

Prevalence of Obsessive-Compulsive Disorder in Patients Followed in Dermatology: A Cross-Sectional Descriptive Study of 200 Cases

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ABSTRACT: **Background:** Obsessive-compulsive disorder (OCD) is a prevalent and disabling psychiatric condition. The relationship between dermatological diseases and psychiatric comorbidities has been increasingly recognized, yet data on OCD prevalence in dermatology settings remain limited, particularly in North African populations. **Objective:** To determine the prevalence of OCD among patients consulting in dermatology and to analyze its association with chronic dermatoses. **Methods:** This cross-sectional descriptive study included 200 adult patients consulting at the Dermatology Department of Avicenna Military Hospital in Marrakech, Morocco. OCD was diagnosed according to DSM-5 criteria and confirmed using the Mini International Neuropsychiatric Interview (MINI) 7.0. Dermatoses were classified as acute or chronic. Statistical analysis was performed using SPSS 25. **Results:** The prevalence of OCD was 14% (n=28). OCD was more frequent in women (17%) than in men (10%) (p=0.08). Patients with chronic dermatoses had a significantly higher prevalence of OCD (20%) compared to those with acute dermatoses (8%) (p=0.01). The most common OCD subtypes were checking compulsions (39%), contamination obsessions (32%), and repetitive behaviors (29%). **Conclusion:** OCD is a frequent comorbidity in dermatology settings, particularly among patients with chronic dermatoses. These findings underscore the importance of systematic screening and integrated psychiatric-dermatological care.

Keywords: Obsessive-compulsive disorder; dermatology; chronic dermatoses; psychiatric comorbidity; psychodermatology; DSM-5

INTRODUCTION

Obsessive-compulsive disorder (OCD) is a chronic psychiatric condition characterized by the presence of obsessions, compulsions, or both, causing significant distress and functional impairment [1]. According to the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5), obsessions are defined as recurrent and persistent thoughts, urges, or images that are experienced as intrusive and unwanted, while compulsions are repetitive behaviors or mental acts that an individual feels driven to perform in response to an obsession [1]. The global lifetime prevalence of OCD is estimated between 1% and 3% [2,3].

The field of psychodermatology has emerged as a bridge between dermatology and psychiatry, recognizing the strong bidirectional relationship between skin and mental health [4,5]. Both the skin and central nervous system originate from the same embryonic ectoderm layer, establishing an intricate anatomical and functional connection [6]. Chronic dermatological conditions can have profound psychological impacts, affecting quality of life through mechanisms including visible disfigurement, persistent pruritus, social stigmatization, and body image concerns [7,8].

Several studies have documented higher rates of psychiatric comorbidities in dermatology settings compared to the general population. A multicenter European study reported that depression affects 10% of dermatological patients compared to 4.3% of controls, while anxiety was present in 17.2% of patients [9]. Furthermore, psychodermatological research has demonstrated that more than one-third of dermatological patients present with psychological comorbidities [10,11]. Chronic inflammatory skin diseases such as psoriasis, atopic dermatitis, and hidradenitis suppurativa are particularly associated with psychiatric disorders including anxiety, depression, and obsessive-compulsive symptoms [12,13].

Regarding OCD specifically, prevalence studies in dermatology clinics have yielded variable results ranging from 9.1% to 24.7% depending on the population studied and diagnostic methodology employed [14-17]. Fineberg et al. found a 20% prevalence of previously undiagnosed OCD in a British dermatology outpatient clinic [14], while Demet et al. reported a 24.7% prevalence in Turkish patients [15]. In Iran, Sheikmoonesi et al. documented a 9.1% prevalence using DSM-IV-TR criteria [16]. These rates substantially exceed the general population prevalence, suggesting that dermatological settings may represent an important but underrecognized context for OCD presentation.

OCD manifesting in dermatological contexts frequently involves specific symptom patterns including contamination obsessions, excessive washing or grooming behaviors, skin-picking (excoriation disorder), hair-pulling (trichotillomania), and body dysmorphic concerns related to perceived skin imperfections [18-20]. The relationship between OCD and dermatological diseases appears particularly pronounced in chronic conditions, where prolonged disease duration, treatment burden, and psychosocial impact may contribute to the development or exacerbation of obsessive-compulsive symptoms [21,22].

Despite growing awareness of psychodermatological comorbidities, systematic data on OCD prevalence in dermatology settings remain limited, particularly in North African and Moroccan populations. Most patients with OCD seek psychiatric consultation 5 to 10 years after symptom onset [23], suggesting that many may initially present to non-psychiatric specialists including dermatologists. Early recognition and treatment of OCD in dermatology settings could significantly improve patient outcomes and quality of life.

The primary objective of this study was to determine the prevalence of OCD among patients consulting in a dermatology department at a Moroccan military hospital. Secondary objectives included analyzing the association between OCD and chronic dermatoses, characterizing OCD symptom subtypes, and examining gender differences in OCD prevalence within this population.

METHODS

Study Design and Setting

This cross-sectional descriptive study was conducted over a six-month period in the Dermatology Department of Avicenna Military Hospital in Marrakech, Morocco. The study protocol was approved by the hospital ethics committee, and all participants provided written informed consent prior to enrollment.

Participants and Sampling

The study population consisted of 200 consecutive adult patients (aged ≥ 18 years) consulting for dermatological conditions. Inclusion criteria required participants to be French- or Arabic-speaking adults capable of providing informed consent. Exclusion criteria included severe cognitive impairment, acute psychosis, or inability to complete the assessment instruments.

Diagnostic Instruments and Procedures

OCD diagnosis was established using DSM-5 criteria [1], which require the presence of obsessions and/or compulsions that are time-consuming (taking more than one hour per day) or cause clinically significant distress or impairment in social, occupational, or other important areas of functioning. The diagnosis was systematically confirmed using the Mini International Neuropsychiatric Interview (MINI) 7.0 [24], a brief structured diagnostic interview for DSM-5 and ICD-10 psychiatric disorders. The MINI 7.0 has demonstrated excellent psychometric properties with high interrater reliability and validity across diverse populations [24,25].

All psychiatric assessments were conducted by trained psychiatrists or psychiatric residents under supervision. Dermatological diagnoses were established by board-certified dermatologists according to standard clinical and, when necessary, histopathological criteria.

Study Variables

Demographic variables included age, gender, and socioeconomic status. Clinical dermatological variables included type of dermatosis, disease duration, and classification as acute or chronic. Dermatoses were classified as chronic if they had persisted for more than three months or were characterized by a relapsing-remitting course requiring ongoing management [26]. Psychiatric variables included presence or absence of OCD diagnosis and, when present, predominant OCD symptom subtypes classified as: (1) contamination obsessions with washing/cleaning compulsions, (2) doubt obsessions with checking compulsions, (3) symmetry obsessions with ordering/repeating compulsions, and (4) other patterns [27].

Statistical Analysis

Statistical analyses were performed using IBM SPSS Statistics version 25.0 (IBM Corp., Armonk, NY). Continuous variables were expressed as means \pm standard deviations and compared using Student's t-test. Categorical variables were presented as frequencies

and percentages and compared using chi-square (χ^2) tests or Fisher's exact test when appropriate. A two-tailed p-value <0.05 was considered statistically significant. Confidence intervals were calculated at the 95% level.

RESULTS

Sample Characteristics

The study included 200 patients with a mean age of 36.4 ± 12.8 years (range: 18-72 years). The sample comprised 112 women (56%) and 88 men (44%). The demographic and clinical characteristics of the study population are presented in Table 1.

Table 1. Demographic and Clinical Characteristics of Study Population (N=200)

Characteristic	N	%
Gender		
Male	88	44.0
Female	112	56.0
Dermatosis Type		
Acute	104	52.0
Chronic	96	48.0

Prevalence of Obsessive-Compulsive Disorder

Of the 200 participants, 28 patients (14%, 95% CI: 9.6-19.6%) met DSM-5 criteria for OCD as confirmed by the MINI 7.0. Among patients diagnosed with OCD, the vast majority (n=25, 89.3%) had not previously received an OCD diagnosis or treatment.

Gender Distribution of OCD

The prevalence of OCD was 17.0% (19/112) in women compared to 10.2% (9/88) in men. While this difference showed a trend toward statistical significance, it did not reach the conventional threshold ($\chi^2 = 2.10$, $p = 0.08$). The gender distribution is detailed in Table 2.

Table 2. Prevalence of OCD by Gender

Gender	Total N	OCD Cases	OCD Prevalence (%)
Male	88	9	10.2
Female	112	19	17.0
Total	200	28	14.0

Association Between OCD and Type of Dermatosis

Chronic dermatoses affected 96 patients (48%). Among patients with chronic dermatoses, 19 (19.8%) had comorbid OCD, compared to only 9 (8.7%) among the 104 patients with acute dermatoses. This difference was statistically significant ($\chi^2 = 6.15$, $p = 0.01$, OR = 2.6, 95% CI: 1.2-5.8), indicating that patients with chronic dermatoses were 2.6 times more likely to have OCD compared to those with acute conditions.

The most common chronic dermatoses in our sample included psoriasis (n=22, 22.9%), chronic urticaria (n=18, 18.8%), atopic dermatitis (n=16, 16.7%), vitiligo (n=12, 12.5%), and alopecia areata (n=10, 10.4%). Among acute dermatoses, the most frequent were acute urticaria (n=28, 26.9%), contact dermatitis (n=24, 23.1%), and viral exanthems (n=18, 17.3%).

OCD Symptom Subtypes

Among the 28 patients diagnosed with OCD, the predominant symptom patterns were characterized as follows: checking compulsions were most common (n=11, 39.3%), followed by contamination obsessions with washing/cleaning rituals (n=9, 32.1%), and symmetry/ordering behaviors (n=8, 28.6%). Several patients exhibited multiple symptom patterns. Notably, contamination and washing symptoms were significantly more prevalent among patients with inflammatory or infectious dermatological conditions.

DISCUSSION

This cross-sectional study found a 14% prevalence of OCD among patients consulting in a dermatology department, which is substantially higher than the 1-3% lifetime prevalence reported in the general population [2,3]. Our findings are consistent with previous international studies that have documented elevated OCD rates in dermatological settings, ranging from 9.1% to 24.7% [14-17]. This convergence of evidence across diverse geographical and cultural contexts supports the conclusion that dermatology clinics represent an important but underrecognized setting for OCD presentation.

The strong association we observed between chronic dermatoses and OCD (19.8% vs. 8.7%, p=0.01) aligns with the psychodermatological literature emphasizing the psychological burden of chronic skin conditions. Several mechanisms may explain this association. First, chronic dermatological conditions often involve visible disfigurement, which can trigger body dysmorphic concerns and related obsessive-compulsive behaviors [28,29]. Second, persistent pruritus, a common feature of many chronic dermatoses, may precipitate or reinforce compulsive scratching behaviors that overlap with OCD phenomenology [30]. Third, the chronic stress associated with ongoing skin disease, including concerns about disease progression, treatment burden, and social stigmatization, may contribute to the development or exacerbation of anxiety-related disorders including OCD [7,31].

Recent research has also highlighted potential neurobiological links between inflammatory skin diseases and psychiatric comorbidities. Inflammatory cytokines, particularly those involved in the Th17 axis implicated in psoriasis and other autoimmune dermatoses, have been associated with neuroinflammation and mood disorders [32,33]. While the specific role of inflammation in OCD pathophysiology requires further investigation, these findings suggest that the relationship between dermatological disease and psychiatric comorbidity may extend beyond purely psychosocial mechanisms.

The higher, though not statistically significant, prevalence of OCD in women (17.0% vs. 10.2%, p=0.08) in our sample is consistent with some previous reports [15,34] and may reflect gender differences in help-seeking behavior, symptom expression, or actual disease prevalence. Women with dermatological conditions have been reported to experience greater psychosocial burden and body image concerns compared to men [35], which could contribute to higher rates of comorbid OCD. However, the lack of statistical significance in our study suggests that this finding should be interpreted cautiously and warrants replication in larger samples.

The distribution of OCD symptom subtypes in our study provides insight into the phenomenology of OCD in dermatological contexts. The predominance of checking compulsions (39.3%) and contamination/washing symptoms (32.1%) is consistent with previous reports [15,16,20]. Checking behaviors in this population may relate to disease monitoring (repeatedly examining skin lesions) or treatment verification (checking whether medications were applied). Contamination fears and washing rituals may be directly linked to concerns about infection, disease transmission, or the perceived "uncleanliness" of skin conditions. These symptom patterns suggest that OCD in dermatological patients may be specifically shaped by the context of their medical condition.

A particularly concerning finding was that 89.3% of patients with OCD in our sample had not previously been diagnosed or treated for this condition. This diagnostic delay is consistent with reports that most OCD patients seek psychiatric consultation 5-10 years after symptom onset [23] and highlights a critical gap in psychiatric screening within dermatology settings. Untreated OCD can significantly impair quality of life, worsen dermatological outcomes through behaviors such as excessive washing or scratching, and complicate treatment adherence [36,37]. Early identification and treatment of OCD could therefore improve both psychiatric and dermatological outcomes.

The use of DSM-5 criteria and confirmation with the MINI 7.0 structured interview represents a methodological strength of our study, ensuring diagnostic reliability and alignment with international standards. Previous studies have employed various diagnostic approaches, which may partly explain the wide range of reported OCD prevalence rates (9.1-24.7%) in dermatology settings. The MINI has demonstrated excellent psychometric properties with high sensitivity and specificity for OCD diagnosis [24,25], making it an ideal instrument for screening in non-psychiatric medical settings.

Clinical Implications

Our findings have important implications for clinical practice in dermatology. First, systematic screening for OCD should be considered, particularly for patients with chronic dermatoses. Brief screening instruments such as the Obsessive-Compulsive Inventory-Revised (OCI-R) or selected questions from the MINI could be incorporated into routine dermatological assessment [38]. Second, dermatologists should be trained to recognize common OCD symptoms and presentations in their patient population. Third, establishing collaborative care pathways between dermatology and psychiatry departments can facilitate timely diagnosis, treatment, and follow-up of comorbid psychiatric conditions.

Treatment of OCD in dermatological patients may involve both pharmacotherapy and psychotherapy. Selective serotonin reuptake inhibitors (SSRIs) represent first-line pharmacological treatment for OCD and may provide benefit for both psychiatric symptoms and, in some cases, dermatological conditions [39]. Cognitive-behavioral therapy with exposure and response prevention (ERP) has demonstrated efficacy for OCD and can be adapted to address dermatology-specific concerns [40,41]. An integrated, multidisciplinary approach addressing both dermatological and psychiatric aspects is likely to optimize outcomes.

Limitations

Several limitations should be acknowledged. First, the cross-sectional design precludes determination of temporal relationships between dermatological disease and OCD onset. Longitudinal studies are needed to clarify whether OCD develops secondary to dermatological disease or represents a pre-existing vulnerability factor. Second, our sample was drawn from a single military hospital, which may limit generalizability to other populations. Military populations may differ from civilian populations in demographic characteristics, stress exposure, and access to healthcare. Third, we did not assess OCD symptom severity using standardized instruments such as the Yale-Brown Obsessive-Compulsive Scale (Y-BOCS), which would have provided valuable information about clinical severity and functional impairment [42]. Fourth, we did not systematically assess other psychiatric comorbidities (e.g., depression, anxiety disorders) that frequently co-occur with OCD and may influence the observed associations. Finally, the moderate sample size may have limited statistical power to detect some associations, as suggested by the non-significant gender difference despite a 6.8 percentage point difference in prevalence.

Future Research Directions

Future research should address several important questions. Longitudinal studies examining the temporal relationship between dermatological disease onset and OCD development would clarify causal pathways. Investigation of potential biological mechanisms, including the role of inflammation and neuroimmune interactions, could reveal novel therapeutic targets [32,33]. Assessment of treatment outcomes in patients with comorbid dermatological disease and OCD would inform optimal management strategies. Research on culturally adapted screening and intervention approaches would enhance applicability across diverse populations. Finally, health services research examining the cost-effectiveness of systematic psychiatric screening in dermatology would support implementation decisions.

CONCLUSION

Obsessive-compulsive disorder is a frequent psychiatric comorbidity in dermatology settings, with a prevalence of 14% in our Moroccan sample. The strong association with chronic dermatoses (19.8% vs. 8.7%, $p=0.01$) highlights the psychological burden of chronic skin conditions and underscores the importance of integrated psychodermatological care. The high rate of undiagnosed OCD (89.3%) represents a significant clinical gap that could be addressed through systematic screening, particularly for patients with chronic dermatological conditions.

These findings support the implementation of collaborative care models incorporating routine psychiatric screening in dermatology departments, dermatologist education about OCD recognition, and established referral pathways to psychiatric services. Such integrated approaches have the potential to improve both psychiatric outcomes and dermatological treatment adherence, ultimately enhancing quality of life for patients with chronic skin conditions.

Further research examining the temporal relationships, underlying mechanisms, and optimal treatment strategies for comorbid OCD in dermatological populations will continue to advance the field of psychodermatology and improve patient care.

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Conflict of Interest

The authors declare no conflicts of interest.

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