

INTRODUCTION

Sexuality is a complex interaction of biology, culture, developmental, and current intra and interpersonal psychology.

A biopsychosocial model of sexual dysfunction provides a compelling argument for a combination treatment that integrates sex therapy and sexual pharmaceuticals. Although more research is needed, it seems probable that combination therapy will be the treatment of choice for all sexual dysfunction, as new pharmaceuticals are developed for desire, arousal, and orgasm problems in men (**Lee et al., 2001**).

The sex status or focused sex history, and continuous reassessment based on follow-up are the foundations of this approach. Restoration of lasting and satisfying sexual function requires a multidimensional understanding of all of the forces that created the problem, whether a solo clinician or multidisciplinary team approach is used. Each clinician needs to carefully evaluate their own competence and interests when considering the treatment of a man's sexual dysfunction (**SD**), so that regardless of the modality used, the patient receives optimized care (**Perelman, 2005**).

From the perspective of the new millennium, it is clear that both organic and psychosocial factors play a role in the etiology of sexual function and dysfunction and consequently

in the diagnosis and treatment of erectile dysfunction (ED). There are omnipresent psychogenic components existing in most potency problems regardless of the degree of organicity **(Perelman, 2003)**.

Clinical experience demonstrates that anxiety can severely complicate the presenting picture of even a mild organic deficit, quickly escalating it into a complete and seemingly total dysfunction. The degree of manifest dysfunction frequently exceeds the degree of organic impairment even in “organically impotent” men. Despite the existence of organic pathogenesis, ED has always had a psychogenic component even if the ED was initially the result of constitution, illness, surgery, or other treatment **(Perelman, 2003)**.

Until a few years ago, SD as related to the intake of psychiatric medications was frequently underestimated and scarcely investigated. Patients often feel inhibited about bringing up such issues spontaneously to their treating physicians. This is confirmed by the results from several studies that compared rates of spontaneous reporting of SD with rates of reporting only after specific questioning **(Dossenbach, 2005)**.

SD as a potential side effect associated with the use of psychotropic drugs is an important issue that should be always discussed with the patient before a specific treatment is chosen. Current evidence suggests that SD rates induced by different drugs vary widely. However, high quality evidence in this

regard is available for only a limited number of drugs, and it is unclear thus far whether systematic differences in SD rates associated with specific drugs could be properly attributed to the drugs themselves or to differences in the methods of inquiry (e.g., inclusion/exclusion of patients with mild SD). Accordingly, further research based on properly powered randomized placebo controlled studies is needed to better determine the incidence and severity of SD induced by various psychotropic treatment regimens **(Baggaley, 2008)**.

Non adherence to psychotropic medication is one of the main causes of relapse in patients with psychiatric illness. Side effects of medication are frequently cited as a reason for non compliance. Clinicians generally feel that the worse side effects of antipsychotic medication are the extra-pyramidal side effects and those most likely to trouble patients and make it difficult for the person to adhere to their medication regime. Despite this, studies showed that patients are more concerned with the sexual side effects of their medications than any other side effect **(Smith and Henderson, 2000)**.

The National Schizophrenia Fellowship have published a survey of over 2000 mental health service users, they found that a large proportion of the people had experienced side effects from their antipsychotic medication and that sexual side effects were deemed to be the most troublesome **(Smith and Henderson, 2000)**.

Clearly, sexual side effects of medication may be an important cause of non adherence and can give an indication of how this troublesome side effect may be combated. Sexual dysfunction is common in patients taking conventional neuroleptic medication and discussion of sexual side effects may prevent non-compliance in patients too embarrassed to discuss spontaneously their sexual problems with their doctor. Clinicians should routinely enquire about sexual symptoms prior to prescription of antipsychotics and on follow up **(Stimmel and Gutierrez, 2006)**.

Usable definitions must be developed to provide consistency in the description of various sexual dysfunction in men. Descriptive and analytical epidemiological studies of various sexual dysfunction backed by evidence based medicine were examined **(Lewis et al., 2004)**.

Consistent uniform, universally acceptable definitions for sexual dysfunctions that affect men and women, which also include the degree of dysfunction, are necessary to compare epidemiological studies across the world **(Basson et al., 2003)**.

Definitions of sexual disorders should be characterized whether they are lifelong or acquired, whether they are global or situational and should include the degree of dysfunction. Such classification will be accepted internationally **(Rosen et al., 1997)**.

Sexual interest/desire dysfunctions are diminished feelings of sexual interest, absent sexual thoughts and lack of responsive desire. There is some decrease of sexual interest with life cycle but the sexual interest dysfunction goes beyond this normally expected decrease. This sexual dysfunction has been more commonly discussed in women and somewhat neglected in epidemiological research in men (**Walidenger et al., 2004**).

In men, erectile dysfunction (ED) is an arousal disorder defined as a consistent or recurrent inability of a man to attain and/or maintain penile erection sufficient for sexual activity. It was suggested that a 3month minimum duration be present for establishment of this diagnosis, except in some instances of trauma or surgically induced erectile dysfunction. Persistent sexual arousal dysfunction is spontaneous, intrusive and unwanted genital arousal in the absence of sexual interest and desire. Early ejaculation in men is ejaculation that occurs sooner than desired, either before or shortly after penetration over which the sufferer has minimal or no control. To this definition, actual intravaginal ejaculatory latency time (IELT), may be added by using stop watch (**Walidenger et al., 2004**).

Delayed ejaculation is undue delay in reaching a climax during sexual activity. Anejaculation in men is the absence of ejaculation during orgasm. Orgasmic dysfunction in either men or women is lack of orgasm, markedly diminished intensity of

orgasmic sensations or marked delay of orgasm from any kind of stimulation **(Rosen et al., 1997)**.

There are many factors which may result in a person experiencing a sexual dysfunction. These may result from emotional or physical causes. Sexual dysfunction may arise from emotional factors, including interpersonal or psychological problems. Interpersonal problems may arise from marital or relationship problems, or from a lack of trust and open communication between partners, and psychological problems may be the result of depression, sexual fears or guilt, past sexual trauma and sexual disorders **(Michetti et al., 2006)**.

Sexual dysfunction is especially common among people who have anxiety disorders. Ordinary anxiousness can obviously cause erectile dysfunction in men without psychiatric problems, but clinically diagnosable disorders such as panic disorder commonly cause avoidance of intercourse and premature ejaculation **(Coretti and Baldi, 2007)**.

Sexual activity may also be impacted by physical factors. These would include use of drugs, such as alcohol, nicotine, narcotics, stimulants, antihypertensives, antihistamines, and some psychotherapeutic drugs **(Saks, 2008)**.

RATIONALE OF THE STUDY

Sexual dysfunction is a common problem among general population as well as among those suffering from psychiatric disorders and/or receiving psychotropic drugs (**Demyttenaere et al., 1998**). Sexual dysfunction has a significant impact on the interpersonal functioning and the overall quality of life in both men and women. **Abd El Atti (2010)** reported that the studies on sexual dysfunction are rare in Egypt where only 19 M.D. and MSc thesis were done on sexual disorders from 1970 to 2009 only two M.D. and nil MSc are from Faculty of Medicine Ain Shams University.

HYPOTHESIS

Sexual dysfunction is common among male psychiatric patients. Sexual dysfunction greatly affects the marital life. Erectile dysfunction is the most common among sexual dysfunction in males.

AIM OF THE WORK

The aim of the study is to:

- 1- Determine the prevalence and the most common types of sexual dysfunction among males in psychiatric outpatient clinic.
- 2- Compare between the different psychiatric morbidities as regards the sexual dysfunction.
- 3- Identify the most common causes of sexual dysfunction among males in psychiatric outpatient clinic.
- 4- Determine the effects of sexual dysfunction of the husband upon the marital relationship.

ANATOMY AND PHYSIOLOGY OF MALE SEXUALITY

Anatomy of the Penis

The penis is essentially a tripartite structure, with bilateral corpora cavernosa and the midline ventral corpus spongiosum/glans, all three of which are surrounded by loose subcutaneous tissue and skin that can be moved freely over the erect organ. The corpora cavernosa function as the main erectile bodies, while the corpus spongiosum contains the urethra (**Benson and Boileau, 1999**).

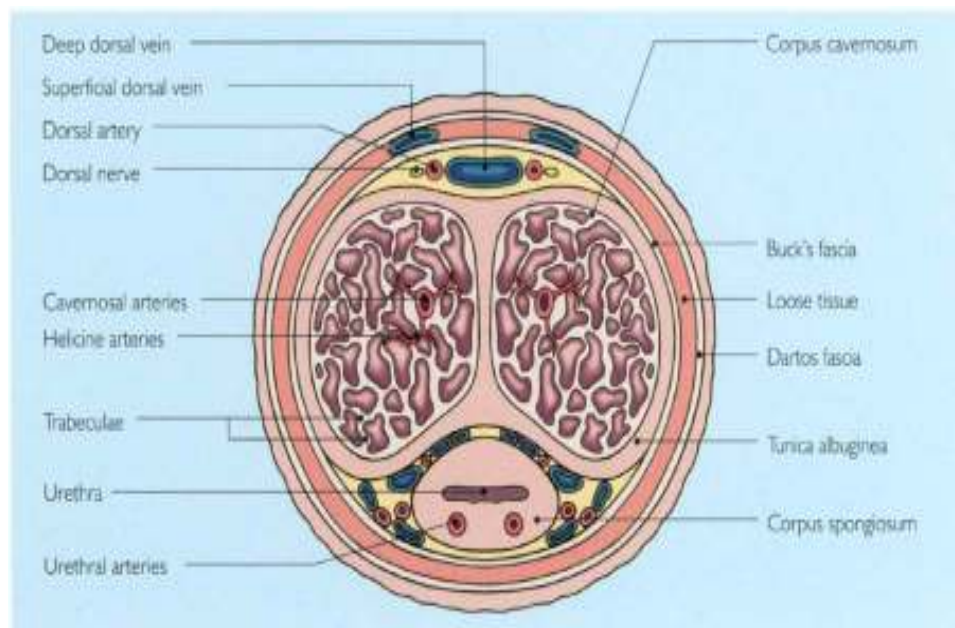


Fig. (1): Cross-sectional anatomy of the penis (**Gray and Lewis, 2015**).

There are two fascial layers. The more superficial is the dartos fascia, continuous with Scarpa's fascia of the abdomen.

It continues caudally as the dartos fascial layer of the scrotum and Colles' fascia in the perineum. The deeper fascial layer is Buck's fascia, which covers the corpora cavernosa and the corpus spongiosum in separate compartments **(Hsu et al., 1994)**.

The corpora are surrounded by tunica albuginea, a strong structure of heterogenous thickness and anatomy, the purpose of which is to both provide rigidity of the erectile bodies as well as to function in the venoocclusive mechanism. The tunica albuginea consists of two layers, the outer of which is oriented longitudinally and the inner layer consisting of circular fibers **(Hsu et al., 1994)**.

The paired internal pudendal arteries are the principal blood supply to the penis. These vessels arise from the internal iliac (hypogastric) artery and form the penile arteries, which, in turn, divide into three main branches. The principal venous drainage of the corpora cavernosa (CC) is the subtunical and emissary veins, which drain into the deep dorsal vein, while the superficial dorsal vein provides for cutaneous drainage of the penis. The other major venous drainage system is the cavernous and crural veins, which form the pudendal vein **(Benson and Boileau, 1999)**.

Lymphatic drainage of the penis is accomplished by the superficial and deep inguinal nodes which, in turn, drain to the iliac and para-aortic lymph nodes **(Roger, 2005)**.

The penis receives both somatic and autonomic (sympathetic and parasympathetic) innervations. The somatic component (S2 to S4) is the dorsal nerve of the penis, a terminal branch of the pudendal nerve carrying penile sensory afferent fibers. Sympathetic (T10 to L2) and parasympathetic (S2 to S4) fibers form the pelvic plexus and cavernosal nerves. Cholinergic parasympathetic fibers are the primary neuronal system involved in the erectile process and are involved in both tactile and psychogenic erection. The role of the sympathetic nervous system is less defined. It is generally agreed that adrenergic stimulation results in penile detumescence; however, sympathetic fibers may have a role in psychic erection (**Benson and Boileau, 1999**).

Physiology of male sexuality

Sexuality is determined by anatomy, physiology, the culture in which a person lives, relationships with others, and developmental experiences throughout the life cycle. It includes the perception of being male or female and private thoughts and fantasies as well as behavior. To the average normal person, sexual attraction to another person and the passion and love that follow are deeply associated with feelings of intimate happiness (**Arnold, 2004**).

Normal sexual behavior brings pleasure to oneself and one's partner, it involves stimulation of the primary sex organs including coitus; it is devoid of inappropriate feelings of guilt or anxiety and is not compulsive. Recreational, as opposed to

relational sex, that is sex outside a committed relationship, masturbation, and various forms of stimulation involving other than the primary sex organs, constitutes normal behavior in some contexts (**Arnold, 2004**).

Sexual response is a true psychophysiological experience. Arousal is triggered by both psychological and physical stimuli; levels of tension are experienced both physiologically and emotionally; and, with orgasm, normally a subjective perception of a peak of physical reaction and release occurs. Psychosexual development, psychological attitudes toward sexuality, and attitudes toward one's sexual partner are directly involved with, and affect, the physiology of human sexual response (**Sadock, 2005**).

Sex refers to a person's biological status and is typically categorized as male, female, or intersex (i.e., atypical combinations of features that usually distinguish male from female). There are a number of indicators of biological sex, including sex chromosomes, gonads, internal reproductive organs, and external genitalia (**De Cuypere et al., 2005**).

Masturbation is usually a normal precursor of object-related sexual behavior. No other form of sexual activity has been more frequently discussed, more roundly condemned, and more universally practiced than masturbation. Children also develop an increased interest in the genitalia of others including parents, children, and even animals. As young acquire playmates, the curiosity about their own and others' genitalia

motivates episodes of exhibitionism or genital exploration. Such experiences, unless blocked by guilty fear, contribute to continued pleasure from sexual stimulation (**Sadock, 2005**).

Sexuality depends on four interrelated psychosexual factors: sexual identity, gender identity, sexual orientation, and sexual behavior. These factors affect personality, growth, development, and functioning. Sexuality is something more than physical sex, coital or non coital and something less than all behaviors directed toward attaining pleasure (**Gutmann, 2006**).

With the approach of puberty, the upsurge of sex hormones, and the development of secondary sex characteristics, sexual curiosity intensifies, and masturbation increases. Adolescents are physically capable of coitus and orgasm, but are usually inhibited by social restraints. The dual and often conflicting pressures of establishing their sexual identities and controlling their sexual impulses produce a strong physiological sexual tension in teenagers that demands release, and masturbation is a normal way to reduce sexual tensions (**Sadock, 2005**).

Gender refers to the attitudes, feelings, and behaviors that a given culture associates with a person's biological sex. Behavior that is compatible with cultural expectations is referred to as gender-normative; behaviors that are viewed as incompatible with these expectations constitute gender non-conformity (**De Cuypere et al., 2005**).

Gender identity refers to “one’s sense of oneself as male, female, or transgender” When one’s gender identity and biological sex are not congruent **(De Cuypere et al., 2005).**

Gender expression refers to the “way in which a person acts to communicate gender within a given culture; for example, in terms of clothing, communication patterns and interests. A person’s gender expression may or may not be consistent with socially prescribed gender roles, and may or may not reflect his or her gender identity” **(De Cuypere et al., 2005).**

Sexual orientation refers to the sex of those to whom one is sexually and romantically attracted. Categories of sexual orientation typically have included attraction to members of one’s own sex (gay men or lesbians), attraction to members of the other sex (heterosexuals), and attraction to members of both sexes (bisexuals).

Coming out refers to the process in which one acknowledges and accepts one’s own sexual orientation. It also encompasses the process in which one discloses one’s sexual orientation to others. The term *closeted* refers to a state of secrecy or cautious privacy regarding one’s sexual orientation **(De Cuypere et al., 2005).**

The Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) defines a four-phase response cycle: phase 1, desire; phase 2, excitement; phase 3, orgasm; phase 4, resolution. It is important to remember that the sequence of responses can overlap and fluctuate. Additionally, a person's

subjective experiences are as important to sexual satisfaction as the objective physiologic response.

Phase 1: Desire

The phase is characterized by sexual fantasies and the desire to have sexual activity.

Phase 2: Excitement

The excitement and arousal phase, brought on by psychological stimulation (fantasy or the presence of a love object) or physiological stimulation (stroking or kissing) or a combination of the two, consists of a subjective sense of pleasure. During this phase, penile tumescence leads to erection in men. With continued stimulation, a man's testes increase 50 percent in size and elevate. Voluntary contractions of large muscle groups occur, heartbeat and respiration rates increase, and blood pressure rises. Heightened excitement lasts from 30 seconds to several minutes (**Sadock, 2005**).

Phase 3: Orgasm

The orgasm phase consists of a peaking of sexual pleasure, with the release of sexual tension and the rhythmic contraction of the perineal muscles and the pelvic reproductive organs. A subjective sense of ejaculatory inevitability triggers men's orgasms. The forceful emission of semen follows. The male orgasm is also associated with four to five rhythmic spasms of the prostate, seminal vesicles, vas, and urethra (**Sadock, 2005**).