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RESEARCH ARTICLE

A STUDY OF PSYCHIATRIC MORBIDITY AND QUALITY OF LIFE IN PATIENTS ATTENDING A DERMATOLOGY OUTPATIENT DEPARTMENT AT A TERTIARY CARE CENTRE IN JAMMU

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ABSTRACT

Background: Dermatology and psychiatry have an embryonic connection. Dermatological disorders are said to be associated with significant psychological distress and poor quality of life. Our study aims to find out psychiatric morbidity in a treatment seeking population in dermatology outpatient clinic. In addition, quality of life of these patients will be assessed. **Methods:** 300 outpatients with various dermatological disorders were assessed for their psychiatric morbidity and quality of life. Hindi version of the 12-item General Health Questionnaire (GHQ) and Hindi version of the Dermatology Life Quality Index (DLQI) were used. Percentages were calculated and results analysed. **Results:** More females visited the treatment facility. Acne, contact dermatitis and tinea were the commonest diagnosis in the sample. More psychiatric distress and poor quality of life was observed in chronic dermatological conditions like systemic sclerosis, psoriasis, pemphigus and vitiligo. **Conclusions:** This study has brought forward important connections between dermatological illnesses and psychiatric disorders. A holistic approach in management of dermatological illnesses including psychiatry and dermatology and is therefore warranted.

INTRODUCTION

Many dermatologists share the opinion that psychiatric disorders are frequent among subjects coming to their attention. Skin exhibits an imperative role in human mind due to its sensitivity to various emotional stimuli. Skin can be considered as a gateway through which our brain situated internally can interact with the external milieu by expressing a range of emotional reactions. This interplay amid skin and mind forms the basis of psychodermatology and can be explained on the basis of common origin i.e., neuroectoderm. This has given rise to the concept of psychodermatological or psychocutaneous disorders. A psychodermatologic disorder is a condition that involves an interaction between the mind and the skin. Psychodermatologic disorders are classified into three groups: psychophysiological disorders, primary psychiatric disorders and secondary psychiatric disorders. Psychophysiological disorders (e.g., psoriasis and eczema) are associated with skin conditions that are not directly connected to the mind but that react to emotional states, such as stress.

Primary psychiatric disorders involve psychiatric conditions that result in self-induced cutaneous manifestations, such as trichotillomania and delusions of parasitosis. Secondary psychiatric disorders are associated with disfiguring skin disorders. The disfigurement results in psychological problems, such as decreased self-esteem, depression or social phobia. Although epidemiological studies are not abundant, pioneer work in this field has already been carried out by investigators who indeed have pointed out that there is a high prevalence of psychiatric disorders in dermatological patients (Hughes *et al.*, 1983; Wessely, 1989; Attah Johnson, 1995; Aktan, 1998). However, so far most investigators have focused their attention on patients affected by specific diseases, such as psoriasis (Gupta, 1998), acne (Gupta, 1998; Van der Meeren, 1985), vitiligo (Kent, 1996), genital herpes (Carney, 1994), alopecia areata (Gupta, 1998; ColoAn *et al.*, 1991; Koo, 1994), hirsutism (Barth *et al.*, 1993) and portwine stains (Lanigan, 1989), there is a scarcity of studies using samples large enough to enable the researchers to estimate with sufficient precision the prevalence of psychiatric morbidity in dermatological patients.

Our study has been designed with the purpose of estimating psychiatric and psychological morbidity in a large sample of outpatients affected by a wide variety of dermatological diseases, attending a dermatological OPD in a tertiary care hospital. This study aims to identify those variables which are associated with the presence of psychiatric disorder in dermatological outpatients. We also wish to examine the impact of dermatological illness on quality of life of the patients.

METHODOLOGY

The study was conducted in patients attending the outpatient clinics of department of dermatology, Government Medical College, Jammu. This is by far the largest dermatological department in the Jammu Region of the state of Jammu and Kashmir. All patients aged 18 years or more attending the outpatient clinics of dermatology on predetermined days for a period of one month were given the research questionnaire, including an information letter. An informed consent was taken from the participating patients on first contact. The participants were explained in detail about the purpose, nature and utility of the study. Exclusion criteria included the refusal to participate in the study and inability to understand or answer the questions. Patients with an organic brain condition, diabetes, hypertension or any chronic systemic disease were also excluded. Research assistants trained in the questionnaires were present in the clinics' waiting rooms to provide further information and assistance in answering the questionnaire. Strict privacy was maintained by avoiding names and contact details of the participants in the study data. The anonymous questionnaire comprised of three parts. First a small section on socio-demographic variables, second the Hindi version of the Dermatology Life Quality Index (Finlay, 1994) (DLQI) and lastly the Hindi version of the 12-item General Health Questionnaire (Saxena *et al.*, 1998) (GHQ-12). DLQI developed in 1994, was the first dermatology-specific Quality of Life instrument. It is a simple 10-question validated questionnaire covering six basic topics: symptoms and feelings, daily activities, leisure, work or school, personal relationships and treatment. Each question is rated on a 4-point Likert scaling. DLQI is calculated by summing the scores of the above questions. Higher scores depict severely impaired quality of life. The GHQ-12 is a self-administered questionnaire that is designed to detect current minor, non-psychotic psychiatric disorders both in general practice settings and in the community. The 12-item version has been translated into Hindi and has been shown to be a valid and reliable instrument (Saxena, 1998). In our study we coded GHQ-12 using Likert scale and a cut off of 12 was used for the evidence of psychological distress. All subjects who gave their written informed consent were instructed to complete the questionnaire in the waiting area, and to return it to the dermatologist during the consultation. Diagnosis of the dermatological condition was made by a senior investigator after detailed history and physical examination and relevant data pertaining to the disease like duration of the disease, relapses and remissions, treatment history were also noted. Percentages were computed and descriptive statistics used as per basic assumptions.

RESULTS

A total of 371 patients attending the outpatient clinics of department of dermatology were enrolled for the study.

After applying the exclusion criterion 300 patients were selected for study and they completed the questionnaire. The dermatological diagnosis of 300 patients along with the sex distribution is given in Table 1. As can be seen acne, contact dermatitis and tinea were the commonest diagnosis present in 37(12.3%), 31(10.3%) and 26(8.6%) patients respectively. More females (192 patients, 64%) than males (108 patients, 36%) were amongst the treatment seeking population. The commonest individual diagnosis in females was melasma and in males was contact dermatitis. There were 31 patients (10.33%) who presented with acute dermatological illnesses of less than one month duration, 136 patients (45.33%) had sub-acute illnesses of duration between one month to one year and 133 (44.33%) patients had chronic illnesses of more than one year duration. On GHQ 12, 47 (15.7%) patients had severe psychological distress, 177 patients (59%) had some evidence of psychological distress and 76 patients (25.3%) had low or no psychological distress arising from their dermatological condition. Thus in total 224 patients with dermatological diagnosis had evidence of psychiatric morbidity (74.66%). Of the 133 patients who had chronic dermatological condition, 118 (88.72% of 133) had psychiatric morbidity as indicated by GHQ-12. In Sub-acute dermatological conditions 94 patients (69.12% of 136) had psychiatric morbidity. In acute dermatological illnesses 12 patients (38.71 %) had evidence of psychiatric morbidity. Severity of psychological distress in various dermatological conditions is presented in Table 2.

On DLQI, dermatological condition had no effect on quality of life in 24 patients (8%). Dermatological condition in 104 patients (34.7%) had small effect, in 87 patients (29%) had moderate effect, in 73 patients (24.3%) had very large effect and in 12 patients (4%) had extremely large effect on quality of life. Effect on quality of life in various dermatological conditions is represented in table 3. The results of DLQI in various dermatological conditions have been re-categorised into no or small effect, moderate effect and very large or extremely large effect for simplification. As can be inferred from the Table 3, DLQI score was high in chronic dermatological conditions like systemic sclerosis, psoriasis and pemphigus.

DISCUSSION

Psychodermatology, or psychocutaneous medicine, is centred around the boundary between psychiatry and dermatology. The skin and the central nervous system are embryologically related, and they share several hormones, neurotransmitters, and receptors. The skin plays a key role as a sensory organ in the socialization processes throughout the life cycle. Numerous skin changes are seen in response to emotional stimuli, and skin appearance greatly influences body image and self-esteem. For optimal management of dermatological disorders we have to understand the psychosocial and occupational context of skin diseases for their holistic treatment. The management of psychodermatologic disorders requires evaluation of the skin manifestation and the social, familial and occupational issues underlying the problem. This study was conducted to support the notion that psychological distress is high and quality of life is poor in most of the patients suffering from dermatological illnesses. The commonest diagnoses observed in our study were acne, contact dermatitis and tinea. For the ease of interpretation, eczema was clubbed with contact dermatitis in our study. Thus these findings become similar to the findings observed by some earlier studies

Table 1. Dermatological Diagnosis

Dermatological Diagnosis	Male	Female	Total (%)
Xanthelasma Palpebrum	0	21	21(7)
Warts	10	6	16(5.3)
Vitiligo	3	4	7(2.3)
Tinea	10	16	26(8.6)
Systemic Sclerosis	0	7	7(2.3)
Scabies	3	10	13(4.3)
Psoriasis	3	7	10(3.3)
Pityriasis Versicolor	1	3	4(1.3)
Pemphigus	7	6	13(4.3)
Molluscum Contagiosum	3	2	5(1.6)
Milia	1	2	3(1)
Melasma	0	30	30(10)
Lichen Planus	1	3	4(1.3)
Leprosy	4	2	6(2)
Keloid	2	8	10(3.3)
Acne	12	25	37(12.3)
Alopecia Areata	7	4	11(3.67)
Acanthosis Nigricans	0	3	3(1)
Contact Dermatitis	15	16	31(10.3)
Corn	5	0	5(1.6)
Hair Loss	1	6	7(2.3)
Photodermatitis	2	2	4(1.3)
Miscellaneous	18	9	27(9)
Total (%)	108(36%)	192(64%)	300

Table 2. Distribution of severity of psychological distress in various dermatological conditions

Diagnosis	Severe Psychological Distress (a)	Evidence Of Some Psychological Distress (b)	Low Psychosocial Distress	Psychiatric morbidity a + b (Percentage of c)	Total (c)
Xanthelasma Palpebrum		14	7	14 (66.67%)	21
Warts		10	6	10 (62.5)	16
Vitiligo	2	5		7 (100)	7
Tinea	4	14	8	18 (69.23)	26
Systemic Sclerosis	5	2		7 (100)	7
Scabies	1	9	3	10 (76.92)	13
Psoriasis	4	4	2	8 (80)	10
Pityriasis Versicolor		2	2	2 (50)	4
Pemphigus	4	9		13 (100)	13
Molluscum Contagiosum		3	2	3 (60)	5
Milia		3		3 (100)	3
Melasma	6	15	9	21 (70)	30
Lichen Planus		2	2	2 (50)	4
Leprosy		3	3	3 (50)	6
Keloid		7	3	7 (70)	10
Acne	4	28	5	32 (86.49)	37
Alopecia Areata		7	4	7 (63.64)	11
Acanthosis Nigricans	1	2		3 (100)	3
Contact Dermatitis	6	18	7	24 (77.42)	31
Corn		4	1	4 (80)	5
Hair Loss		5	2	5 (71.43)	7
Photodermatitis	2	2		4 (100)	4
Miscellaneous	8	9	10	17 (62.96)	27
Total	47	177	76	224	300

Table 3. Effect on quality of life (DLQI score) in various dermatological conditions

	No or small Effect On Patient's Life	Moderate Effect On Patient's Life	Very Large or Extremely large Effect On Patient's Life (percentage of d)	Total (d)
Xanthelasma Palpebrum	10	8	3 (14.28%)	21
Warts	10	4	2 (12.5%)	16
Vitiligo	3	0	4 (57.14)	7
Tinea	9	14	3 (11.54)	26
Systemic Sclerosis	0	0	7 (100)	7
Scabies	4	6	3 (23.08)	13
Psoriasis	1	2	7 (70)	10
Pityriasis Versicolor	2	2	0 (0)	4
Pemphigus	0	0	13 (100)	13
Molluscum Contagiosum	3	1	1 (20)	5
Milia	1	2	0 (0)	3
Melasma	21	6	3 (10)	30
Lichen Planus	3	1	0 (0)	4
Leprosy	0	2	4 (66.67)	6
Keloid	3	7	0 (0)	10
Acne	23	4	10 (27.03)	37
Alopecia Areata	5	4	2 (18.18)	11
Acanthosis Nigricans	0	3	0 (0)	3
Contact Dermatitis	7	11	13 (41.93)	31
Corn	3	2	0 (0)	5
Hair Loss	0	3	4 (57.14)	7
Photodermatitis	2	0	2 (50)	4
Miscellaneous	18	5	4 (14.81)	27
Total	128(42.67%)	87(29%)	85(28.33%)	300

(Agarwal, 2016; Kosaraju, 2015). The prevalence of non infective skin diseases was more than those of infective illnesses. This finding is also in tune with earlier studies (Agarwal, 2011; Das, 2003). Almost twice as many females were amongst the patients who completed the study. The first US Health and Nutrition Examination Survey (NHANES) found that even though prevalence of dermatological pathology is slightly more in males but they were *less* likely than *females* to *seek* medical advice (Johnson, 2012). Since our sample was from treatment seeking population thus more females are represented in our study. On GHQ 15.7% of patients had severe psychological distress where as 59% patients had some psychological distress. Similar levels of high psychological distress corresponding to psychiatric morbidity has been noted by a number of earlier studies (Koo, 2001; Aktan, 1998). Hughes *et al* and Fava *et al* reported 60% and 33% psychiatric morbidity in psychiatric inpatients respectively. These authors further reported that psychiatric outpatients had higher percentage of GHQ scores than general population (Hughes, 1983; Fava *et al.*, 1982). Our study found that 88.72% of chronic dermatological conditions had psychiatric morbidity. Studies have consistently reported high psychiatric morbidity in chronic skin disorders like psoriasis, vitiligo, systemic sclerosis alopecia areata etc (Mattoo, 2005; Hanen *et al.*, 2004).

Evidence of psychiatric morbidity was 100% in vitiligo, systemic sclerosis, pemphigus, photodermatitis and acanthosis nigricans. Psoriasis and acne also had significantly higher psychiatric morbidity at 80 % and 86.5% respectively. Vitiligo is an autoimmune disorder characterised by depigmented patches over the body. Studies have reported significant negative life events in vitiligo suggesting psychological distress may contribute to onset (Padopoulos *et al.*, 1998). People with vitiligo are embarrassed about their appearance and subject themselves to stigmatisation, self or perceived. Consequently they have reduced self image, low confidence and poor social adjustment. The psychosocial effect of acne was first recognized in 1948, when Sulzberger and Zaidens wrote, 'There is no single disease which causes more psychic trauma and more maladjustment between parents and children, more general insecurity and feelings of inferiority, and greater sums of psychic assessment than does acne vulgaris (Sulzberger, 1948)'. Acne has been shown to be significantly associated with psychological stress by a number of earlier studies (Koo, 1991; Bach, 1993).

Young males with scarring acne are prone to bouts of depression and suicidality (Cotterill, 1997). Psoriasis is an inflammatory papulo-squamous disorder characterised by erythematous scaly plaques on the body. Psoriasis is associated with poor self esteem and self stigmatisation. Five dimensions of the stigma associated with psoriasis have been identified: (1) Anticipation of rejection, (2) feelings of being flawed, (3) sensitivity to the attitudes of society, (4) guilt and shame and (5) secretiveness (Ginsburg, 1989). Psoriasis is associated with a variety of psychological difficulties, including poor self-esteem, sexual dysfunction, anxiety, depression and suicidal ideation (Basavaraj, 2010). The frequency of psychiatric disturbance decreased with improvement in the clinical severity and symptoms of psoriasis. Out of 300 patients, 42.67% of patients were perceiving either no or very small effect on their quality of life due to their skin disorder where as 57.33% of patients were having moderate to extremely large effect on their quality of life.

However this domain was severely affected in patients suffering from systemic sclerosis, pemphigus, psoriasis and leprosy. This finding can be corroborated to the studies conducted by Frantz C *et al* in systemic sclerosis, Layegh *et al* in pemphigus, Nayak *et al* in psoriasis and Govindharaj *et al* in leprosy. All these authors reported a negative impact on the quality of life in terms of disease chronicity and severity (Frantz, 2015; Layegh, 2013; Nayak, 2018; Govindharaj, 2018). Further analysis revealed that those disorders having small effect on patients life like acne, melasma, warts, xathelasma palpebrum were more commonly related to their negative cosmetic outcome where as those exhibiting higher DLQI scores were in addition concerned about their impaired daily activities, personal relationships, treatment issues like duration of stay in the hospital, frequent follow ups, longer treatment duration, treatment cost and finally outcome of the disease (like relapses in psoriasis and recurrent reaction in leprosy). All these impaired parameters affecting the patient's quality of life can lead to full blown psychological morbidities in predisposed individuals as well as hitherto also.

Conclusion

From this study, we can conclude that more than an aesthetic impairment, dermatological disorders are associated with a diversity of psychopathological problems. Dermatologists should be aware of basic psychopharmacology and should offer both pharmacological and non pharmacological interventions like stress reduction techniques, particularly in chronic non-responding dermatological conditions. A good liaison between dermatologist and a psychiatrist can improve disease outcome with better quality of life as desired by every individual.

Conflicts of Interest: None

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REFERENCES

- Agarwal S., Sharma P., Gupta S., Ojha A. 2011. Pattern of skin diseases in Kumaun region of Uttarakhand. *Indian J Dermatol Venereol Leprol.* 77:603-4.
- Aktan S., Ozmen E., Sanli B. 1998. Psychiatric disorders in patients attending a dermatology outpatient clinic. *Dermatology.*, 197: 230-4.
- Attah Johnson FY., Mostaghimi H. 1995. Co-morbidity between dermatologic diseases and psychiatric disorders in Papua New Guinea. *Int J Dermatol.*, 34: 244-8.
- Bach M., Bach D. 1993. Psychiatric and psychometric issues in acne excoriee. *Psychother Psychosom.*, 60:207-10.
- Barth JH., Catalan J., Cherry CA., Day A. 1993. Psychological morbidity in women referred for treatment of hirsutism. *J Psychosom Res.*, 37: 615-19.
- Basavaraj KH., Navya MA., Rashmi R. 2010. Relevance of psychiatry in dermatology: Present concepts. *Indian J Psychiatry.*, 52:270-5.
- Carney O., Ross E., Bunker C. *et al.*, 1994. A prospective study of the psychological impact on patients with a first episode of genital herpes. *Genitourin Med.*, 70: 40-5.
- ColoAn EA., Popkin MK., Callies AL. 1991. *et al.* Lifetime prevalence of psychiatric disorders in patients with alopecia areata. *Compr Psychiatry.*, 32: 245-51.
- Cotterill JA., Cunliffe WJ. 1997. Suicide in ermatological patients. *Br J Dermatol.*, 137:246-50

- Das KK. 2003. Pattern of dermatological diseases in Guwahati medical college and hospital Guwahati. *Indian J Dermatol, Venereol Leprol.*, 69:16-8
- Fava GA., Pilowsky I., Pierfederic A., Bernardi M., Pathak D. 1982. Depressive symptoms and abnormal illness behavior in general hospital patients. *Gen Hosp Psychiatry.*, 4: 171-8
- Finlay AY. and Khan GK. 1994. Dermatology Life Quality Index (DLQI): a simple practical measure for routine clinical use. *Clin Exp Dermatol.*, 19:210-216.
- Frantz C., Avouac J., Distler O. *et al.*, 2015. Impaired Quality of life in systemic sclerosis and patient perception of the disease: A large international survey. *Arthritis Rheumatol.* 67(suppl 10).
- Ginsburg IH., Link BG. 1989. Feelings of stigmatization in patients with psoriasis. *J Am Acad Dermatol.*, 20:53-63
- Govindharaj P., Srinivasan S., Darlong J. 2018. Quality of life of persons affected by leprosy in an endemic district, West Bengal, India. *Indian J Dermatol.*, 6363:459-64.
- Gupta MA., Gupta AK. 1998. Depression and suicidal ideation in dermatology patients with acne, alopecia areata, atopic dermatitis and psoriasis. *Br J Dermatol.*, 139: 846-50.
- Hanen MS., Samar AM., Rania S., Afaf MA. 2008. Comparative study of psychiatric morbidity and quality of life in psoriasis, vitiligo and alopecia areata. *Egypt Dermatol Online J.*, 4:45-51
- Hughes JE., Barraclough BM., Hamblin LG., White JE. 1983. Psychiatric symptoms in dermatology patients. *Br J Psychiatry.*, 143: 51-4.
- Johnson M.L.T. 1978. Skin conditions and related need for medical care among persons 1-74 years, United States, 1971-1974. Vital and Health Statistics: Series 11, No. 212. DHEW publication No. (PHS) 79-1660. US Department of Health, Education and Welfare, National Center for Health Statistics: 1-72.
- Kent G., Al'Abadie MS. 1996. Psychologic effects of vitiligo: a critical incident analysis. *J Am Acad Dermatol.*, 35: 895-8.
- Koo J., Lebwohl A. 2001. Psycho dermatology: the mind and skin connection. *Am Fam Physician.* Dec 1;64(11):1873-8.
- Koo JY., Shellow WV., Hallman CP., Edwards JE. 1994. Alopecia areata and increased prevalence of psychiatric disorders. *Int J Dermatol.*, 33: 849-50.
- Koo JY., Smith LL. 1991. Psychologic aspects of acne. *Pediatr Dermatol.*, 8:185-8
- Kosaraju SK., Reddy KS., Vadlamani N. *et al.*, 2015. Psychological Morbidity Among Dermatological Patients in a Rural Setting. *Indian J Dermatol.*, 60(6):635
- Lanigan SW., Cotterill JA. 1989. Psychological disabilities amongst patients with port wine stains. *Br J Dermatol.*, 121: 209-15.
- Layegh P., Nahidi Y., Malekzadeh I., Shakeri MT. 2013. Quality of life evaluation in patients with pemphigus vulgaris. *Iran J Dermatol.*, 16:100-104.
- Mattoo SK., Handa S., Kaur I., Gupta N., Malhotra R. 2005. Psychiatric morbidity in psoriasis: Prevalence and correlates in India. *German J Psychiatry.*, 2005;8:17-22
- Nayak PB., Girisha BS., Noronha TM. 2018. Correlation between disease severity, family income and quality of life in psoriasis: A study from South India. *Indian Dermatol Online J.*, 9:165-9.
- Padopoulos L., Bor R., Legg C., Hawk JL. 1998. Impact of life events on the onset of vitiligo in adults: Preliminary evidence for a psychological dimension in etiology. *Clin Exp Dermatol.*, 23:243-8
- Saxena S., Chandiramani K., Bhargava R. 1998. WHOQOL-Hindi: A questionnaire for assessing quality of life in health care settings in India. *The National Medical Journal of India.*, 11(4):160-6.
- Sulzberger MB., Zaidens SH. 1948. Psychogenic factors in dermatologic disorders. *Med Clin North Am.*, 32:669-85.)
- Van der Meeren HL., Van der Schaar WW., Van der Hurk CM. 1985. The psychological impact of severe acne. *Cutis* 36: 84±6.
- Wessely SC., Lewis GH. 1989. The classification of psychiatric morbidity in attenders at a dermatology clinic. *Br J Psychiatry.*, 155: 686-91.
