Sexual Disorders: General Perspectives

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Sexuality is an important component of physical, intellectual, psychological and social well-being of all the individuals. However, there is lack of agreement on what constitutes 'normal', 'healthy', 'adequate' or 'functional' sexual behavior. To over-come this difficulty in definition, clinicians have tried to adopt a patient centered approach. Accordingly, a sexual problem exists when an individual presents a complaint about one or more behavioral, affective or cognitive problems in sexual relationship of functioning. Unless specified otherwise sexual inadequacy refers to sexual dysfunction by which Masters and Johnson in 1970 implied, some specific disruption of the 'SEXUAL RESPONSE CYCLE'.[1,2] In both men and women it encompasses desire / appetite, excitement or arousal – plateau, orgasm and resolution phases. Sexual inadequacies need to be differentiated from Gender identity disorders and paraphilias. The gender identity disorders are characterized by abnormality in ones sense of being masculine or feminine and sexual perversions or paraphilias characterized by recurrent intense sexual urges and sexually arousing fantasies, generally involving either non-human objects, suffering or

humiliation of oneself or ones partner or children or other non-consenting persons.

EPIDEMIOLOGY

Sexual dysfunctions are fairly common and are almost equal in both the sexes, even though there may be differences in seeking help in different cultures and societies[3]. Masters and Johnson in 1970 reported that 50% of all Americans have sexual problems sometime during their life[1,2]. Gebhard & Johnson in 1979 reported occasional erectile failure in 35% of males. Frank in 1978 noted sexual dissatisfaction in 5th of women and 3rd of the men while Frenken studying Dutch population noted 43% if women and 26% of men having sexual problems. The community data in our country is meagre though we know that sexual problems are fairly common and myths galore. Debonair, Savvy and other sex-surveys are available, still there are many methodological problems involved in interpreting the data. Natera, Wig and Verma in 1977 from Chandigarh noted sexual problems in 10% of males attending psychiatry and medical OPD[4]. In our department 6% of the males had sought psychiatric help primarily for sexual problems[5,6,7]. A 2 years retrospective study of cases in general hospital and a private psychiatry OPD by the author revealed that 50% of the patients belonged to the category of Dhat syndrome while the follow-up attendance was poor in majority of the cases.

Sexual problems can appear anytime in an individual but is fairly common between 20-40 years. The disorders are called primary, if they are present throughout ones life or secondary, if they appear after a period of normal sexual functioning. The sexual problems, in addition could be generalized or situational. So also, they could be total or partial.

ETIOLOGY:

Human sexual response is a complex phenomenon. Generally speaking, sexual dysfunctions are multi-factorial in etiology.

Each individual would be unique and the combination of factors is a rule rather than exception. However, the reported problems in medical and surgical practice may have higher correlation to organic illnesses while in psychiatric practice they predominantly belong to psycho-social domain. Table-1 details the etiology of sexual disorders.[8,9,10,11,12,13,14,15]

Table- 1

Etiology of Sexual Disorders

Clinical features	Etiology
Disorders of desire	
Hypoactive sexual desire (HSD)	Psychogenic (e.g., depression, marital discord leading to desire deficiency, performance anxiety leading to excitement inhibition) CNS disease (partial epilepsy, Parkinson's, post stroke, adrenoleukodystrophy) Androgen deficiency (primary or secondary), androgen resistance Drugs (antihypertensives, psychotropics, alcohol, narcotics, dopamine blockers, antiandrogens)
Compulsive sexual behaviors	Psychogenic (obsessive-compulsive sexuality, excessive sex-seeking in association with affective disorders, addictive sexuality, sex impulsivity)
Disorders of arousal	
Erectile dysfunction	Psychogenic Drugs (antihypertensives, anticholinergics, psychotropics, estrogens and antiandrogens, digoxin ,cigarette smoking, substance abuse) Systemic diseases (cardiac, hepatic, renal, pulmonary, cancer, metabolic, post organ transplant, pelvic irradiation) Androgen deficiency (primary or secondary), androgen resistance, other endocrinopathies like hyperprolactinectemia, hyperthyroidism, hypothyroidism Vascular insufficiency (atherosclerosis, pelvic steal, penile Raynauld's, venous leakage) Neurological disorder (Parkinson's, Alzheimer's, Shy-Drager, encephalopathy, spinal cord or nerve injury, peripheral neuropathy, pudendal nerve injury)

	Penile disease (Peyronie's, priapism, phimosis, smooth muscle dysfunction, trauma) Renal failure, hypertension, chronic obstructive pulmonary disease
Disorders of orgasm	
Premature ejaculation (primary or secondary)	Psychogenic (neurotic personality, anxiety/depression, partner discord or other situational factors) Organic (increased central dopaminergic activity, increased penile sensitivity) Drugs
Absent ejaculation (anejaculation)	Neural (spinal cord injury, cauda equine lesions, retroperitoneal lymphadenectomy, aortoiliac surgery, colorectal surgery, irradiation, diabetes, multiple sclerosis) Drugs (Antihypertensive, antidepressants, antipsychotics, alcohol) Androgen deficiency (primary or secondary), androgen resistance
Postejaculation pain	Psychogenic
Delayed ejaculation	Neural (spinal cord lesions, penile nerve lesions) Drugs (Antihypertensive, antidepressants, antipsychotics, alcohol)
Orgasmic dysfunction	Drugs (selective serotonin reuptake inhibitors, tricyclic antidepressants, monoamine oxidase inhibitors, substance abuse) CNS disease (multiple sclerosis, Parkinson's, Huntington's chorea, lumbar sympathectomy) Psychogenic (performance anxiety, conditioning factors, fear of impregnation, hypoactive sexual desire)
Failure of detumescence Priapism (primary or secondary)	Structural penile disease Penile structural abnormalities (Peyronie's, phimosis) Primary priapism: idiopathic Priapism secondary to disease: hematologic (sickle cell anemia, leukemia, multiple myeloma), infiltrative (Faber's disease, amyloidosis), inflammatory (tularemia, mumps), and neurologic diseases, solid tumors, trauma Priapism secondary to drugs: phenothiazines, trazodone, cocaine, intrapenile vasoactive injections

ORGANIC CAUSES

They could be cardio-vascular (Hypertension, myocardial in infarction, atherosclerosis, peyronie's disease), Neurological (cauda equina syndrome, spinal cord lesions, peripheral neuropathy, multiple sclerosis, transverse myelites, etc), pulmonary disorders (C.O.P.D., Asthama), Renal disorders, liver disorders, infections, malignancies, endocrinal disorders (Diabetes mellitus, Thyroid, pituitary, Cushings, etc), surgical procedures, traumatic causes, Iatrogenic (like drugs, particularly antihypertensives, antidepressants, antipsychotics, anticholinergics, etc), and the local

causes involving both the sexes. Sexual dysfunctions caused by some of the routinely used drugs are mentioned below. [8,9,16]

Table-2

Drugs Most Commonly Associated with Male Sexual Dysfunction

Medication	Type of sexual dysfunction
Antihypertensive medications	
Diuretics (thiazides, spironolactone)	Erectile dysfunction, decreased libido
Sympatholytics	
Central agents (methyldopa , clonidine)	Erectile dysfunction, decreased libido
Peripheral agents (reserpine)	Erectile dysfunction, ejaculatory dysfunction
Alpha blockers	Erectile dysfunction, ejaculatory dysfunction
Beta blockers (particularly nonselective agents)	Erectile dysfunction, decreased libido
Psychotropics	
Antipsychotic agents	Multiple phases of sexual function
Antidepressants	
Tricyclic antidepressants	Decreased libido, erectile dysfunction
Monoamine oxidase inhibitors	Multiple phases of sexual function
Selective serotonin reuptake inhibitors	Ejaculatory dysfunction, erectile dysfunction
Benzodiazepines	Decreased libido
Antiandrogenic	
Digoxin	Decreased libido, erectile dysfunction
Histamine H2-receptor blockers	Decreased libido, erectile dysfunction
Others	
Alcohol (long-term heavy use)	Decreased libido, erectile dysfunction
Ketoconazole	Decreased libido, erectile dysfunction
Niacin	Decreased libido
Phenobarbital	Decreased libido, erectile dysfunction
Phenytoin	Decreased libido, erectile dysfunction

PSYCHOGENIC CAUSES

a. **Socio-cultural factors:** Primarily sexual attitudes and values from parents and others that 'sex is dirty', punishment for masturbation and 'double standard' of behaviors for men and women, religious beliefs that sex is only for

reproduction and not for pleasure. Trauma in early adolescence, in particular lack of knowledge, hasty sexual encounters in anxiety provoking situations, incest, sexual abuse, rape, etc.,

b. **Intra Psychic conflicts:** Anxiety is the commonest etiological factor. Performance anxiety may be due to self-imposed high expectation and standard based in 'fantasy model' of what is seen, heard or read in popular fiction, movies, etc. Performance pressure may be related to demand for instantaneous erection, to reach orgasm, to achieve multiple orgasms, simultaneous orgasm, etc. Monitoring one's own sexual expertise, pleasure (spectatoring), fear, guilt, self-hatred, depression, denial are the other factors.

c. **Interpersonal or Relationship Problems:** Anger, being passive or aggressive, creating hostility in the partner, choosing inappropriate time for sex, making oneself physically and psychologically repulsive to partner, finding excuses like claiming exhaustion, feigning illnesses, lack of trust, power struggles, poor communication skills, 'sex-manual' mentality etc.

d. **Educational & Cognitive Factors:** Early lasting experience, sexual ignorance, myths particularly concerning semen, masturbation, menstruation, sexual activity, role expectation, sexual prowess, etc.

e. **Iatrogenic:** Unrealistic reassurances, Inadvertent and ignorant comments perpetuation of myths etc.

Some of the characteristic psychological factors that acts as predisposing, precipitating, perpetuating factors in males and females are detailed below.[17,18]

Table-3

Psychological factors associated with sexual dysfunction

Factors	Male	Female
Predisposing factors	Restrictive upbringing Disturbed family relationships Traumatic early sexual experience Inadequate sexual information Insecurity in the psychosexual role	Restrictive upbringing Disturbed family relationships Traumatic early sexual experience Inadequate sexual information Insecurity in the psychosexual role Distraction
Precipitating factors	Unreasonable expectations Random failure Discord in the relationship Dysfunction in the partner Infidelity Reaction to organic disease	Childbirth Poor emotional intimacy Discord in the relationship Infidelity Expectation of negative outcome Reaction to organic disease Depression or anxiety
Maintaining factors	Performance anxiety Guilt Poor communication Loss of attraction between partners	Poor emotional intimacy Depression or anxiety Expectation of negative outcome Guilt
	Impaired self-image Restricted foreplay	Fear of intimacy Impaired self image Sexual myths Poor communication

COMMON SEXUAL DYSFUNCTIONS OR INADEQUACIES:

1. **Hypoactive or Inhibited sexual desire:** Characterized by persistently or recurrently deficient or absent sexual

fantasies and desire for sexual activity. The judgment of deficiency or absence is made by the clinician, taking into account the factors that affect sexual functioning such as age, sex and the context of the person's life.

2. **Sexual aversion disorders:** These are characterized by persistent or recurrent extreme aversion to and avoidance of all or almost all genital sexual contact with a sexual partner.

3. **Sexual arousal disorders (Inhibited sexual excitement):** Before making the diagnosis, organic factors must always be ruled out. It is also necessary to establish that the sexual activity and masturbation is adequate in force, intensity and duration.

Male: Erectile disorder

It is characterized by 1. recurrent and persistent partial or complete failure to attain or maintain an erection through completion of the sex act or 2. recurrent or persistent lack of pleasure or excitement during sex.

FEMALE: Arousal disorder

It is characterized by 1. partial or complete failure to attain or maintain the lubrication and swelling response to sexual excitement unit completion of the sex act or 2. Recurrent or persistent lack of pleasure or excitement during sex.

For the diagnosis, the problem must occur in atleast 20-30% of all attempts which is also true with women in orgasmic dysfunction.

Research indicates that 10-20% of all men have experienced sexually impotence sometime in their life and it increases with age.

4. ORGASM DISORDERS

a. Inhibited female orgasm: It is characterized by recurrent or persistent inhibition of orgasm after a sexual excitement phase that ought to be adequate in focus, intensity and duration. Some women experience difficulty both in excitement and orgasmic stages while others may be able to have an orgasm during non coital clitoral stimulation but not during coitus.

Some women could be asymptomatic even in the absence of orgasm while others may present with pelvic pain, vaginal discharge, tiredness and irritation. Research indicates prevalence of secondary orgasmic dysfunction in 30% of the female population.

b. INHIBITED MALE ORGASM

It is characterized by recurrent or persistent delay or absence of ejaculation following an adequate phase of sexual excitement.

c. PREMATURE EJACULATION

It is defined as recurrent ejaculation with minimal sexual stimulation before the man wishes it to occur. This is the most common male sexual dysfunction, particularly in young men. Earlier definitions used utilize time duration, being not able to control his ejaculation for atleast 30 seconds after vaginal penetration. Masters & Johnson defined a person as 'premature

ejaculator' if he cannot control his ejaculatory process for a sufficient length of time during intravaginal containment to satisfy his partner in atleast 50 percent of their coital connections. However, this definition has the disadvantage of not taking into account the possibility of sexual dysfunction in the partner, hence has been discarded. Premature ejaculation has been recognized almost always as psychogenic, secondary to anxiety, conditioned by early sexual experiences, guilt and hostility towards the partner[19,20,21].

5. FUNCTIONAL DYSPAREUNIA

This is defined as recurrent or persistent genital pain before, during or after sexual intercourse, which is not due to lack of lubrication, vaginismus or physical causes. In male, it is reported to be rare and if present, is usually organic related. However, only 40% of the women with dyspareunia are found to have organic causes.

6. FUNCTIONAL VAGINISMUS

This is defined as recurrent or persistent involuntary spasm of the musculature of the outer third of the vagina that interferes with coitus. It is also seen in certain specific situations like during pelvic examination.

7. DHAT SYNDROME

This term has been used to refer to a culture bound syndrome of sexual dysfunction. It is seen in India and the subcontinent, as a mixture of neurotic features of asthenia, anxiety, depression, phobia and hypochondria is in patients, who are usually young and attribute the myriad of symptoms to loss of semen, in

nocturnal emission, 'bad dreams', semenuria, masturbation or sexual intercourse. As the misplaced fear and ignorance are the core features of this syndrome, treatment primarily involves sex education and counseling [22,23,24].

DIAGNOSTIC EVALUATION: Careful history taking and physical examination is a must in all the cases[25]. Desire disorders and aversion disorders are encountered far more frequently in practice than expected earlier. Men with erectile dysfunction may have normal libido and ejaculatory function. Usually, psychogenic potency problems begins suddenly, are situation specific and are accompanied by normal nocturnal and early morning tumescence. However, organic erectile dysfunction starts gradually, presents consistently and there would be loss of early morning erections. Laboratory studies should include a urine analysis, blood tests for complete blood count, creatinine, lipid profile, fasting blood sugar, thyroid function and other endocrinal tests. Nocturnal penile tumescence, intracavernous pharmacologic injection using a vasodilating agent like papaverine, phentolamine & prostaglandin E1, Duplex color ultrasonography, dynamic infusion pharmacocavernosometry and cavernosography, pharmacologic pelvic penile angiography are the other tests in some selected cases[26,27]. It is necessary to understand relationship difficulties among the couple, whether partner is sympathetic or asympathetic towards the problem, their expectation and motivation for treatment[28]. Differentiating features between psychogenic and organic sexual dysfunctions are given in table-4[29] Differentiating features between psychogenic and organic erectile dysfunction are given in table-5[14,15]Areas to be covered in Psychosocial assessment of sexual disorders are given in table-6 [17]

Table-4

Differentiating features between psychogenic and organic sexual dysfunction

	Organic	Psychogenic
Age	Older	Younger
Onset	Gradual (except trauma or surgery)	Acute
Circumstances	Global	Situational
Symptom Course	Consistent or progressive	Intermittent
Desire	Normal	Decreased
Organic risks	Present	Absent, variable
Partner problem	Secondary	At onset
Anxiety and fear	Secondary	Primary

Table-5

Differentiating features between psychogenic and organic erectile dysfunction

Parameters	Psychogenic	Organic
Onset of disorder	Situational with defined onset (onset associated with specific emotional event)	Insidious
Precipitating event	Psychogenic condition	Debilitating disease, vascular insufficiency or CNS abnormality, penile trauma or interfering drugs
Erectile function before intromission	May be present	Usually absent except in patients with pelvic steal phenomenon
Erectile function after intromission	Variable with different partners	Usually absent
Erectile response to other sexual stimuli	Usually present	Usually absent
Nocturnal or morning erections	Initially present and full, lost in longstanding Dysfunction	Absent or reduced in frequency and intensity
Course of disorder	Episodic or transient loss of erection	Persistent and progressive erectile Dysfunction
Associated ejaculatory disorder	Premature ejaculation and intermittent loss of ejaculation	Retrograde or absent ejaculation
Nocturnal penile tumescence		
Total time	> 90-180 min/night	<60 min/night
Circumferential change	.2 cm	2 cm
Penile-brachial index (PBI)	>0.70	< 0.60
Bulbocavernosus reflex latency	<35 sec	>40 sec

Table-6

Psychosocial assessment of sexual disorders

Variables	Areas covered
Background variables	Marital history Children Educational level Social class Occupation Religious beliefs
Life style factors	Alcohol Smoking Opioids
Psychiatric history	Depression Anxiety
Sexual History	Childhood and adolescent sexual learning and activities Masturbation history Interpersonal sexual activity Breadth and flexibility of sexual script with all partners "Time table of life"
Current sexual functioning	Current masturbatory and interpersonal sexual activities Nature of the problem, onset, course, frequency Spontaneous sexual experiences (morning erections) Current "Time table"
Relationship with partner	Harmony Communication Partner's health
Life stresses	Recent life stress Current life stress Losses
Expectations from treatment	Need, Expectations ,Priorities Treatment preferences

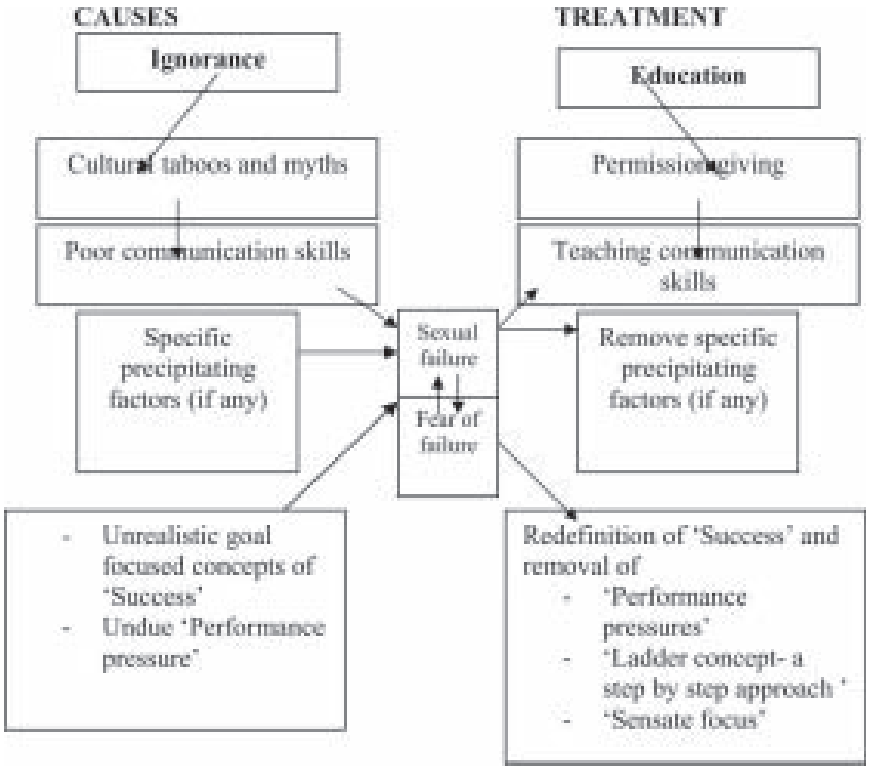
MANAGEMENT OF SEXUAL INADEQUACIES

Involves the following major steps:

1. Ruling out organic disease or problem.
2. Assess the extent of contributing Physical illness, if any and provide the appropriate management.
3. Psychotherapeutic Intervention: Sex therapy ideally includes both the patient and the partner as it is well recognized that the therapeutic involvement of the

partner is an important determinant of the outcome of the therapy. Therapy should emphasize that there is no use blaming one's partner or oneself, that there is no such thing as an uninvolved partner, that sex is not something a man does to a woman or woman to a man; it is something a man and woman do together. It can be a form of interpersonal communication at a highly intimate level; enhanced social communication benefits relationship in general.[30]

4. Behavioral Techniques: The assessment and treatment need to be tailored depending upon one's setting, profession, specialty and most important of all, the type of the problem encountered in the client.



CAUSES & MANAGEMENT OF SEXUAL PROBLEMS
(Adopted from Elizabeth Stanley)

BEHAVIORAL TECHNIQUES

Annon (1974) proposed a graded intervention popularly called as PLISSIT MODEL wherein.

P = Permission giving
LI = Limited information
SS = Specific suggestion
IT = Intensive sex therapy

The different levels of approaches represent the different degrees and modalities of sexual problems a particular clinician encounters in his practice. The assessment and treatment need to be tailored depending upon one's setting, profession, speciality and the important of all, the type of the problem encountered in the client. The intensive therapy involves primarily Sensitization, desensitization techniques[28]. The general principles are applicable to majority of the inadequacies encountered in the practice. The major guide-lines to be followed are:

1. **EDUCATING THE PATIENT:** Elicit discussion by giving permission to talk freely and openly about sex in a non-judgmental way, encourage partners to see, hear and understand each other's perception and teach communication skills[31].

2. **SETTING THE PARAMETERS OF THE THERAPY:** Inform ground rules of the therapy, dispel negative and sensational images of sex therapy and allow the couple to recognize and take responsibility for much of their treatment.

3. **PROSCRIBE SEX:** To take off performance anxiety and pressure.

4. **SENSATE FOCUS EXERCISES:** These are structured exercises, about 3-5 sessions assigned between the visits. Help couple recognize that sexual activity is not limited to sexual intercourse and that 'Pleasuring' and 'Receiving Pleasure' can be enjoyable without being regarded as foreplay or a preliminary to sexual intercourse. Slow progress from Non demanding pleasuring i.e., pleasing to explore one's own feelings about the experience from non-genital to breasts and then to penital pleasuring[32].

5. **SYSTEMATIC SENSITIZATION & DESENSITIZATION:** The example of premature ejaculation is about to become inevitable. 'Start-Stop Sensitization' technique can be established by the partner who provides manual stimulation to be stopped at a signal from him when orgasm becomes imminent. When some degrees of control has been achieved, partners should then try intra vaginal containment, usually in FEMALE SUPERIOR POSITION. Partners should increase the rhythmic movements until the man gives the signal to stop. Pause and then to restart again as the partners learn how to prolong the pleasure of intercourse while containing the urge to ejaculate[33].

Similar desensitizing and sensitizing techniques are utilized in treating psychogenic erectile and orgasmic dysfunctions in men and arousal and orgasmic dysfunctions in women. In women, with progressive stimulation of clitoral and other genital areas by partner, arousal is experienced without demand or pressure of intercourse.

Pharmacotherapy of sexual dysfunction:

SILDENAFIL CITRATE

It acts on nitric oxide mechanism by blocking PDE – 5. It is rapidly absorbed after oral administration; peak plasma concentrations

are reached about an hour later. The terminal half-life is 3-5 hrs. Tadalafil has much longer duration of action (36 hours). The clearance is reduced in the elderly, in patients with severe renal insufficiency and in those with liver disease. It is effective irrespective of the etiology of the erectile dysfunction. Patients who have benefited are those who have had erectile dysfunction due to psychogenic causes, spinal cord injury, diabetes mellitus and prostate surgery. Patients also benefit irrespective of age or baseline severity of erectile dysfunction. The magnitude of the benefit however varies. This means it does not produce a magic erection; rather it improves the strength of the erection, the duration of the erection, and the number of occasions on which the erection is satisfactory.

Currently the related drug tadalafil, which is long acting is available in Indian Market. Pharmacotherapuetic agents used in treatment of Premature Ejaculation are outlined in table-7.

Table-7

Pharmacotherapuetic agents used Premature Ejaculation

Oral therapies	**Recommended dose**
Non selective serotonin reuptake inhibitor - Clomipramine	25-50 mg/day or 25 mg 4-24 hours pre-intercourse
SSRI	
Fluoxetine	5-20 mg/d ay
Paroxetine	10-40 mg/day or 20 mg , 3-4 hours, pre-intercourse
Sertraline	25 to 200 mg or 50 mg 4-8 hrs pre-intercourse
Topical therapies	**Dose**
Lidocaine / prilocaine cream	Lidocaine 2.5% 20-30 mins. Pre- intercourse

ADVERSE EFFECTS

Adverse effects with sildenafil are dose dependent. Common adverse effects are headache, flushing, rhinitis and visual disturbance changes in the perception of colour hue or brightness. The adverse effects are usually mild and transient, lasting a few minutes to a few hours after drug administration. It is contraindicated in patients on concurrent organic nitrates. This is because it potentiates the hypotensive action of such drugs through its effects on nitric oxide/c-GMP mechanisms. It should be used with caution in persons with anatomical deformities of the penis (e.g. angulation, cavernosal fibrosis, Peyronie's disease), and in patients at risk for priapism (e.g patients with sickle cell anemia, multiple myeloma, leukemia, bleeding disorders, retinitis pigmentosa).

OTHER METHODS:

1. **Testosterone** is definitively effective only in case of hypogonadism. It can increase the desire but has no effect on erectile functioning. Female low sex drive and anorgasmia can be tried under careful monitoring.

2. **Hormone replacement therapy (HRT)** with estrogen in case of menopausal women as vaginal function, particularly lubrication is determined by them.

3. **Hyperprolactinaemia** is treated by administration of dopaminergic drugs like bromocriptine.

4. **Smooth Muscle relaxants** like papaverine, phentolamine, phenoxybenzamine are used in ICIVAD techniques,

Prostaglandin EI is a very effective agent. Various bi and tri mixes are available for use[37].

5. **Yohimbine**, central alpha 2 adrenoreceptor blocker and increases sympathetic drive. Its effectiveness is doubtful.

6. **Trazodone**, an antidepressant acts by inhibiting serotonin uptake and also by influencing alpha adrenergic and dopaminergic function. Results are inconsistent in erectile disorders[38].

7. **Apomorphine** acts by dopamine receptor stimulating effect[39,40].

8. **L-arginine**, a nitric oxide precursor.

9. **Naltrexone**, an opiate antagonist, can antagonize the inhibition of sexual functions[41].

10. **Sildenafil** acts by inhibition of phosphodiesterase – 5.

11. **Aswagandha, Shathavari, Korean red ginseng** and others may have beneficial effect.

Topical pharmacotherapy

1. **Nitroglycerine** (2% ointment) A known vasodilator

2. **Minoxidil** – A vasodilator directly acting on arterial smooth muscles by opening potassium channels. (2% solution)

3. **Papaverine gel** – vasodilator

4. **Alprostadil cream** (MUSE) (Prostaglandin EI) used intraurethrally[43].

In some selected cases when psychotherapy, behavior techniques and drugs fail or seen to be not very effective, vacuum devises, injections and implants, vibrators are found to be relatively effective. Ultimately, the success of sex therapy depends on a host of factors. Therapy duration ranges from 6weeks to more than a year in occasional cases. Sexual dysfunctions respond to treatment better compared to gender identify disorders and paraphilias, which are very resistant to therapy. More than half of the cases of erectile dysfunction and almost all the cases of premature ejaculation respond to combination of therapies.

B. GENDER IDENTITY DISORDERS:

Core gender identity refers to the sense of being male or female. This is usually set before 18months age in a child and is irreversibly established before 3 years age. This is primarily determined by anatomical sex (biological sex) by the presence of genitals (phenotype), genetic factor (genotype) and early upbringing. Gender identity refers to the expression of gender identify toward oneself and others.

Dual role transvestism:

The subject wishes to lead a double role, spending part of h is time as a male and part as a female.

Gender identity disorder of childhood:

Is listed in ICD – 10while DSM-IV codes has different categories for gender identity disorder in childhood and gender identity disorder in adolescence or adulthood.

Intersexuality: develops where there was ambiguity at birth regarding child's external genitalia. Androgen sensitivity syndrome or congenital adrenal hyperplasia are the examples.

Sexual maturation disorder

Here the person suffers from uncertainty about his or her gender identity or sexual orientation which causes anxiety or depression.

Transexualism:

Is a gender identity disorder characterized by a persistent belief to be or the opposite sex. A male transsexual believes that he will grow up to be woman and lose his genitals. A female transsexual tends to present masculine appearance and behavior. These individuals are characterized by behavior of cross dressing before the age of 4years in 75% of the individuals. No specific factor has been established conclusively. Early upbringing, lack of proper parental identification etc, are the causes. Treatment involves psychotherapy, behavior modification, family therapy and in some selected cases sexual reassignment surgery.

C. PARAPHILIAS (Sexual Déviations or Perversions)

These are rare and occur mostly in men. They are characterized by recurrent intense sexual urges and sexually arousing fantasies generally involving either non human objects, the suffering or humiliation of oneself or one's partner or children or other non-consenting persons. For the paraphilic patient, the imagery is persistent, the fantasies evoked are necessary for erotic arousal, for the relief from non-erotic tension and for sexual excitement and orgasm. Many paraphilics feel no distress and represent an

impairment in the capacity for reciprocal affectionate sexual activity. Though increased incidence of criminality is known with extra Y chromosome no known genetic or biological factors have been implicated in its etiology. Only upbringing, problems in mother-child relationship etc, has been implicated. History of being sexuality abused as children is common among these groups.

1. **Fetishism:** Sexual arousal is produced by non living objects such as women's clothing.

2. **Transvestism:** Must dress in women's Clothes in order to become sexually aroused.

3. **Frotteurism:** Sexually arousing urges to touch or rub against a non-consenting person, usually in a crowded setting where detection can be avoided. Common in men 15-25 years age.

4. **Pedophilia:** Sexual activity or fantasy involves prepubertal children of either sex.

5. **Exhibitionism:** Affected individual exposes his genitals in order to obtain sexual gratification, seen usually in psychologically immature men.

6. **Voyeurism:** Urges and fantasies about seeing unsuspecting people naked, in the act of disrobing or having sex, usually heterosexual in nature and is commonly referred as 'Peeping Tom'. It excludes watching pornography or normal sexual play in which individuals being watched are willing.

7. **Masochism and Sadism:** Achievement of sexual pleasure only through physical pain or suffering of self or others respectively.

8. **Bestiality or Zoophilia:** Sex with animals in the presence of other natural sexual outlets.

9. **Homosexuality:** is the sexual relationship between the persons of the same sex. It is no more considered a sexual deviation. This is a disorder when it is the dominant, significant and persistent mode of sexual relationship for that person and causes significant distress to the individual and is called ego-dystonic homosexuality (DSM-IV-TR). ICD – 10recognizes this as a category when sexual development and orientation are problematic to the individual. 5% of all males and 2% of all female are reported to be homosexual. The whole spectrum of biological and social causes have been implicated in its causation.

The treatment of gender identity disorders and paraphilias are difficult and time consuming, often needs professional intervention. The recommended treatments are:

1. To decrease deviant sexual arousal
2. To develop heterosexual arousal
3. To develop skills or social interaction with members of the opposite sex.
4. To provide training in assertiveness
5. To provide training in empathy
6. To attain sexual knowledge and
7. To treat sexual dysfunction with the marital unit.

Classification of sexual disorders as per DSM-IV and ICD-10 are given below.

DSM-IV-TR SEXUAL DISORDERS CATEGORIES

PARAPHILIAS

302.20	Pedophilia
302.30	Transvestile Fetishism
302.40	Exhibitionism
302.81	Fetishism
302.82	Voyeurism
302.83	Sexual Masochism
302.84	Sexual Sadism
302.89	Frotteurism
302.90	Paraphilias Nos.

SEXUAL DYSFUNCTIONS

Sexual Desire Disorders:

302.71	Hypoactive sexual desire disorder
302.79	Sexual aversion disorders

Sexual Arousal Disorders:

302.72	Female Sexual arousal disorder
302.72	Male erectile disorder

Orgasm Disorders:

302.73	Inhibited female orgasm
302.74	Inhibited male orgasm
302.75	Premature ejaculation

Sexual Pain Disorders:

302.70 Sexual dysfunctions NOS
302.76 Dyspareunia
306.51 Vaginismus

OTHER SEXUAL DISORDERS

302.90 Sexual Disorders NOS

ICD – 10 (W.H.O) CLASSFICATION
F52: SEXUAL DYSFUNCTIONS, NOT CAUSED BY ORGANIC DISORDER OR DISEASE

F52.0 Lack or loss of sexual drive.
F52.1 Sexual aversion and lack of sexual enjoyment.
F52.2 Failure of genital response
F52.3 Orgasmic dysfunction.
F52.4 Premature ejaculation
F52.5 Non-organic Vaginismus
F52.6 Non-organic dyspareunia.
F52.7 Excessive sexual drive
F52.8 Other sexual dysfunctions not caused by organic disorders or disease.
F52.9 Unspecified sexual dysfunction, not caused by organic disorder or disease.
F64: GENDER IDENTITY DISORDERS
F65: DISORDERS OF SEXUAL PREFERENCE (Includes paraphilias)
F66: PSYCHOLOGICAL AND BEHAVIORAL DISORDERS ASSOCIATED WITH SEXUAL DEVELOPMENT AND ORIENTATION.
F66.0 Sexual maturation disorder.

F66.1	Ego dystonic sexual orientation
F66.2	Sexual relationship disorder.
F66.8	Other psycho sexual development disorders.
F66.9	Psychosexual development disorders-unspecified.

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