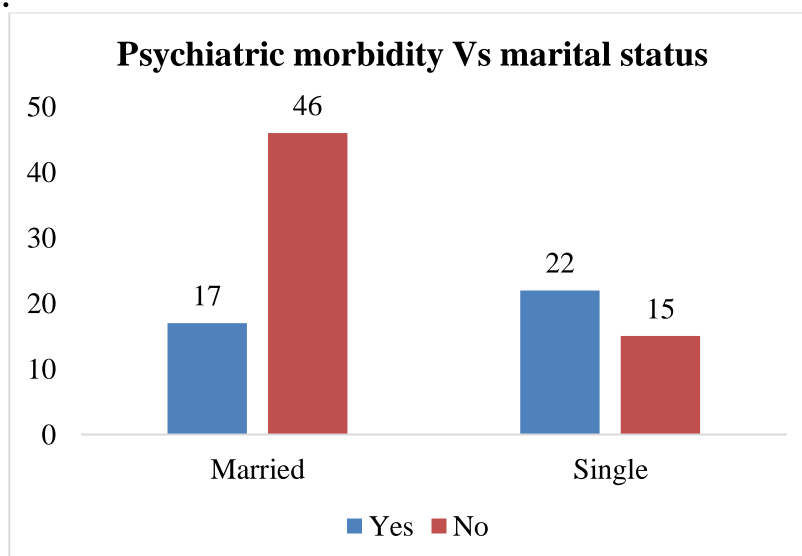
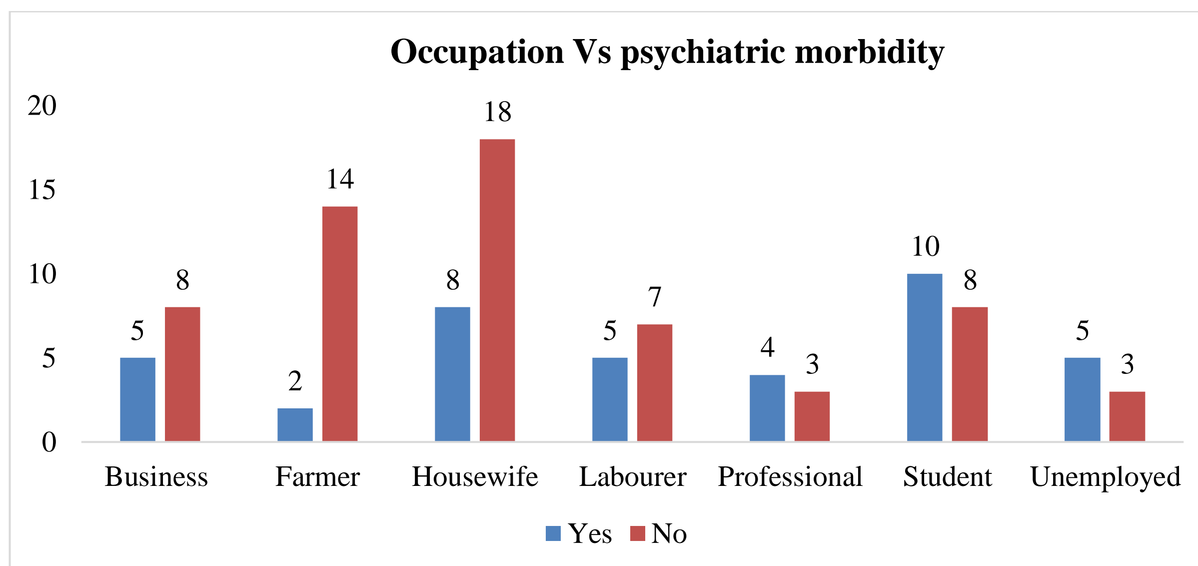


Table 9- marital status:



Among 220 patients, 140 (64%) were married and 80 (36%) were unmarried. Psychiatric morbidity is high in unmarried (46%) than in married individuals (39%).

Table 10- occupation of patients in the study:



Patients in the study occupation wise as follows, Business-29 (13%), Farmer-36 (16%), Housewife 56 (26%), Labourer-26 (12%), Professional 4 (6%), Student-41 (18%), Unemployed-18 (8%). Of these, the prevalence of psychiatric morbidity is higher among students (10%) followed by housewives (8%). In the present study prevalence of psychiatric morbidity is higher in patients with skin diseases of less than 2 years duration i.e. 28%.

DISCUSSION:

This study was done to infer the prevalence of psychiatric morbidities in patients with dermatological disorders. Woodruff et al. have reported 30 -40 % prevalence of psychiatric problems among the dermatological patients attending their clinic. [10] In the present study, conducted among 220 patients with dermatological diseases that attended the outpatient department of DVL at a tertiary care centre, 85 patients were found to have psychiatric morbidity and its prevalence to be 39% There are variations in the prevalence of the psychiatric disorder in patients with dermatological comorbidities among several studies using different methods and instruments. Hamilton Depression Rating Scale (HDRS), also known as the HAM-D and Hamilton Anxiety Rating Scale (HAM-A) are used to assess psychiatric morbidity in patients with dermatological diseases like psoriasis, acne, chronic urticaria, alopecia areata and vitiligo. [14] Studies by Seyhan et al showed depression (51.7%) and anxiety (45.5%) among patients with dermatological diseases. [11]In studies conducted by Pulimood et al depression (34%) was more prevalent. [11] Picardi et al revealed anxiety (58%) as the prevalent psychiatric morbidity. [11, 12] Studies by Sarkar et al. revealed depression as one of the psychiatric comorbidity with a prevalence of 43.75%. [16] In the present study, dermatological diseases with psychiatric morbidity in the order of decreasing frequency, vitiligo (27%) followed by acne vulgaris (25%), alopecia areata (18%), followed by psoriasis (13%) and chronic urticaria (13%). Out of 39%, Patients with anxiety (38%), depression (35%) and mixed anxiety & depression (27%). Karia *et al.* reported depression in (20%) followed by anxiety in (8%) of the patients in study. Sharma *et al.* found depression (10%) and anxiety (3.3%)in vitiligo vulgaris. [17,18] In our study patients of vitiligo vulgaris, psychiatric morbidity was (46%), mixed anxiety disorder(11%), anxiety(10%), and depression(6%). Some studies have shown that acne patients are at increased risk for depression (29.5%) and anxiety (26.2%). [15] In 46 patients with Acne,14% had depression,10% had anxiety and 1% had mixed anxiety and depression. A study by colon et al. 31 Alopecia area ta patients showed a prevalence of psychiatric disorders in 74%, with rates of depression and anxiety being 39% each. [15] A study of 50 patients reported by, Saleh et al found psychiatric illness in 36% alopecia area ta patients, with anxiety in 24% & depression in 14%. [20] In our study, of patients with psychiatric morbidity, 18% are patients of alopecia areata: Of which 8% have anxiety, 8% have mixed anxiety and depression, 2% have depression. According to a few studies, the most common psychiatric comorbidity in chronic urticaria was anxiety (30%) to be followed by depression (17%). [19] In our study, patients with chronic urticaria 8% had anxiety, 6% had depression and 1% had mixed

anxiety and depression. Seyhan et al reported higher psychiatric morbidity in married individuals. [11] In the present study, a higher prevalence of psychiatric morbidity is seen in single/unmarried patients than in married, with the mean age, having psychiatric morbidity are 28 years. Picardi et al. found higher psychiatric morbidity in females. In contrary to the present study, where the prevalence of psychiatric morbidity ranked high among males than in females. [12] Seyhan et al. reported psychiatric morbidity of 27.8% in patients with dermatological problems of more than 1 year duration. Whereas in the present study noted 28% of prevalence. [11]

LIMITATIONS: No limitation was observed in the study.

CONCLUSION:

Dermatological diseases have an impact on psychosocial well-being and are often underestimated. Skin diseases should be measured not only by their symptoms but also by their psychological and social impact. Hence, a holistic approach by monitoring the patient's mood-related changes and implementing early psychological intervention along with dermatological treatment is warranted.

ETHICAL COMMITTEE CLEARANCE:

Clearance was taken by the institutional ethics committee.

DECLERATION OF PATIENT CONSENT:

The authors have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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CONFLICTS OF INTEREST: No conflict of interest

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