Sexual Dysfunction in A Sample of Female Patients with Obsessive Compulsive Disorder

Thesis

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Abb.	Full term
5-HT	5-hydroxy-tryptamine
5-HTTLPR	Serotonin-transporter-linked polymorphic region
ADHD	Attention deficit hyperactivity disorder
BDNF	Brain-derived neurotrophic factor
BSSC-W	Brief Sexual Symptom Checklist for Women
CNS	Cerebral nervous system
COMT	Catechol-O-methyltransferase
CSFQ	Changes in sexual functioning questionnaire
CSTC	Cortico- striato- thalamo- cortical circuit
D1	Dopamine 1 receptor
D2	Dopamine 2 receptor
DEORmodel	Desire. Excitation. Orgasm and Resolution Model
DSM-5	Diagnostic and Statistical Manual of Mental disorder 5th edition
DSM-IV	Diagnostic and Statistical Manual of Mental disorder 4th edition
ED	Erectile dysfunction
EEG	Electroencephalography
EPOR	Excitement, plateau, orgasm, and resolution
FOD	Female orgasmic disorder
FSAD	Female sexual arousal disorder
FSD	Female sexual dysfunction
FSFI	Female sexual function index
GABA	Gamma Aminobutyric acid
GRISS	Golombok Rust Inventory of Sexual Satisfaction
HIV	Human Immunodeficiency Virus
HPV	Human Papilloma Virus

List of Abbreviations Cont...

Abb.	Full term
HSDD	Hypoactive sexual desire disorder
HTR1B	5-HT1B receptor
HTR2A	5-HT2A receptor
MAO-A	Monoamine oxidase-A
MOG	Myelin oligodendrocyte glycoprotein
MRI	Magnetic resonance imaging
OCD	Obsessive compulsive disorder
OCPD	Obsessive compulsive personality disorder
OCRD	Obsessive Compulsive and Related Disorders
PANDAS	pediatric autoimmune neuropsychiatric disorders associated with streptococcal infections
PET	Positron Emission Tomography
SC	Structural connectivity
SCID-I	Structured Clinical Interview for DSM-IV-TR Axis I Disorders
SCS-W	Sexual Complaints Screener for Women
SD	standard deviation
SLC6A4	Solute Carrier Family 6 Member 4
SPSS	Statistical Package for the Social sciences
SRIs	Serotonin Reuptake Inhibitors
SSRIs	Selective Serotonin Reuptake Inhibitors
TCA	Tricyclic antidepressant
Y-BOCS	Yale-Brown Obsessive-Compulsive Scale

INTRODUCTION

Sexuality has always been in the focus of interest and analysis to human beings from the days of cave paintings, anatomical illustrations and drawings of Leonardo da Vinci to the internet nowadays. Every person's sexual tendencies depend on four interrelated psychosexual factors: sexual identity, gender identity, sexual orientation and sexual behaviour. These factors influence the development, growth and personality of a person ***(Kaplan and Sadock, 2014).***

Sexual function needs an interaction between anatomical, physiological, sociocultural, psychological factors, relationships with others, and developmental experiences throughout life ***(American Psychiatric Association, 2013).***

Female sexuality problems can be a result of a complex interplay of biological, hormonal, and psychological factors that can have a significant negative effect on female sexual health and quality of life and can be influenced by several factors as advancing age, social factors, psychosocial stress, and trauma ***(Kingsberg and Woodard, 2015).***

Female Sexual Dysfunction (FSD) takes different forms, including lack of sexual desire, impaired arousal, inability to achieve orgasm, or pain with sexual activity. It may be a lifelong problem or acquired later in life after a period of normal sexual life ***(American Psychiatric Association, 2013).***

Obsessive-compulsive disorder (OCD) is one of the chronic disabling psychiatric disorders. It presents with obsessions and/or compulsions and affects badly the patient's quality of life ***(Inanir et al., 2015).***

Obsessions include thoughts, feelings, images and urges. They are illogical, unwanted and silly. They waste time and interfere with the normal life, work, usual social activities or interpersonal relationships. Compulsion is a behavior that may be associated with obsessions trying to reduce the anxiety but does not always lead to reducing anxiety. Anxiety may remain unchanged or even increase. It is conscious and recurrent such as counting, checking, or avoiding ***(Pepper et al., 2015).***

Many studies tried to find an association between OCD and sexual complaints. Patients with OCD suffered from multiple sexual problems but these problems had mainly been accounted for the effect of pharmacotherapy use for management of OCD on sexual function and impaired their sexual life and quality of life ***(Inanir et al., 2015).***

Many reports found that patients with OCD did not prefer to marry or have sexual life or experience. Also, OCD patients may suffer from sexual dissatisfaction ***(Steketee, 1997).*** A Turkish study compared the level of sexual satisfaction in OCD and generalized anxiety disorder and found higher incidence of lack of orgasm, decreased sexual arousal and sexual avoidance in the OCD group ***(Aksaray & Yelken, 2001).***

Other studies found that 62% of the patients had problems in sexual desire, 33% had orgasmic phase dysfunction, 29% had reduced sexual arousal, 25% had problems regarding physiological arousal and 10% had lack of sexual pleasure ***(Vulink et al., 2006).***

There were conflicting reports in studies of sexual dysfunction in patients with OCD and most of them were uncontrolled and provided relatively limited evidence about sexual dysfunction in OCD ***(Kendurkar & Kaur, 2008)***.

Also, to our best knowledge there are not any studies or reports about the relation between OCD and sexual dysfunctions in Egypt.

Hypothesis

There is a significant association between sexual dysfunctions and obsessive-compulsive disorder.

Aim of the Work

1- To assess the rate of sexual dysfunctions in female patients with OCD

2- To compare between females diagnosed with OCD and control group regarding sexual dysfunctions.

3- To determine the relation between the content, duration and severity of OCD symptoms and sexual dysfunctions.

Chapter 1

FEMALE SEXUALITY

Sexuality is an important part of life and no one can obtain a healthy and satisfying life without sex. It is essential for wellbeing and quality of life for all people especially middle-aged women. Physical and emotional benefits like reduced risk of heart disease, improved self-esteem, and more can come from having sexual life ***(Biddle et al., 2009).***

Women share men in many reasons to initiate or respond to sexual activity as sharing sexual excitement and physical pleasure and experiencing affection, love, romance, or intimacy. However, women need sex for other reasons as they need to be more emotionally close with their partners, to improve their self-confidence, to confirm their desirability and to please their partners for something ***(Murtagh, 2010).***

Sexual identity development is related to an interaction between biological sex (being male of female), gender identity which is a psychological sense of being male or female, gender role that is a degree of adherence to social expectations for one's sex, sexual orientation which is defined as the direction and persistence of one's experiences of sexual attraction and intention or values framework (what one intends to do with the desires one has in light of one's beliefs and values) ***(Althof, 2007).***

Female Sexual activities are mediated by the complex interaction of anatomical, physiological (hormonal, vascular, muscular, and neurological), sociocultural, psychological factors, relationships with others, and developmental experiences throughout life ***(Reda et al., 2013).***

Exact Mechanisms about the development of healthy sexuality cannot be clearly found, but it is proven that it cannot be only sexual. It may depend on attachment styles to parents, the ability of caretakers to identify and satisfy the child's needs ***(Zeuthen and Gammelgaard, 2010).***

Limbic system (especially medial amygdala, hippocampus, cingulate cortex, insular cortex, nucleus accumbens, stria terminalis and preoptic area) is essential for sexuality and plays a major role in the initiation of sexual desire and fantasies and their related sexual consequences as mental sexual arousal and the subsequent cascade of neurovascular events (somatic and genital responses) ***(Solms and Turnbull, 2002).***

Many studies proved the role and involvement of the neocortex (parietal and frontal cortices) in the sexual response in humans (final pathway of different sensory smells, tastes, words, sights or touch stimuli). They can give the green signals to both the parietal sensory cortex and the limbic sexual cortex when the sensations are 'coded' as sexual. Cognitive factors are also in play in evaluating the sexual stimulus and modulate the 'judgment' of concomitant risks and wishes before engaging, or