Prevalence and Severity of Obsessive-Compulsive Disorder and Their Relationships with Dermatological Diseases

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Abstract- Most obsessive-compulsive disorder (OCD) patients meet psychiatrists 5 to 10 years after onset of OCD .Its relatively high prevalence ratio and the delay in seeking help suggest that patients with OCD may seek help at non-psychiatric clinics. The present study was undertaken to provide some epidemiological data on the prevalence and severity of OCD in dermatological patients. The participants included 265 consecutive patients with primary dermatologic chief complaint. They were visited by a dermatologist and diagnosis of dermatological lesion was done according to ICD-10. All patients were visited by a psychiatry resident and were screened for OCD using the structured clinical interview for DSM-IV-TR (SCID-I). If the diagnosis of OCD has been made, the Yale-Brown obsessive compulsive scale(Y-BOCS) was used to evaluate the severity of OCD. To analyze the data student t-test for quantitative variables and X2 tests for categorical variables. From the total of 265 patients, 24 (9.1%) met the DSM-IV-TR criteria for OCD and 9 (37.5%) with OCD had previously been diagnosed with OCD, however, only three were treated pharmacologically. The most symptoms were pathological doubt (29.1%), fear of contamination (29.1%) and washing (54.16%). Severity of OCD according to Y-BOCS was evaluated among patients with OCD. Six (25%) were found with subclinical OCD, 11(45.8%) had mild OCD, six (25%) had moderate OCD, and one (4.2%) was detected with severe OCD. prevalence of OCD in dermatology clinic was higher compared with general population.

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Introduction

Obsessive-compulsive disorder (OCD) is represented by a diverse group of symptoms such as intrusive thought, rituals, preoccupations and compulsions. These recurrent obsessions or compulsions cause severe distress to the person (1). The rates of OCD are fairly consistent, with lifetime prevalence in the general population estimated at 2 to 3 percent. Some researchers have estimated that the disorder is found in as many as 10 percent of outpatients in psychiatric clinics (2). Lifetime prevalence of OCD for general population was recorded at 1.8 percent and is estimated at 6 percent in psychiatric clinics in Iran (3,4).

In spite of high prevalence of OCD, most OCD patients meet psychiatrists 5 to 10 years after onset of OCD (5,6). Its relatively high prevalence ratio and the delay in seeking help suggest that patients with OCD may seek help at nonpsychiatric clinics. Such patients occasionally present to outpatient departments of dermatology with dermatological signs and symptoms (7).These expressions which are known as dermatological or dermo-OCD was divided by Koblenzer into two groups of obsessions and compulsions. According to this grouping, hair loss, looking ugly, sexually transmitted diseases, skin cancer, fungal infection, AIDS and acne scars might be examples of obsessions, trichotillomania, neurotic excoriations, onychotillomania, lip licking, localized neuro-dermatitis or irritant dermatitis caused by frequent hand washing may meet the criteria for compulsive behaviors (7).

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This descriptive study was undertaken to provide some epidemiological data on the prevalence and severity of OCD in dermatological patients and evaluation of any possible relationship between dermatological lesions and OCD. Also, the clinical and phenomenological features of the OCD subgroup were determined.

Materials and Methods

This study was conducted during a period of one year from 2011 to 2012 in a dermatology clinic affiliated to Mazandaran University of Medical Sciences. The participants included 265 consecutive patients with primary dermatologic chief complaint. The patients older than 18 years of age who had the physical and mental competence for psychiatric interview and agreed to participate in the study were recruited.

The subjects were given a detailed explanation of the aims of study, then, they were visited by a dermatologist and diagnosis of dermatological lesion was done according to ICD-10.All patients were visited by a psychiatry resident and were screened for OCD using the structured clinical interview for DSM-IV-TR (SCID-I) (8). If the diagnosis of OCD has been made, the Yale-Brown obsessive compulsive scale (Y-BOCS) (9) was used to evaluate the severity of OCD. A detailed dermatological evaluation was carried out in all patients.

To analyze the data student t-test for quantitative variables and X2 tests for categorical variables were used using SPSS V.10.

Results

The samples consisted of 265 outpatients in dermatology clinic. The demographic a feature of the total sample is shown in table 1. From the total of 265 patients, 24 (9.1%) met the DSM-IV-TR criteria for OCD and 9 (37.5%) with OCD had previously been diagnosed with OCD, however, only three were treated pharmacologically.

Table 1. Demographic features of total sample, OCD and non-OCD group

		Total sample (N=265)	OCD group (n=24)	Non-OCD group (n=241)	*P*
Age		30.6+10.9	28.6+9.4	30.8+11.1	0.35
Gender	**Male**	34(12.8%)	5(14.7%)	29(85.3%)	0.18
	Female	231(87.2%)	19(8.2%)	212(91.8%)	
Marital Status	**Married**	147(55.5%)	9(6.2%)	137(93.8%)	0.42
	Single	133(42.6%)	13(11.5%)	100(88.5%)	
	Widow/Divorces	5(1.9%)	2(40%)	3(60%)	
Education	**Primary**	14(5.3%)	2(14.3%)	12(85.7%)	0.83
	Guidance School	13(4.9%)	1(7.7%)	12(92.3%)	
	High School	66(24.9%)	7(10.6%)	59(89.4%)	
	College	172(64.9%)	14(8.1%)	158(91.9%)	
Profession	**Officer**	60(22.6%)	6(10%)	54(90%)	0.84
	Housewife	87(32.8%)	9(10.3%)	78(89.7%)	
	Worker	4(1.5%)	1(25%)	3(75%)	
	Student	58(21.9%)	4(6.9%)	54(93.1%)	
	Self-employed	30(11.3%)	2(6.7%)	28(93.3%)	
	Unemployed	26(9.8%)	2(7.7%)	24(92.3%)	

The most commonly occurring obsessions were pathological doubt (29.1%), fear of contamination (29.1%) and washing (54.16%). Table 2 shows the distribution of obsessions and compulsions in OCD group. Aggression, somatic, hoarding, religious, and ordering problems were assessed. However, none of these obsessions and compulsions was seen among OCD patients.

Severity of OCD according to Y-BOCS was evaluated among patients with OCD. Six (25%) were found with subclinical OCD, 11 (45.8%) had mild OCD, six (25%) had moderate OCD, and one (4.2%) was detected with severe OCD. Distribution of OCD in dermatological diagnosis is shown in Table 3.

Table 2. Distribution of obsessions and compulsions in OCD group (n=24)

Obsessions	N	%
Pathological doubting	7	29.1
Contamination	7	29.1
Symmetry	1	4.16
Sexual	1	4.16
Miscellaneous	2	8.32
Compulsions		
Washing	13	54.16
Checking	7	29.1
Counting	2	8.32

Table 3. Distribution of dermatological diagnosis in the whole sample

OCD group	Non-OCD group			
	N=24	N=241	X^2	P
Cosmetic	4	23	--	--
Diseases of the skin appendages	5	99	--	--
Erythema and urticaria	1	4	--	--
papulosquamo disorder	0	16	--	--
eczema, atopic dermatitis	5	30	8.75	0.27
blistering dermatosis	0	2	--	--
bacterial infections	4	20	--	--
others	5	47	--	--

Discussion

Psychodermatology addresses the interaction between mind and skin. Psychiatry is more focused on the "internal" non-visible disease, and dermatology is focused on the "external" visible disease. In more than one third of dermatology patients, effective management of the skin condition involves consideration of associated psychological factors (10). But, OCD is not diagnosed as frequently as anxiety and depression by dermatologists (7).

This study mainly aimed at determining the prevalence of OCD among dermatological outpatients. The prevalence of OCD among patients attending outpatients departments of dermatology was found to be 9.1% according to DSM-IV-TR. Omranifard *et al.,* (11) reported a prevalence rate of 22.1% in a study carried out in Isfahan, Iran. Different studies investigating this issue found different results, for example, Finberg *et al.,* (12) observed OCD among 20% and in a study conducted in Turkey the prevalence rate was 24.7% (7).Prevalence of OCD in general population was estimated at 2-3% and is estimated at 4.7-6% in Iranian general population (4).Previous studies indicate that OCD is a psychiatric disorder that is shown in a high proportion of dermatological outpatients. In our study, prevalence of OCD was higher compared with general population, although it is lower than reported incidence rate among dermatology outpatients in other studies.

The difference in the prevalence of OCD indicates a difference in cultural and local believes. Also, the high incidence of referrals to dermatology clinics signifies that clinical symptoms of OCD are very much similar to other psychiatric disorders which mainly presents physical discomfort and referring to nonpsychiatric clinics. Moreover, OCD patients have more health concerns and are more likely to consult with doctors.

In this study 24 patients were diagnosed with OCD of whom nine cases (37/5%) were previously diagnosed with OCD, five (21%) patients had a history of medication for OCD. In the study carried out by Demmet *et al.* and Finberg *et al.* (85%) and (94.4%) cases, respectively were not diagnosed as OCD patients (7,12). Also, in the study performed by Omranifard *et al.,* no patient was found with previous diagnosis of OCD. These low numbers could be due to lack of awareness among patients with OCD, delayed consultation with psychiatrist and delayed diagnosis. In the present study there was no significant difference in the prevalence of OCD among male (14.7%) and female (8.2%) (P=0.18). The number of male patients was substantially lower than female (male= 34, female= 231) but the incidence rate of OCD is reported similar among men and women. The demographic features (age, marital status, educational background, location of residency) of patients with OCD were not different compared to that of other patients attending dermatology clinics. In another study conducted in Iran no relationship was found between the prevalence of OCD and marital status (11). However, in epidemiologic studies OCD is observed more in single population and is considered as one of the main reasons for having no desire for marriage since it could cause problems in relationship. The difference in aforementioned results is probably due to cultural differences (1). In the present study, the most common symptoms were washing and checking and doubting. In the study of Omranifard *et al.,* washing and contamination were the most common complaints (11). Some other studies also observed compulsive washing among patients with dermatology problems (7,12). It was also reported as the commonest complaint among OCD patients in psychiatry clinics (13,14)

The most prevalent complaint of patients in this study was skin appendages (hair and nails), and then dermatitis (contact dermatitis, *seborrheic* and atopic)

and eczema. Other studies also found similar results (7,11). The present study found no significant correlation between dermatology diseases and the prevalence of OCD. This result was in line with the results drawn from the study of Finberg *et al.,* (12). In the study of Omranifard *et al.,* a significant relationship was detected between nail diseases (fragility, hang nail, paronychia) and OCD. They concluded that obsessive washing was probably the main reason triggering nail diseases (11). Others however, associated OCD with other dermatology complaints such as Acne excoriee, sebaceous disorder (7,15). Different theories exist on the relationship between OCD and dermatology diseases. In fact some scholars do not believe OCD as the etiology of some dermatology lesions but argue that dermatology diseases are sometimes accompanied by OCD (16). The psychopathology of this association remains unclear thereby. Gupta *et al.,* mentioned psychiatry pressure associated with dermatology disorders as the reason for OCD (17). However, it is important to consider the relation between these issues, since skin disorder might have existed before OCD and sometimes there are overlaps in the symptoms related to OCD and dermatology problems which could be the secondary complication of OCD. Obsessive compulsive disorder could result in poor body image which leads to obsessive thoughts regarding physical diseases. Consequently, these patients will consult dermatologists more frequently (18). Therefore, further studies are recommended to confirm the psychopathological association between OCD and dermatologic diseases.

References

1. Sadock BJ, Sadock VA, editors. Synopsis of psychiatry.10th ed. New York: Lippincott Williams& Wilkins; 2007: p. 604.
2. Sadock BJ, Sadock VA. Comprehensive Textbook of Psychiatry. 9th ed. New York: Lippincott Williams& Wilkins; 2009: p. 1858.
3. Dadfar M. Comorbidity of personality disorder and obsessive compulsive disorder [Dissertation]. Tehran Psychiatry Instit., 1998.
4. Azimi A, Shakibaei F, Movahed Abtahi SM. The obsessive - compulsive disorder: prevalence and therapy in psychiatric clinic clients at Nour hospital of Isfahan (1995-1997). Journal Qazvin Univ Med Sci 2004;8(3):73-9.
5. McClure-Tone EB, Pine DS. Clinical Features of the Anxiety Disorders. In: Sadock BJ, Sadock VA, Ruiz P, editors. Kaplan and Sadock's Comprehensive textbook of psychiatry. 9th ed. New York: Lippinoutt Williams & Wilkins; 2009: p. 1844-55.
6. Merikangas KR, Kalhydjian AE. Epidemiology of Anxiety Disorder. In: Sadock BJ, Sadock VA, Ruiz P, editors. Kaplan and Sadock's Comprehensive textbook of psychiatry. 9th ed. New York: Lippinoutt Williams & Wilkins; 2009:p. 1856-63.
7. Demet MM, Devici A, Taskin EO, et al. Obsessive-Compulsive disorder in a dermatology outpatient clinic. Gen Hosp Psychiatry 2005;27(6):426-30.
8. First MB, Gibbon M, Spitzer RL, et al, editors. Structured Clinical Interview for DSM-IV-TR Axis I Disorders. Washington, DC: American Psychiatric Press; 1997: p. 10.
9. Goodman WK, Price LH, Rasmussen SA, et al. The Yale-Brown obsessive Compulsive scale. I. Development, use, and reliability. Arch Gen Psychiatry 1989;46(11):1006-11.
10. Jefferany M. Psychodermatology: a guide to understanding common psychocutaneous disorders. Prim Care Companion J Clin Psychiatry 2007;9(3):203-10.
11. Omranifard V, Kheirabadi GHR, Movahed Abtahi SM, et al. Obsessive compulsive disorder among outpatient referrals to dermatologic clinics of Isfahan. Ofogh-e-Danesh J 2007;13(2):52-6.
12. Finberg NA, O'Doherty C, Rajagopal S, et al. How common is obsessive-compulsive disorder in a dermatology outpatient clinic? J Clin Psychiatry 2003;64(2):152-5.
13. Dadfar M, Bolhari J, Malakooti K, et al. Prevalence of obsessive compulsive symptoms. J Psychiatry Clin Psycol 2001;7(1):27-32.
14. Saleem S, Mahmood Z. OCD in cultural context: A phenomenological approach. Pakistan J Psychol Res 2009;24(1-2):27-42.
15. Monti M, Sambvani N, Sacrini F. Obsessive-compulsive disorders in dermatology. J Eur Acad Dermatol Venerol 1998;11(2):103-8.
16. Gupta MA, Gupta AK. Psychodermatology: an update. J Am Acad Dermatol 1996;34(6):1030-46.
17. Gupta MA, Gupta AK, Ellis CN, et al. Psychiatric evaluation of the dermatology patient. Dermatol Clin 2005;23(4):591-9.
18. Kobelenzar CS. Psychiatric syndromes of interest to dermatologists. Int J Dermatol 1993;32(2):82-8.