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Mental Health Evaluation in Dermatologic Outpatients with Chronic Pruritus

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Abstract

Background: Various studies have shown high prevalence of psychiatric disorders among dermatology outpatients and inpatients. As pruritus is the most common complaint in dermatology, we investigated the status of mental health in outpatients with chronic itch as a chief compliant.

Material and methods: We administered the Symptom Checklist-90-R (SCL-90-R)to 193 consecutive patients with chronic itch (itching more than 6 weeks), who referred to three different clinics in the city of Ahvaz. We also evaluated the relationship between occupation, itchy areas of the body, age, gender and abnormal mental health.

Results: In this study, mental health was abnormal in 55.4% of the patients. Paranoia and psychosis had the highest scores in 52.38% of the female patients and anxiety and psychosis had the highest scores in 47.83% of the male patients.

Conclusion: According to high rates of psychiatric co-morbidity in the patients with chronic itch, psychiatric and psychological interventions should be considered in these patients to improve their quality of life and mental health.

Keywords: mental health, pruritic skin diseases, Scl-90

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Introduction

In 1660, Samuel Hafenreffers defined itch or pruritus as an unpleasant sensation leading to scratch (1). Pruritus is a common symptom in skin and internal diseases. Chronic itch that ismore than six weeks can be due to skin dermatoses. In either case, numerous studies suggested the role of psychological stress in the exacerbation of skin diseases. In addition, primarily psychiatric conditions and psychological factors may also cause itching (2). Based on the relationship between the skin diseases and mental disorders,psychodermatology can be divided into three categories;1)psychologic disorders caused by skin diseases triggering different emotional status, but not directly comorbid with mental disorders(psoriasis, eczema), 2)primary psychiatric disorders responsible for self-induced skin disorders (delusions of parasitosis, trichotillomania), 3) secondary psychiatric disorders caused by disfiguring skin (ichthyosis, acne conglobata, vitiligo),which can lead to state of fear, depression or suicidal thoughts (3).

Psychiatric comorbidity in dermatology inpatients suffering from chronic itch is high (2).There are some articles in literature addressing the influence of chronic itching on psychological condition or in a reverse direction, psychological status causing itch (4,5,6,7).Self-report symptom inventories are commonly used to gather information about patients' mental status. Among different self-report instruments developed to assess current psychology, the Symptom Check List SCL-90 is the one extensively used in the field of mental health (8). Assessing psychological status of individuals through self-reports dates back to World War I, but it has been remained to be a useful tool for clinical measurement (9). Recognizing psychological role in skin manifestations depends on dermatologists'level of awareness. Sensitivity to and understanding of the influence of underlying psychological status on the disease help dermatologists manage patients more efficiently through a cooperation with psychologists. In this study, we evaluated mental health using SCL-90 questionnaire in patients with chronic pruritus who referred to three skin clinics in Ahvaz city in Iran.

Materials and methods

A consecutive sample of 193 outpatients entered the study who had referred to skin clinic of Ahvaz Jundishapur University of Medical Sciences (AJUMS) training center and two private offices. Including criteria were patients with the symptom of pruritus lasting more than six weeks and over 14 years of age. Excluding criteria were addiction and mental retardation. The study had gained the approval of the ethical committee of Ahvaz Jundishapur University of Medical Sciences(AJUMS) and written informed consents were obtained from all the participants. The patients were examined by a dermatologist to diagnose their skin condition. General psychological morbidity was measured by the Symptom Checklist-90(SCL-90). The questionnaire consists of 90 questions arranged in eight subscales: somatization, obsessive-compulsive behavior, distrust and interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, and sleeping problems. A five-point Likert scale was used to identify the severity of participants' complaint. The sum score of the SCL-90 can be considered a measure of general mental health status (10). To measure global severity index (GSI) we divide the sum score to 90, which is the total number of the questions. Data were analyzed using SPSS 17.0 for windows (SPSS Inc., Chicago, IL, USA).The chi-

square test was used to analyze the differences among groups in categorical variables. P value less than 0.05 was considered significant.

Results

In all, 200 patients were entered into the study, 193 of which completed the questionnaires. In this study, mental health was abnormal in 55.4% of all the patients. The mean age of participants was 29.37±11.10 years (14-67) and 75% were women, 48.3% single, 50.3% married and 0.5% widowed. Mean diseases duration was 34.69 months. There was no significant relationship between age and abnormal GSI in either males or females (p=0.619 and 0.81, respectively). In addition, we did not find any meaningful relationship between health status and occupation of the patients. However, in females, abnormal GSI was most frequent among the homemakers (27%) and then in students (13%). Unemployed male participants showed the highest abnormal GSI frequency in the male group. Abnormal GSI was found in 58.5% of the women and 45.7% of the men.We did not find any relationship between occupation and GSI. Among the participants, 37 of women (25%) with abnormal GSI reported genital itching and 25% on extremities. In this study, 10 patients (5%) had already referred to psychiatrists due to prominent psychiatric problems and 1% had been admitted in psychiatric wards. The most frequent skin diseases are shown in Table 1. Other diseases observed in participants were less than 4.7% in frequency and included neurotic excoriation(2.5%), psychological pruritus, erythrasma, and acne all 1.6% and superficial fungal infections, pediculosis, lichen nitidus, scabies, intertrigo, nickel dermatitis, mycosis fungoides, pityriasis rosea, lichen planus all 0.5%. Chi square test did not show significant difference between mental health and age, gender, anatomic site of itching and patients' job (p>0.05). The most frequently reported skin diseases were eczema (32.1%), atopic dermatitis (14%), lichen simplex chronicus (11.4%), psoriasis (11.4%) and seborrheic dermatitis (8.3%). Abnormal health status in different subscales of SCL-90 questionnaire for four most frequent diseases is presented in Table 2.Figure1 and 2 show the frequency of SCL-90 dimensions among the female and male participants.

Table 1.The frequency of different skin diseases in the study

Skin disease	Frequency	Percent (%)
Eczema (other kinds)	62	32.1
Atopic dermatitis	27	14
Lichen simplex chronicus	22	11.4
Psoriasis	22	11.4
Seborrheic dermatitis	16	8.3
Chronic urticaria	9	4.7
Generalized itching	7	3.6
Neurotic excoriation	4	2.1
Psychological pruritus	3	1.6
Erythrasma	3	1.6
Acne	3	1.6
Superficial fungal infection	2	1
Pediculosis	2	1
Lichen nitidus	1	0.5
Scabies	1	0.5
Intertrigo	1	0.5
Nikle dermatitis	1	0.5
Mycosis fungoides	1	0.5
Pityriasis rosea	1	0.5
Lichen planus	1	0.5
Total	189	97.9
Missing data	4	2.1

Table 2.Percentage of abnormal various dimensions of SCL-90 questionnaire in four most frequent skin diseases in our study

		Numberof patients	SOM	OC	IP	DEP	ANX	AGG	PHOB	PARA	PSY	GSI
Psoriasis	F	15	45.45	36.36	36.36	50	40.9	36.36	54.5	40.91	53.30	46.70
	M	6	45.5	36.4	40.91	59.10	63.6	54.5	59.1	40.9	54.5	59.1
Atopic eczema	F	22	54.2	54.2	54.2	50	50	45.8	58.3	62.5	62.5	58.3
	M	3	66.7	51.9	0	55.6	66.7	44.4	63	59.3	59.3	74.1
LSC	F	19	47.4	47.4	63.2	42.1	63.2	52.6	63.2	68.4	63.2	68.4
	M	3	59.1	40.9	33.3	54.5	68.2	54.5	63.6	63.6	59.1	68.2
Seborrheic dermatitis	F	11	18.2	45.5	36.4	36.4	63.6	45.5	18.2	27.3	27.3	54.5
	M	6	43.8	43.8	31.3	37.5	56.3	43.8	37.5	31.3	31.3	62.5

SOM: Somatization, OC:Obsessive-Compulsive, IP:Interpersonal sensitivity, DEP:Depression, Anx: Anxiety, AGG:Aggression, PHOB:Phobic anxiety, PARA:Paranoid, PSY:Psychosis, GSI:Global Severity Index, F=Female, M=Male, LSC=Lichen Simplex Chronicus

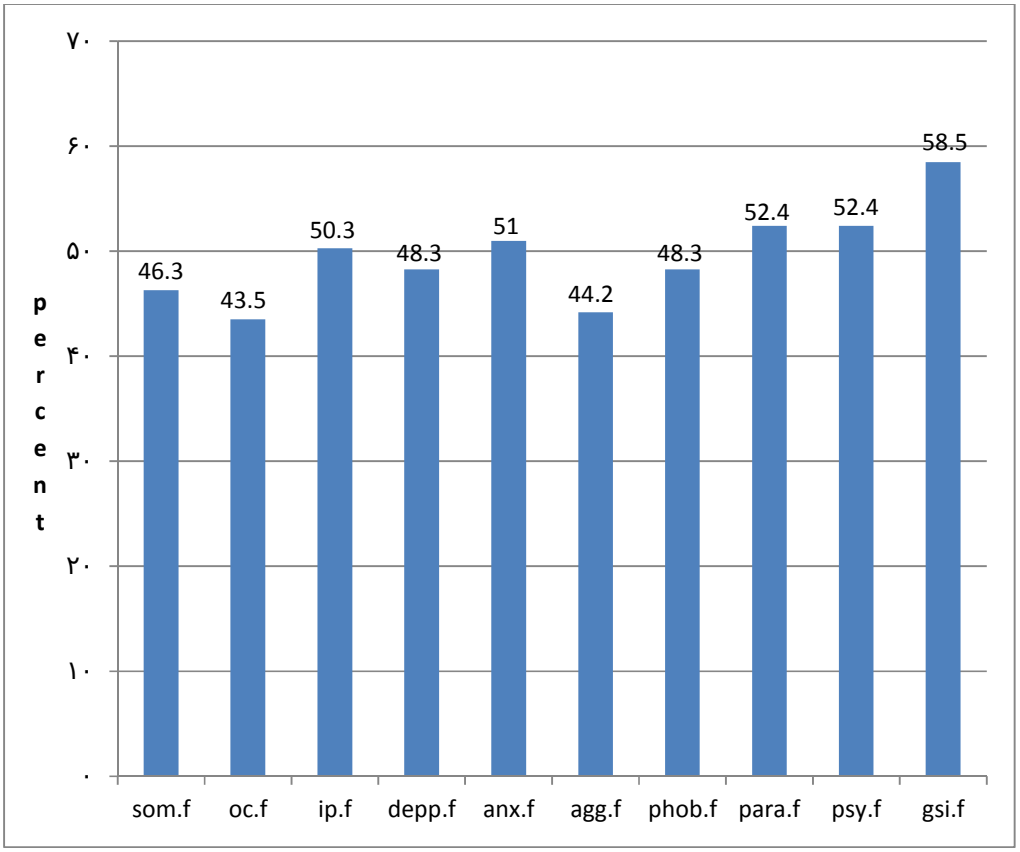

Figure 1.Percentage of female patients with no mental health based on SCL-90
som:Somatization, oc:Obsessive-Compulsive, ip:Interpersonal sensitivity, dep:Depression, anx:Anxiety, AGG:Aggression, phob:Phobic anxiety, para:Paranoid, psy:Psychosis, gsi:Global Severity Index, f=Female, m=Male, lsc=Lichen Simplex Chronicus

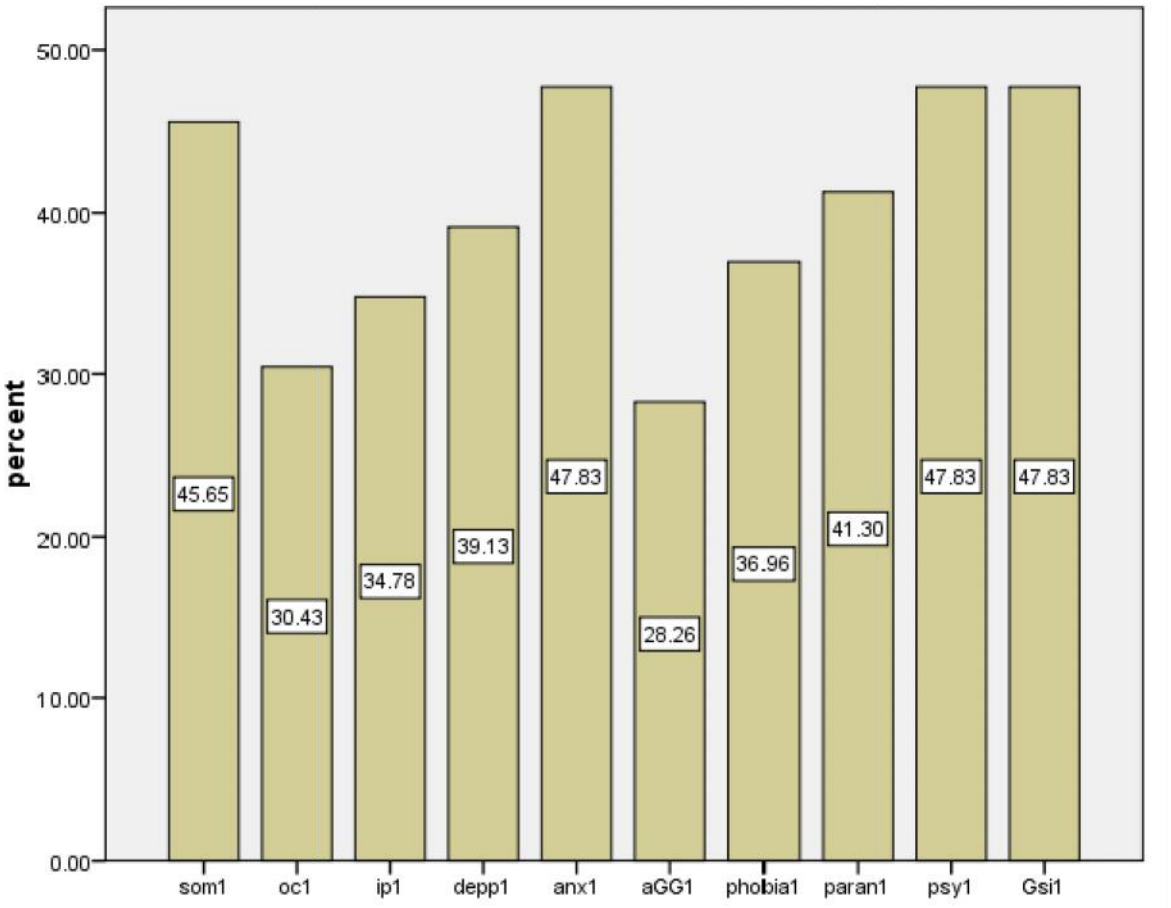

Figure 2.Percentage of male patients with no mental health based on SCL-90

som:Somatization, oc:Obsessive-Compulsive, ip:Interpersonal sensitivity, dep:Depression, anx:Anxiety, AGG:Aggression, phob:Phobic anxiety, para:Paranoid, psy:Psychosis, gsi:Global Severity Index, f=Female, m=Male, lsc=Lichen Simplex Chronicus

Table 3.The most frequent skin diseases in the study

Skin disease	Frequency	Percent (%)
Eczema (other kinds)	62	32.1
Atopic dermatitis	27	14
Lichen simplex	22	11.4
Chronicus	22	11.4
Psoriasis	16	8.3
Sebborrheic/dermatitis	9	4.7
Chronic urticaria	9	4.7
Generalized itching	9	4.6

Discussion

Itching or pruritus has multifactorial causes including dermatological, internal, neurological or psychological disorders. Various studies have shown the role of psychosomatic factors and psychiatric comorbidities in eliciting or aggravating itching. Usually dermatologists do not consider psychological factors in managing itchy skin disorders and psychological comorbidities often remain unrecognized in dermatology patients.

According to the *international classification of diseases*, 10th revision (ICD-10), diagnoses related to itch are predominantly psychogenic pruritus (F44-F45), pruritus in dermatological illness for which psychological factors may play a role (F54), problems in coping with chronic pruritus (F43), comorbidity with other psychiatric illness (F10-F19,F40-F41,F32-F33) and personality disorders (F60). Regarding ICD-10, many patients referring with the symptom of itch can be said to have mental comorbidity or their mental health influenced by chronic itch (2).

Schneider et al. investigated mental health in outpatients with chief complaint of chronic itching referred to dermatology clinics. They found 1-6 psychiatric diagnoses in more than 70% of patients. This result is close to the study done by Van OS-Mendendorp et al. who measured general psychological morbidity with the Symptom Checklist-90 (SCL-90). They found higher SCL-90 scores than a healthy Dutch population in patients with pruritic skin diseases (10). Schneider et al. reported chronic pruritus, prurigo nodularis and atopic dermatitis to be the most common diseases causing itch found in over 70% of the patients (40.5%, 25.7% and 13.8%, respectively). They used Global Assessment Foundation (GAF) scale and psychiatric diagnoses were based on investigators interview. They found depressive disorders in 10.1%, adjustment disorders in 22.9% and psychological factors associated with other disorders in 46.8% of all the patients (2). In the present study, we found abnormal GSI in 55.4% of the patients. The frequency of depression among our patients with lichen simplex chronicus (42.1% of females and 54.5% of males) and anxiety among psoriatics (40.9% in females and 63.6% in males) are significant hints to consider psychological status in the management of these patients.

We did not find significant relationship between mental health and job, area of itching, age and gender. A small number of the patients in subgroups can affect the significance of the above-mentioned relationship. Conducting further studies on subgroups for evaluating the relation between job, site of pruritus and gender are amenable. In our study, atopic dermatitis, lichen simplex chronicus, psoriasis and seborrhoeic dermatitis had more frequency than other diagnosis. Percentages of patients with undesirable scores in these four disorders are available in Table2. It has long been believed that emotional upset could induce lichen simplex chronicus, but the other three diseases that are highly influenced by psychological status of the patients are also recommended to be managed with corporation of dermatologists and psychologists. Whether these chronic skin diseases influence psychological manner or independent psychological factors modifies disease symptoms, significant role of mental status in the management of these patients cannot be ignored.

There are many manuscripts addressing the correlation between psychological status and itching. It has been reported that psychiatric and psychological factors play a significant role in at least 30% of dermatologic disorders (11). Neimer et al. found the influence of stress on 47.52% of patients with hand eczema (12).Even though, there is

recently an increased awareness of the relationship between emotional or psychiatric states and itching, dermatologists do not seem to take into account psychological state of itchy patients as much as needed. Dermatologists should remember that patients with dermatologic conditions are found to experience a higher rate of psychiatric illness than the general population (12).The limitations in this study were small number of participants in each disease group. In addition, the participants were only those referring to outpatient centers and sampling of the whole chronic itch population was not performed.

In conclusion, it can be stated that this study is in line with other studies revealing the importance of considering mental and psychological factors in dermatology patients suffering from chronic itch. That is to manage such patients more efficiently and help them get their health and coping skills.Patients with chronic pruritus should have psychiatric consultation as well as dermatological care.

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