

OBSESSIVE COMPULSIVE SPECTRUM AND QUALITY OF LIFE AMONG PATIENTS WITH COSMETIC DERMATOLOGICAL DISEASES

Thesis

*Submitted for partial fulfillment of Master Degree
in Neuropsychiatry*

By

Mariam Mohamed Mohamed Shehata
M.B.B.Ch.

Supervised By

Professor Mohamed Fekry Abd El-Aziz
*Professor of Neuropsychiatry
Faculty of Medicine-Ain Shams University*

Dr. Sohier Helmy El-Ghoniemy
*Assistant Professor of Neuropsychiatry
Faculty of Medicine-Ain Shams University*

Dr. Ahmed Adel M. AbdElgawad
*Lecturer of Neuropsychiatry
Faculty of Medicine-Ain Shams University*

*Faculty of Medicine
Ain Shams University*

2016

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قالوا

لسبب انك لا تعلم لنا
إلّا ما علمتنا إنك أنت
العليم العظيم

صدق الله العظيم

سورة البقرة الآية: ٣٢



Acknowledgements

First of all, I thank God for granting me the power to proceed and accomplish this work.

*I wish to express my deepest gratitude to **Prof. Mohammed Fekry Abd el Aziz**, Professor of Psychiatry, Faculty of Medicine, Ain Shams University for his continuous encouragement, faithful guidance, tremendous support that enabled me to accomplish this work, for his determination to set it straight from the beginning and for giving me the chance to gain from his valuable years of expertise and wisdom*

*I am profoundly grateful to **Dr. Soheir Helmy ElGhoniemy**, Assistant Professor of Psychiatry, Faculty of Medicine, Ain Shams University for her patience, her meticulous revision, generous recommendations, inspiring passion for this work, being there for me in every single step and believing in me from my early days in residency till the accomplishment of this work.*

*My sincere thanks and deep appreciation goes to **Dr. Ahmed Adel Abd El Gawad**, Lecturer of psychiatry, Faculty of Medicine, Ain Shams University for his sincere advice, active participation and continuous feedback in all steps of this work.*

I also want to thank all my professors, colleagues, dermatology residents and all staff members of neuropsychiatry, Faculty of Medicine, Ain Shams University for their encouragement and cooperation and for helping me through my residency. I would also like to thank my patients for participating and help to complete this work.

Last but not least, I have to thank my parents for being there for me and for their continuous support, I could not have done it without them.

List of Contents

<i>Subject</i>	<i>Page No.</i>
List of Abbreviations.....	i
List of Tables.....	iii
List of Figures.....	iv
Introduction	1
Aim of the Work.....	3
Review of Literature	
The Interaction between Dermatological Disorders and Psychiatry	4
The relation between Obsessive Compulsive Symptoms and Dermatological diseases.....	28
Management of pchyodermatological disorders.....	45
Methodology	62
Results.....	67
Discussion	84
Summary	95
Conclusion.....	101
Recommendations	103
References	105
Arabic Summary	—

List of Abbreviations

<i>Abbr.</i>	<i>Full term</i>
AA	: Alopecia areata
b.i.d	: bis in die (twice/day)
BDD	: Body dysmorphic disorder
BDZ	: Benzodiazepines
CBT	: Cognitive behavioral therapy
CSTC	: Cortico-striatal thalamo-cortical
DA	: Dermatitis artefacta
DIHS	: Drug-induced hypersensitivity syndrome
DSM 5	: Diagnostic and statistical manual of mental disorders
ECT	: Electroconvulsive therapy
EMG	: Electromyography
GAD	: Generalized anxiety disorder
GHQ	: General health questionnaire
HPA	: Hypothalamic pituitary axis
HRQOL	: Health related quality of life
ICD	: International statistical classification of diseases
MDD	: Major depressive disorder
MINI	: Mini-international neuropsychiatric interview
NICS	: Neuro-immuno cutaneous system
OC	: Obsessive compulsive
OCD	: Obsessive compulsive disorder
PPsDs	: Primary psychiatric disorders
q.i.d	: Quaterindie (Once/day)

QLI	: Quality of life index
QOL	: Quality of life
5HT	: Serotonin
SJS	: Steven-Johnson syndrome
SNRI	: Serotonin norepinephrine reuptake inhibitor
SPsDs	: Secondary psychiatric disorders
SRI	: Serotonin reuptake inhibitors
SSRI	: Selective serotonin reuptake inhibitors
T.i.d.	: ter in die (3 times a day)
TEN	: Toxic epidermal necrolysis
WHO	: World Health Organization
YBOCS	: Yale brown obsessive compulsive scale

List of Tables

<i>Table No.</i>	<i>Title</i>	<i>Page No.</i>
Table (1):	Obsessive-compulsive disorders relevant in dermatology according to ICD 10 and DSM 5... 35	
Table (2):	Frequently used psychopharmaceuticals 51	
Table (3):	Sociodemographic data..... 69	
Table (4):	The percentage of the Dermatological diseases. 70	
Table (5):	Dermatology procedures in the outpatient clinics. 72	
Table (6):	Detection of the OCD symptomology Using YBOCS..... 74	
Table (7):	Detection of the severity of OCD among Group A 76	
Table (8):	Rates of dermatological diseases among Group 77	
Table (9):	Demographic features of Group A and Group B..... 78	
Table (10):	Detection of the psychiatric comorbidities in the OCD group..... 80	
Table (11):	Comparison between group A and group B as regard QOL and its domains 81	
Table (12):	Relation between the severity of the symptoms and the QOL. 83	

List of Figures

<i>Figure No.</i>	<i>Title</i>	<i>Page No.</i>
Figure (1):	Common psychodermatology disorders	9
Figure (2):	Gender distribution.....	69
Figure (3):	Dermatological diseases among the study sample.	71
Figure (4):	Psychiatric disorders in the sample using MINI.....	73
Figure (5):	The most common obsessions according to YBOCS.....	75
Figure (6):	The most common compulsions according to YBOCS.....	75
Figure (7):	The severity of the OC symptoms among Group A.	76
Figure (8):	Distribution of the OCD among the dermatological diseases.	77
Figure (9):	Comparison between the two groups as regard sociodemographic data.....	79
Figure (10):	Psychiatric co-morbidities among patients with OCD.....	80
Figure (11):	Comparison between group A and group B as regard QOL and its domain.....	82

Introduction

Obsessive compulsive disorder (OCD) is represented by a diverse group of symptoms such as intrusive thought, rituals, preoccupation & compulsions. These recurrent obsessions or compulsions cause severe distress to the person (*Sadock, 2007*).

Worldwide, it is one of the top 20 causes of illness related disability following depression, mood disorders, schizophrenia and dementia as regard psychiatric disorders according to WHO (*Sadock, 2009*). The prevalence of OCD is approximately 1-2% .It is considered the 4th most common mental disorder after phobia, substance abuse and major depression (*Kestenbaum, 2014*).

In Egypt, there is a high prevalence of obsessive traits and symptoms among the population especially the adolescents. A study was performed on a sample of Egyptian adolescents revealed that the prevalence of obsessive traits was 26.2% and that of obsessive compulsive symptoms was 43.1% among this sample (*Okasha et al., 2001*).

It is worth mentioning that OC symptoms are highly prevalent among patients seeking medical advice at non-psychiatric clinics as internal medicine, plastic and dermatology clinics. Nearly 80% of the patients with these symptoms seek medical advice at these clinics. The majority

of these patients meet psychiatrists 5 to 10 years after onset of OCD (*Sansone et al., 2004*).

Many studies were performed and reported that OC symptoms in dermatology clinics is higher compared with general population. These symptoms could result in poor body image which leads to obsessive thoughts regarding physical appearance; consequently these patients will consult dermatologists more frequently (*Sheikhmoonesi et al., 2014*).

Moreover, it is found that the severity of OC symptoms is one of the greatest predictors of poor quality of life of these patients (*Demet et al., 2005*).

Although there is still an insufficient amount of data, it may be concluded that OC symptoms in dermatological patients is frequent. Both the fact that OCD causes a psychological condition that may facilitate the occurrence of dermatological illness and the fact that some dermatological symptoms are included in obsessive-compulsive symptomatology need to be considered by dermatologists in their routine activities (*Demet et al., 2005*).

Aim of the Work

- a) To identify the OC symptoms and its severity among patients with different dermatological diseases.

- b) To correlate the OC symptoms with the quality of the life in this group of patients.

Chapter 1

The Interaction between Dermatological Disorders and Psychiatry

Introduction.

Psychodermatology or psychocutaneous medicine describes an interaction between dermatology and psychiatry. It encompasses disorders prevailing on the boundary between psychiatry and dermatology. Skin has a special place in psychiatry with its responsiveness to emotional stimuli and ability to express emotions such as anger, fear, shame and frustration, and by providing self-esteem, the skin plays an important role in the socialization process, which continues from childhood to adulthood. Skin is an organ that has a primary function in tactile receptivity and reacts directly upon emotional stimuli. Dermatological practice involves a psychosomatic dimension. A relationship between psychological factors and skin diseases has long been hypothesized (*Basavaraj et al., 2010*).

However, Psychiatry is more focused on the ‘internal’ non-visible disease, and dermatology is focused on the ‘external’ visible disease. Connecting the two disciplines is a complex interplay between neuroendocrine and immune systems that has been described as the Neuro-Immuno-Cutaneous System (NICS) (*Misery, 1996*).

This domain of dermatology is not new, but has often received limited attention. A survey done to assess the awareness and attitude about this condition among dermatologists revealed a clear understanding of psychodermatology in only 18% of the dermatologist (*Yadav et al., 2013*). Although, The incidence of psychiatric disorders among dermatological patients is estimated at about 30 to 60% (*Korabel et al., 2008*).

The link between psychiatry and dermatology.

I. Embryological.

The relationship between skin and the brain exists due to more than a fact, that the brain, as the center of psychological functions, and the skin, have the same ectodermal origin and are affected by the same hormones and neurotransmitters. Moreover the skin and the nervous system form and develop side by side in the ectoderm of the fetus and remain intimately interconnected throughout life. Cutaneous innervation represents the largest sense organ of the body and is also vital to skin protection and health. There is a significant psychosomatic or behavioral component to many skin disorders (*Zane, 2003*).

II. Immunological.

A relationship between psychological factors and skin diseases has long been hypothesized. There is a common

opinion that many cases of skin disease are caused by psychological stress, or are related to certain personality traits, or represent a complication of a psychiatric disorder hence the dermatologists awareness of the problem is increasing (*Millard, 2000*).

Co-occurring mental disorders go often unrecognized and are believed to be less frequent than they actually are in many skin conditions. There is a need for a biopsychosocial approach to patients with skin disease (*Picardi et al., 2004; Richards et al., 2004*).

The complex interrelationship between mind and skin has been investigated at both molecular and cellular levels and has been studied extensively. It has been recorded that patients with depression suffer more from physical illness and patients with chronic illness suffer more often from major depressive illness, suggesting that the state of mind has a marked bearing not only on how an illness is perceived but also on its severity and content (*Johnson et al., 2012*).

Garg et al., (2001) reported that psychologic stress perturbs epidermal permeability barrier homeostasis, and it may act as precipitant for some inflammatory disorders like atopic dermatitis and psoriasis.

III. Neuroendocrinal.

The Neuro-ImmunoCutaneous-Endocrine model was proposed by *O'Sullivan et al. (1998)* to explain the mind and body. It forms the basis of many inflammatory cutaneous dermatoses that are triggered or exacerbated by psychological factors. These organs share a complex language of neuropeptides, cytokines, glucocorticoids, another effector molecules (*Slominski et al., 2003; Arck et al., 2006*).

Hypothalamic pituitary axis (HPA) responds to psychological stress with upregulation of stress hormones (corticotrophin-releasing hormone, adrenocorticotropin releasing hormone, cortisol, and prolactin), sympathetic nervous system activation leading to elevated catecholamine levels, and the release of neuropeptides and neuromediators (substance P and calcitonin gene-related peptide). Skin mast cells are an important target of key stress hormones and mediators, and their activation leads to immune dysregulation and various skin disorders (*Yadav et al., 2013*).

Arc et al (2006) suggested that skin is exquisitely well innervated and has its own neuro-endocrine system equivalent of the HPA axis local stress response system, which is tightly linked to systemic neuro-endocrine axis.