Sexual Disturbances in Psychiatric Disorders

An Essay Submitted for Partial Fulfillment of Master Degree in Neurology & Psychiatry

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Dedication

This work is dedicated to . . .

The martyrswho gave their souls and bloodfor the sake of our freedom, dignity, justice and identity.

My beloved Parentsto whom I owe everything I ever did in my life and will achieve, who always give me all the kindness and empathy.

My beloved wifefor being the partner of my life who always gives me all the support and care.

My keen brothers and sister who surround me with their love and prays.

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MohamadTawfikRakha

الاضطرابات الجنسية فى الأمراض النفسية

رسالة

توطئة للحصول على درجة الماجستير
فى طب الأعصاب و الطب النفسى

مقدمة من

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List of Abbreviations

5-HT2: 5- Hydroxy-Tryptamine (Serotonin)

ACh M1: Acetyl Choline Muscarinic 1

ADHD: Attention Deficit Hyperactivity Disorder

AN: Anorexia Nervosa

APD: Avoidant Personality Disorder

BAT: Biologically Active Testosterone

BMI: Body Mass Index

BN: Bulimia Nervosa

BPRS: Brief Psychiatric Rating Scales

cGMP: cyclic Guanidine Mono Phosphate

CNS: Central Nervous System

CPA: Cyproterone Acetate

CSB: Compulsive Sexual Behavior

CSFQ: Changes in Sexual Functioning Questionnaire

D2: Dopamine 2

delta-9-THC: Tetra Hydro Cannabinoid

DHEAS: dehydroepiandrosterone

DSM-IV-TR: Diagnostic and Statistical Manual of Mental Disorders-The Text Revision of the Fourth Edition

ECT: Electro- Convulsive Therapy

ED: Erectile Dysfunction

EDNOS: Eating Disorder Not Otherwise Specified

EF: Erectile Function

FMRI: Functional Magnetic Resonance Imaging

GAD: Generalized Anxiety Disorder

GnRH: Gonadotropin-Releasing Hormone

GSP: Generalized Social Phobia

H1: Histamine 1

i.m: intra muscular

ICD-10

IIEF: International Index of Erectile Function

LH: Luteinizing Hormone

LHRH: Luteinizing Hormone Releasing Hormone

LRE: Localization-Related Epilepsy

MAOI.s: Momoamine Oxidase Inhibitors

MDD: Major Depressive Disorder

MDMA: (3,4-methylenedioxy-*N*-methylamphetamine)

mg/d: milligram/ day

MPA: Medroxy-Progesterone Acetate

MSQ: Mood and Sexuality Questionnaire

NOS: Not Otherwise Specified

OCD: Obsessive-Compulsive Disorder

OR: Odd Ratio

PAN: Purging Anorexia Nervosa

PANSS: Positive and Negative Symptoms Scale

PDE-5: phosphodiesterase-5

PE: Premature Ejaculation

PSAS: Persistent Sexual Arousal Syndrome

PTSD: Post-Traumatic Stress Disorder

RAN: Restricting Anorexia Nervosa

RLND: Retroperitoneal Lymph Node Dissection

SCID-P: Structured Clinical Interview for DSM-IV Psychiatrist-version

SCL-90: Symptom Check List-90

SES: Sexual Excitation Scales

SHBG: Sex Hormone Binding Globulin

SIS1 and SIS2: Sexual inhibition Scale 1, 2

SNRI: Serotnin Noradrenaline Reuptake Inhibitor

SR: Sustained Release

SSRIs: Selective Serotonin Reuptake Inhibitors

TCAs: Tricyclic Antidepressants

THBG: Testosterone Hormone-Binding Globulin

USA: United States of America

VOP: Veno-Occlusive Plethysmography

vs.: versus

XR: Extended Release

ZDPR: Zemore Depression Proneness Rating

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Introduction

Sexual behavior and functioning is an important aspect of the global functioning of the individual. Knowledge about sexual functioning is important for contemporary psychiatrists for several reasons, the most important reason is that sexuality is an important part of our patients' lives. Intimate sexual activity can serve as a vehicle for the sense of emotional connection for another person and may serve as a buffer against the emotional impact of life stress. Many psychiatric patients suffer from decreased sense of personal competence because they are aware of their psychological impairment. The presence of sexual impairment may further undermine their sense of personal competence and put an added burden on intimate relationships that may be already stressed by psychiatric difficulties **(Segraves, 2002)**.

Sexual disturbances include sexual dysfunction and abnormal sexual behaviors. According to DSM-IV-TR sexual dysfunction is defined as a disturbance in the sexual response cycle or as pain with sexual intercourse **(Sadock and Sadock, 2005)** , While abnormal sexual behavior may include paraphilias, sexual compulsions , sexual addiction….etc .

Recent information indicates that sexual dysfunction is highly comorbid with many psychiatric disorders. Also, many commonly prescribed psychiatric drugs have sexual side effects. In some cases, these side effects may become an unspoken cause of treatment non-compliance **(Segraves, 2002)**.

One of the psychiatric disorders associated with prominent sexual disturbance is Schizophrenia. The manifest sexual relationship problems in schizophrenic patients are due to lack of social skills, degeneration of social functioning and adverse effects of antipsychotics rather than due to primary structural impairment specific to schizophrenia **(Verhulst and Schneidman, 1981 and Michael et al., 2006).**

Antipsychotic drugs are thought to interfere with sexual functioning but the underlying mechanisms were poorly understood **(Smith et al., 2002 and Rajesh et al. , 2006) .** Dopamine antagonists, such as most antipsychotics both typical and atypical, could reduce sexual performance both directly and indirectly through inducing hyperprolactinaemia **(Segraves, 1989 and Atmaca et al., 2004)**.

A case-control study done by **Macdonald et al. (2003)** showed that at least one sexual dysfunction was reported by 82% of male schizophrenic patients ; 52% had less desire for sexual intercourse , 52% were less likely to achieve an erection , 36% were less likely to maintain an erection , 35% were more likely to ejaculate too quickly and 33% were less satisfied with the intensity of their orgasms . Moreover , a study done by **Hashem et al.(2006)** showed that duration of mental illness among patients with paranoid schizophrenia is inversely proportional to the intensity of desire , excitement , erection , orgasm and frequency of intercourses.

Another psychiatric disorder affecting sexual function is Major depression; A study published in 1992 done on male patients with major depressive disorder according to DSM-III-R (1987), it was found that 54% of these patients suffered sexual dysfunction from the start and 74.08% of them showed improvement of their sexual dysfunction after treatment only with tricyclic antidepressants in the doses of 75 mg to 100 mg / day for six months. However , it was found that 36.84 % of the major depressive patients who admitted satisfied sexual performance inspite of their psychiatric illness before treatment showed decrease sexual

performance after the previously described treatment **(Ahmed and Emad El-Din, 1992)** .

Kennedy (1999) investigated sexual function in male patients and female patients with untreated Major depressive disorder (MDD). 50% of the female patients reported a marked decrease in libido with the onset of the MDD. 50% of the women also reported decreased sexual arousal. 15% reported difficulty achieving orgasm. Problems with desire were associated with a greater number of depressive episodes. However, the results of this study was limited by the absence of a control group.

In the contrary**, Goodwin and Jamison (1990)** stated that sexual activity and libido are reported to increase in Manic episodes.

Anorexia Nervosa(AN) has been reported to be associated with sexual impairment corresponding either to sexual aversion disorder or hypoactive sexual desire disorder . Also , an increased level of sexual drive has been reported to correlate with weight gain in patients with AN **(Raboch and Faltus, 1991 and Wiederman et al. , 1996)**. Studies have also found high rates of hypoactive sexual desire disorder in women with Obsessive Compulsive Disorder (OCD) and Panic Disorder **(Minnen and Kampman, 2000**).

Abnormal Sexual behaviors are another form of sexual disturbance in psychiatric patients . Compulsive sexual behavior is one of these abnormalities; A study was done on 36 subjects (28 men and 8 women) reporting compulsive sexual behavior showed that this behavior was quite varied and included both paraphilic (e.g., cross-dressing) and non-paraphilic (e.g.,compulsive masturbation) types . 14 persons (39%) reported a history of major depression or dysthymia, 15 persons (42%) reported a history of phobic disorder and 23 persons (64%) reported a history of substance use disorders. Personality disorders were quite frequent, particularly paranoid, histrionic , obsessive-compulsive and passive-aggressive subtypes **(Black et al. ,1997)** .

Goodman (1998 a) defined Sexual addiction as "Some form of sexual behavior in a pattern that is characterized by recurrent failure to control the behavior and continuation of the behavior despite significant harmful consequences".

Another definition states that sexual addiction is " a behavior that can function both to produce pleasure and relieve painful affects in a pattern that is characterized by two key features: recurrent failure to control the behavior and continuation of the behavior despite significant harmful consequences **(Goodman, 1998 b)**.

Rickards and Laaser (1999) suggest that 3 distinct populations of patients can be described: " Sexually addictive / compulsives, sexually addictive / compulsive borderlines and borderlines who may act out sexually but who aren't sexually addictive / compulsive ".

Some sexual addicts may act out their addiction in areas such as exhibitionism , fetishism , pedophilia , sexual masochism, sexual sadism , transvestism and voyeurism, Others will be involved primarily in non-paraphilic sexual activities such as pornography , masturbation , prostitution ….etc **(Stephens, 2004)** .

Rationale of the Work

Sexuality in chronic and/or severe mental illness isn't a widely researched or a widely discussed topic , although there many issues involved that are important for the clinician**.**

Variable forms of sexual dysfunction and abnormal sexual behavior are highly prevalent in psychiatric patients. In many times, asking our patients about their sexual functioning and behavior is neglected although it is an important factor that affects their global functioning and drug compliance.

Enrichment of the knowledge about possible sexual disturbances in psychiatric disorders provides valuable information that should be considered on assessment of psychiatric patients and putting a more comprehensive management plan that really improves the patient's global functioning and quality of life .

Hypotheses

1- There is a high prevalence of sexual disturbance in psychiatric disorders .
2- Sexual disturbance leads to initiation or aggravation of already existing psychiatric disorders .
3- Sexual disturbance in psychiatric patients has many biological and psychosocial etiologies .

Aim of the Work

1- To verify the previously mentioned hypotheses .
2- To highlight different sexual disturbances associated with psychiatric disorders .
3- To review possible plans of management of sexual disturbances associated with psychiatric disorders.