NATURE, PREVALENCE, RISK FACTORS AND EXPLANATORY MODELS OF FEMALE SEXUAL DYSFUNCTION IN THE COMMUNITY

Dissertation submitted to

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CERTIFICATE

This is to certify that the dissertation titled “Nature, prevalence, risk factors and explanatory models of female sexual dysfunction in the community” is the bonafide work of Dr Shonima.A.V towards MD Psychiatry Degree Examination of Tamilnadu Dr M.G.R Medical University to be conducted in March 2009. This work has not been submitted to any university in part or full.

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DECLARATION

I hereby declare that this dissertation titled **"**Nature, prevalence, risk factors and explanatory models of female sexual dysfunction in the community **"** is a bonafide work done by me under the guidance of Dr.K.S.Jacob, Professor of Psychiatry, Christian Medical College, Vellore. This work has not been submitted to any university in part or full.

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Dr Shonima.A.V

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INTRODUCTION

Sexuality is determined by anatomy, physiology, psychology, the culture in which one lives, one's relationships with others, and developmental experiences throughout the life cycle. It includes the perception of being male or female and all those thoughts, feelings and behaviors connected with sexual gratification and reproduction including the attraction of one person to another.

Interest in human sexuality began in the 18th century, but formal and more rigorous studies focused on sexual satisfaction and sexual practices were published in the early 1900s. Alfred Kinsey's pioneering work on sexuality, in which he surveyed over 10,000 men and women age 16 and older, began in the late 1930s. In the mid-1960s, Masters and Johnson published their seminal work characterizing the sexual response cycle. Since then, numerous researchers have attempted to understand and to quantify “normal” sexual behaviors using survey techniques.

Clinical trials on sexual dysfunctions in women are limited in spite of the fact that sexual dysfunctions are likely to be more common in women than in men.

The 1990s have seen advances in the field of sexuality in the areas of pharmacology and psychology and in the study of the interaction of sex and the social milieu. Significant new developments are the availability of medications that enable men to gain and maintain erections later in their lives and hormonal therapies that allow women to have pleasurable coitus postmenopausally.

Sexuality has become an important recognized area of health. Rather than strictly providing for reproduction, sexuality involves but is not limited to biological,

psychological-social-emotional, cognitive, and culture experiences. Recent advances in the neurobiology of sexual behavior have provided greater insights in the contribution of neuroanatatomical, neuroendocrine, and neurochemical systems that modulate sexual behavior. Sexual behavior can include cognitive or physical aspects, and may involve a partner in a heterosexual or homosexual relationship, or self-stimulation. Reproductive endocrinology involving sex steroids and the neurotransmitters modulated by these hormones contributes significantly to the outcome and timing of sexual behavior. Psychological factors may also affect sexual functioning and include interpersonal relationships, body image, sexual self-esteem, and prior psychosexual adjustment. Substances may also affect sexual functioning, including prescribed medications, herbal preparations, and drugs of abuse. Cultural factors also play a role in sexual functioning, affecting psychological and social aspects of sexual behavior. [1]

REVIEW OF LITERATURE

1.1 NORMAL HUMAN SEXUALITY

1.1.1 DEFINITION

Sexuality can be defined as the ways in which people experience and express themselves as sexual beings; the awareness of themselves as males or females; the capacity they have for erotic experiences and responses.

1.1.2 HISTORY

Men and women have always been curious about sexual life: its inherent mysteries, drives, intentions, oddities, and the all too common sexual problems. Treatment rituals, folk remedies, advice, and sex manuals have been discovered among the writings of the ancient Greek physicians, Islamic and Talmudic scholars, and Chinese and Hindu practitioners. The venerable Indian text *The Kama Sutra* offered sage advice and illustrated the varied coital positions.

The first attempt at describing and classifying sexual disorders began with Richard von Krafft-Ebing[2] and his *Psychopathia Sexualis (1898)*, which influenced medical and legal practice for more than three-quarters of a century. Attempts to develop databases to quantify normal and abnormal sexual acts soon followed, and ultimately led to the seminal contributions of Havelock Ellis(1896)[3] and Albert Kinsey.[4,5]

Historically, treatments of sexual dysfunctions were based on prevailing salient ideologies: psychoanalytical, behavioural, Masters and Johnson, neo-Masters and Johnson, and the current psychobiological.

Prior to 1950 psychoanalytical concepts guided clinicians in their understanding and treatment of sexual problems. Sexual symptomatology was linked to constellations of unresolved, unconscious conflict(s) occurring during specific developmental periods.[6] Psychoanalytical notions were heterosexist and male-centred, as is clearly evident in the construction of the controversial concept of penis envy and the psychological interpretation given to the classification of women's orgasm as either clitoral or vaginal.

In the late 1950s the behavioural perspective gained ascendancy; sexual problems were understood to be learned (conditioned) anxiety responses.[7,8] Interventions, loosely modelled on classical conditioning paradigms, sought to extinguish the anxiety or performance demands that interfered with normal sexual function.

In 1966 Masters and Johnson reported the first results of laboratory observations of male and female sexual arousal and orgasm.[9] Initially they described the physiology of these phases of functioning, and later highlighted the deleterious influence of performance anxiety (the fear of future sexual failure based upon previous failures, which can contribute to all sexual dysfunctions including those with primary organic aetiologies), the impact of relationship factors, and the significance of biological factors on the development of sexual dysfunctions.[10] Their work foreshadowed the later integration of medical and psychological interventions.

The neo-Masters and Johnson era was heralded by the publication of Helen Singer Kaplan's book, *The New Sex Therapy*.[11] She integrated psychoanalytical theory with Masters and Johnson's cognitive-behavioural understanding of sexual dysfunction. Distinguishing between recent and remote aetiological causations, she recommended behavioural approaches for the former and reserved traditional psychodynamic methods for the latter.

The mid-1980s ushered in the current psychobiological era. This period is distinguished by the medicalization of treatment approaches, primarily for male sexual dysfunction.[12] Scientific investigations of cellular chemistry have elucidated the pathophysiology of male sexual arousal problems and have led to the introduction of new oral treatments, such as sildenafil.

1.1.3 ANATOMY AND PHYSIOLOGY

Anatomy **:**The external genitalia of the normal female, also called the vulva, include the mons pubis, major and minor lips, clitoris, glans, vestibule of the vagina, and vaginal orifice. The internal system includes the ovaries, fallopian tubes, uterus, and vagina.

Innervation of Sex Organs : Innervation of the sexual organs is mediated primarily through the autonomic nervous system (ANS). Clitoral engorgement and vaginal lubrication result from parasympathetic stimulation that increases blood flow to genital tissue. In women the sympathetic system facilitates the smooth muscle contraction of the vagina, urethra, and uterus that occurs during orgasm. The ANS functions outside

of voluntary control and is influenced by external events (e.g., stress, drugs) and internal events (hypothalamic, limbic, and cortical stimuli). It is not surprising, therefore, that erection and orgasm are so vulnerable to dysfunction.

Endocrinology: From the time of conception, hormones play a major role in human sexual development. Unlike the fetal gonads, which are under chromosomal influence, the fetal external genitalia are very susceptible to hormones. Testosterone is the hormone believed to be connected with libido in both men and women. In men stress is inversely correlated with testosterone blood concentration. Other factors, such as sleep, mood, and lifestyle, influence circulating levels of the hormone.

Many clinicians correct the hormone deficiency of the postmenopausal period with estrogen replacement therapy. Testosterone has been used in combination with estrogen in women who do not respond to estrogen alone. The combination is especially useful in treating headache, depression, and reduced libido. Oxytocin, secreted by the hypothalamus, stimulates lactation and uterine contractions. It may enhance sexual activity. Plasma oxytocin concentrations increase in men and women during orgasm.

1.1.4 NEUROBIOLOGY OF SEXUAL BEHAVIOR

The neurobiology of sexual behavior involves sex steroids and neurotransmitters, and includes central nervous system effects and peripheral effects in the genitalia. In women, estrogen appears to be important in desire, but is particularly important in arousal, as declining levels of estrogen associated with the menopausal transition and postmenopausal state may lead to vaginal atrophy and subsequent difficulty with vasocongestion and lubrication. Testosterone appears to be the primary sex steroid

influencing desire, and may involve initiation of sexual activity, while progesterone may mediate receptivity to partner approach [13]. However, attempts to relate circulating levels of testosterone to sexual desire have yielded inconsistent results [14]. Testosterone function may, at least in part, be modulated by the neurotransmitters dopamine and serotonin by way of the hypothalamus and associated limbic structures. In addition, decreased levels of bioavailable testosterone may lead to symptoms consistent with androgen insufficiency manifested as a diminished sense of well-being or dysphoric mood, persistent and unexplained fatigue, and sexual function changes, including diminished libido, reduced sexual receptivity, and diminished sexual pleasure [15]. Prolactin also influences the sexual excitement phase with increasing levels of prolactin having a negative affect on arousal and subsequent phases of sexual functioning. Oxytocin appears to be related to changes across the menstrual cycle, possibly enhancing sexual receptivity [16], and is associated with perineal contractions and increased systolic blood pressure at the time of orgasm [17]. Neurotransmitters associated with central effects on sexual functioning include dopamine, which appears to enhance sexual desire and the subjective sense of excitement and wish to continue in sexual activity once sexual stimulation has been initiated. Norepinephrine is also involved centrally in the arousal phase [18], and the effects of dopamine [19] and norepinephrine on sexual functioning can both be diminished by increasing serotonergic neurotransmission[20] .Peripheral effects on sexual functioning appeared to be even more complicated. Estrogen, testosterone, and progestin released by the ovaries or the adrenals maintain genital structure and function[21] . They also influence bioavailability and function of each other; for example, increasing levels of estrogen may lead to increased sex hormone-binding globulin

(SHBG) with subsequent binding of free testosterone, thus lowering bioavailable or free testosterone. In addition, progestin can be antiestrogenic. Vasocongestion of clitoral tissue appears to be positively mediated by nitric oxide [22] and vasoactive intestinal polypeptide (VIP) once sexual stimulation occurs [23]. The presence of adequate levels of estrogen [24] and bioavailable testosterone appears to be required for nitric oxide to initiate vasocongestion with sexual stimulation [25]. Estrogen also influences nerve transmission and sensory thresholds [26]. Cholinergic fibers innervate vascular smooth muscle in the vagina and may be associated with vaginal engorgement during sexual arousal [27]. In peripheral tissues, serotonin appears to play a role in the initiation of sexual arousal by way of effects on vascular tone and blood flow, and potentially on orgasm by facilitating uterine contractions, but may also interfere with both of these phases via effects on sensation, reduced adrenergic effects, inhibiting nitric oxide synthase [28], and inhibition of orgasm by stimulation of 5-HT2 receptors [29].

Psychosexual Factors

Sexuality depends on four interrelated psychosexual factors: sexual identity, gender identity, sexual orientation, and sexual behavior. These factors affect personality, development, and functioning.

1.1.5 HUMAN SEXUAL RESPONSE CYCLE

The most successful model was that formulated by Masters and Johnson [30]. In the laboratory, they observed the changes that took place in the male and female body and especially the genitals during sexual arousal to orgasm either by masturbation or by

natural or artificial coitus with a plastic penis that allowed internal filming of the female genitalia. After studying approximately 7500 female and 2500 male arousals to orgasm in some 382 female and 312 male volunteers over 11 years they proposed a four-phase linear, sequential, and incremental model of the human sexual response cycle . The phases were described as the excitation (E) phase (stimuli from somatogenic or psychogenic sources raise sexual tensions), the plateau (P) phase (sexual tensions intensified), the orgasmic (O) phase (involuntary pleasurable climax), and finally the resolution (R) phase (dissipation of sexual tensions). The great success of this EPOR model was its wide compass; it could characterize the sexual responses of women and men, both heterosexual and homosexual, ranging from simple petting to vaginal or anal coitus with orgasm. However, it had several weaknesses.

The first weakness of the EPOR model is that it was derived from the study of a highly selected group of American men and women volunteers who could arouse themselves to orgasm in a laboratory, on demand, and allow themselves to be watched/filmed or measured for scientific and altruistic (or perhaps exhibitionistic) purposes. The second weakness was the lack of inter observer agreement about the changes observed and of confirmation of their sequential reliability. Robinson [(31)] examined the E phase and P phase, and concluded convincingly that the P phase was simply the final stage of the E phase. Helen Kaplan, [(32)] a New York sex therapist, proposed that before the E phase there should be a ‘desire phase' (D phase). This proposal came from her work with women who professed to have no desire to be sexually aroused, even by their usual partners. She suggested that the desire must occur before sexual arousal can begin. Kaplan's subjects were attending a clinic and no studies were ever conducted with a

control normal population (either women or men) to investigate whether this ‘self-evident' fact was true. Despite this, the EPOR model gradually became replaced by the desire, excitation, orgasmic, and resolution phase (DEOR) model. While this is the currently accepted model, the centrality of the desire phase in women remains uncertain . In a survey of non-clinic sexually experienced women in Denmark, about a third reported that they never experienced spontaneous sexual desire and in an American survey women reported periods of several months when they lacked interest in sex. The other problem with the desire phase is its location in the sequential DEOR model. Sexual desire that appears to be spontaneous (but presumably must still be activated by a learned trigger) should obviously be placed at the beginning of the model , but what of sexual desire created when the person is sexually aroused by another? Where do we place this sexual desire, at the early stages of the excitation phase? Courtship behaviour, which begins the initiation of sexual activity, is also difficult to position in regard to the DEOR .

DSM-IV defines a four-phase response cycle:

phase I, desire;

phase II, excitement;

phase III, orgasm;

phase IV, resolution.

Phase I: Desire

Phase I is distinct from any identified solely through physiology and reflects the psychiatrist's fundamental concern with motivations, drives, and personality. It is characterized by sexual fantasies and the desire to have sexual activity.

Phase II: Excitement

Phase II is brought on by psychological stimulation (fantasy or the presence of a love object), physiological stimulation (stroking or kissing), or a combination of the two. It consists of a subjective sense of pleasure. The excitement phase is characterized by penile tumescence leading to erection in the man and vaginal lubrication in the woman.

Phase III: Orgasm

Phase III consists of peaking sexual pleasure, with release of sexual tension and rhythmic contraction of the perineal muscles and pelvic reproductive organs.

Phase IV: Resolution

Resolution consists of the disgorgement of blood from the genitalia (detumescence), which brings the body back to its resting state. If orgasm occurs, resolution is rapid; if it does not occur, resolution may take 2 to 6 hours and be associated with irritability and discomfort.

1.2 DESCRIPTION OF FEMALE SEXUAL DYSFUNCTION

1.2.1 DEFINITION

Sexual dysfunction refers to a disturbance in the psycho-physiological processes involved in the sexual-response cycle of both men and women. In DSM-IV [33] sexual dysfunctions are categorized as Axis I disorders. The syndromes listed are correlated with the sexual physiological response, which is divided into the four phases discussed above. The essential feature of the sexual dysfunctions is inhibition in one or more of the phases, including disturbance in the subjective sense of pleasure or desire or disturbance in the objective performance. Either type of disturbance can occur alone or in combination. Sexual dysfunctions are diagnosed only when they are a major part of the clinical picture. They can be lifelong or acquired, generalized or situational, and due to psychological factors, physiological factors or combined factors. If they are attributable entirely to a general medical condition, substance use, or adverse effects of medication, then sexual dysfunction due to a general medical condition or substance-induced sexual dysfunction is diagnosed. Unlike ICD-10, DSM-IV requires that the dysfunction cause marked distress or interpersonal difficulty

According to the 10th revision of International Statistical Classification of Diseases and Related Health Problems (ICD-10) [34], sexual dysfunction refers to a

G1. The subject is unable to participate in a sexual relationship as he or she would wish. (This dysfunction is expressed in various ways: as a lack of desire or of pleasure or as a physiological inability to begin, maintain, or complete sexual interaction.)

G2. The dysfunction occurs frequently, but may be absent on some occasions.

G3. The dysfunction has been present for at least 6 months.

G4. The dysfunction is not entirely attributable to any of the other mental and behavioral disorders in ICD-10, physical disorders (such as endocrine disorder), or drug treatment.

1.2.2 DIAGNOSTIC CRITERIA

Seven major categories of sexual dysfunction are listed in DSM-IV:

(1) sexual desire disorders,

(2) sexual arousal disorders,

(3) orgasm disorders,

(4) sexual pain disorders,

(5) sexual dysfunction due to a general medical condition,

(6) substance-induced sexual dysfunction, and

(7) sexual dysfunction not otherwise specified

In ICD 10,the categories are

(1) Lack or loss of sexual desire

(2) Sexual aversion and lack of sexual enjoyment

(3) Failure of genital response

(4) Orgasmic dysfunction

(5) Premature ejaculation

(6) Nonorganic vaginismus

(7) Nonorganic dyspareunia

(8) Excessive sexual drive

(9) Other sexual dysfunction,not caused by organic disorder or disease

(10)Unspecified sexual dysfunction, not caused by organic disorder or disease

DSM-IV: Hypoactive sexual desire (302.71)

A. Persistently or recurrently deficient (or absent) sexual fantasies and desire for sexual activity. The judgement of deficiency or absence is made by the clinician, taking into account factors that affect sexual functioning, such as age and the context of the person's life.

B. The disturbance causes marked distress or interpersonal difficulty.

C. The sexual dysfunction is not better accounted for by another Axis I disorder (except another sexual dysfunction) and is not due exclusively to the direct physiological effects of a substance (e.g. a drug of abuse, a medication) or a general medical condition.

ICD-10: Lack or loss of sexual desire (F52.0)

A. The general criteria for sexual dysfunction (F52) must be met.

B. There is a lack or loss of sexual desire, manifest by diminution of seeking out sexual cues, of thinking about sex with associated feelings of desire or appetite, or of sexual fantasies.

C. There is a lack of interest in initiating sexual activity either with a partner or as solitary masturbation, resulting in a frequency of activity clearly lower than expected, taking into account age and context, or in a frequency very clearly reduced from previous much higher levels.

DSM-IV: Sexual aversion disorder (302.79)

A. Persistent or recurrent extreme aversion to, and avoidance of, all (or almost all) genital sexual contact with a sexual partner.

B. The disturbance causes marked distress or interpersonal difficulty.

C. The sexual dysfunction is not better accounted for by another Axis I disorder (except another sexual dysfynction)

ICD-10: Sexual aversion (F52.1)

A. The general criteria for sexual dysfunction (F52) must be met.

B. The prospect of sexual interaction with a partner produces sufficient aversion, fear, or anxiety that sexual activity is avoided, or, if it occurs, is associated with strong negative feelings and an inability to experience any pleasure.

C. The aversion is not the result of performance anxiety (reaction to previous failure of sexual response).

DSM-IV: Female sexual arousal disorder (302.79)

A. Persistent or recurrent inability to attain, or to maintain until completion of the sexual activity, an adequate lubrication–swelling response of sexual excitement.

B. The disturbance causes marked distress or interpersonal difficulty.

C. The sexual dysfunction is not better accounted for by another Axis I disorder (other than a sexual dysfunction) and is not due exclusively to the direct physiological effects of a substance (e.g. a drug of abuse, a medication) or a general medical condition.

ICD-10: Lack of sexual enjoyment (F52.11)

A. The general criteria for sexual dysfunction (F52) must be met.

B. Genital repsonse (orgasm and/or ejaculation) occurs during sexual stimulation, but is not accompanied by pleasurable sensations or feelings of pleasant excitement.

C. There is no manifest and persistent fear or anxiety during sexual activity.

ICD-10: Failure of genital response (F52.2)

A. The general criteria for sexual dysfunction (F52) must be met.

B. There is failure of genital response, experienced as failure of vaginal lubrication, together with inadequate tumescence of the labia. The dysfunction takes one of the following forms:

(1) general: lubrication fails in all relevant circumstances;
(2) lubrication may occur initially but fails to persist for long enough to allow comfortable penile entry;
(3) situational lubrication occurs only in some situations (e.g. with one partner but not another, or during masturbation, or when vaginal intercourse is not being contemplated).

DSM-IV: Female orgasmic dysfunction (302.73)

A. Persistent or recurrent delay in, or absence of, orgasm following a normal sexual excitement phase. Women exhibit wide variability in the type or intensity of stimulation that triggers orgasm. The diagnosis of female orgasmic disorder should be based on the clinician's judgement that the woman's orgasmic capacity is less than would be reasonable for her age, sexual experience, and the adequacy of sexual stimulation she receives.

B. The disturbance causes marked distress or interpersonal difficulty.

C. The orgasmic dysfunction is not better accounted for by another Axis I disorder (other than a sexual dysfunction) and is not due exclusively to the direct physiological effects of a substance (e.g. a drug of abuse, a medication) or a general medical condition.

ICD-10: Orgasmic dysfunction (F52.3)

A. The general criteria for sexual dysfunction (F52) must be met.

B. There is orgasmic dysfunction (either absence or marked delay of orgasm) which takes one of the following forms:

(1) orgasm has never been experienced in any situation;
(2) orgasmic dysfunction has developed after a period of relatively normal response:
  (a) general: orgasmic dysfunction occurs in all situations and with any partner;
  (b) situational: for women, orgasm does occur in certain situations (e.g. when masturbating or with certain partners).

DSM-IV: Dyspareunia (302.76)

A. Recurrent or persistent genital pain associated with sexual intercourse in either a male or a female.

B. The disturbance causes marked distress or interpersonal difficulty.

C. The disturbance is not caused exclusively by vaginismus or lack of lubrication, is not better accounted for by another Axis I disorder (except another sexual dysfunction), and is not due exclusively to the direct physiological effects of a substance (e.g. a drug of abuse, a medication) or a general medical condition.

ICD-10: Non-organic dyspareunia (F52.6)

A. The general criteria for sexual dysfunction (F52) must be met.

In addition, for women:

B. Pain is experienced at the entry of the vagina, either throughout sexual intercourse or only when deep thrusting of the penis occurs.

C. The disorder is not attributable to vaginismus or failure of lubrication; dyspareunia of organic orgin should be classified according to the underlying disorder.

In addition, for men:

B. Pain or discomfort is experienced during sexual response. (The timing of the pain and the exact localization should be carefully recorded.)

C. The discomfort is not the result of local physical factors. If physical factors are found, the dysfunction should be classified elsewhere.

DSM-IV: Vaginismus (306.51)

A. Recurrent or persistent involuntary spasm of the musculature of the outer third of the vagina that interferes with sexual intercourse.

B. The disturbance causes marked distress or interpersonal difficulty.

C. The disturbance is not better accounted for by another Axis I disorder (e.g. somatization disorder) and is not due exclusively to the direct physiological effects of a general medical condition.

ICD-10: Non-organic vaginismus (F52.5)

A. The general criteria for sexual dysfunction (F52) must be met.

B. There is spasm of the perivaginal muscles, sufficient to prevent penile entry or make it uncomfortable. The dysfunction takes one of the following forms:

(1) normal response has never been experienced;
(2) vaginismus has developed after a period of relatively normal response:
  (a) when vaginal entry is not attempted, a normal sexual response may occur;
  (b) any attempt at sexual contact leads to generalized fear and efforts to avoid vaginal entry (e.g. spasm of the adductor muscles of the thighs).

1.2.2 THEORIES AND RISK FACTORS

Theories behind lack or loss of sexual desire

Strong negative emotions (anger, dysthymia, guilt, shame) can result in diminished sexual desire; however, empirical studies supporting these ideas are generally lacking. One exception is Schreiner-Engel and Schiavi's report [35] that men and women with generalized hypoactive sexual desire had higher lifetime prevalences of depressive disorder which had preceded the development of the sexual disorder. Many clinicians

also believe that situational sexual desire disorders may have their origin in the deterioration of a couple's non-sexual relationship. Stuart et al [36] found that hypoactive sexual desire was associated with lower levels of marital satisfaction and lower feelings of romantic love toward the partner. Finally, a history of childhood sexual abuse or gender identity conflict has been associated with generalized hypoactive sexual desire in some women.[37,38]

Theories for sexual aversion disorders

There is generally a phobic element seen that leads clinicians to consider a traumatogenic aetiology more often than the other factors proposed for generalized hypoactive sexual desire. These may include early sexual abuse, painful experiences with coitus, or the perception of being assaulted by the partner.

Theories for sexual arousal disorders

There is considerable ambiguity regarding this diagnosis because, with the exception of postmenopausal women in whom diminished lubrication is a normal physiological change, symptoms of female arousal disorder are frequently subsumed under desire and/or orgasmic disorders .Too often hurried attempts at intercourse without adequate preparation and foreplay result in symptoms of an arousal disorder. The clinician should explore whether cultural, social, or religious ideas may be interfering with the development of arousal. The symptom may be a reflection of relationship dissatisfaction, sexual orientation incongruity, preoccupation with other life tasks (childbearing), fatigue, or depression.

Theories for orgasmic disorders

The most popular theory, although soundly debunked for years, has been Freud's notion that sexual maturity in a woman requires that she give up clitoral sensitivity for vaginal responsiveness. Thus, women who could not achieve orgasm with penile thrusting alone were considered neurotic.

Masters and Johnson's psychophysiological research clearly demonstrated that no distinction can be made between vaginal and clitoral orgasms, and that the sensitivity of clitoral/vaginal neuropathways naturally varied among women.

Fisher [39] characterized anorgasmic women as having an increased need to control situations involving high arousal where they might lose control. He believed these women were defending against disappointments with their fathers, which was transferred to their current love object. Although clinicians may question the psychodynamic basis for Fisher's conclusions, none the less many concur that the ‘fear of losing control' constitutes a major issue underlying anorgasmia.

Other psychological explanations include fear of impregnation, guilt regarding sexual impulses, fear of rejection by one's partner, and fear of vaginal damage by penile thrusting.

The strength and tone of a woman's pubococcygeus muscle has been proposed as a contributing factor in the development of anorgasmia. However, psychophysiological research has demonstrated that the correlation between pubococcygeus muscle tone and

orgasmic capacity is low. For some women it is possible that focusing on increasing the tone and strength of the pubococcygeus muscle may idiosyncratically improve their orgasmic ability by eliminating outside distractions. [40]

Theories for dyspareunia

Dyspareunia is currently the only female sexual dysfunction in which organic factors are hypothesized to play a major role. Abarbanel [41] has devised a useful tripartite classification of medical aetiologies associated with dyspareunia: anatomical, pathological, and iatrogenic. Anatomical factors comprise congenital or developmental impairments such as a rigid hymen or vaginal atrophy. Pathological factors include acute and chronic infections of the genital tract, such as endometriosis. Iatrogenic factors are conditions induced by a physician usually as a consequence of a surgical procedure such as episiotomy.

Theories for vaginismus

Vaginismus is hypothesized to be the body's expression of the psychological fear of penetration, but is also characterized as a psychosomatic disorder, a phobia, a conditioned response, and a conversion reaction. [42]

Meana etal [43] and Meana and Binik [44] suggest that dyspareunia be reconceptualized from a sexual dysfunction involving pain to a pain syndrome resulting in sexual dysfunction. Such a reconceptualization would focus on the target symptom (pain) and on the potential underlying mechanisms, rather than on possible psychological theories that have no empirical support.

Vaginismus is most likely multicausal and overdetermined in aetiology.[42]The precipitating events range from specific childhood or adult trauma to unconscious conflict, although attempts to link vaginismus to childhood or adult sexual abuse have not been empirically validated.

Analytically oriented therapists have speculated that vaginismus reflects the woman's rejection of the female role, as a resistance against a male sexual prerogative, a defence against her father's real or fantasized incestual threat, and attempts to ward off her own castration images. [45]

Spence [46] suggests that fears of pregnancy, strict religious adherence, disgust regarding genitalia, partner dissatisfaction, and irrational beliefs about anatomy underlie the development of vaginismus.

Finally, learning theorists understand the dysfunction as a conditioned fear reaction reinforced by the belief that penetration can only be accomplished with great difficulty and will result in pain and discomfort.

The most common conditions affecting sexual functioning include psychiatric, neurological, endocrine, infectious, autoimmune, and genitourinary. Psychiatric conditions may decrease sexual desire, such as major depressive disorder (70%) [47] and eating disorders[48] , or may be associated with orgasmic dysfunction, as in histrionic personality disorders [49] and schizophrenia [50]. Medical conditions also affect sexual functioning, including multiple sclerosis [51], Crohn's disease [52], diabetes mellitus [53], and status postgenital surgery [54,55]. Identification of all substances that might contribute

to sexual dysfunction is essential; frequent problems have been seen with antidepressants, antipsychotic medications, antihypertensives, hormonal contraceptives, and H_2 blockers. Laboratory studies should be drawn when clinically indicated. Measures to be considered include thyroid function tests, hemoglobin A1C, lipid levels, sex hormone binding globulin (SHBG), free and total testosterone, and estradiol, prolactin, follicle-stimulating hormone (FSH), and luteinizing hormone levels. A targeted neurological assessment or a genitourinary examination may be indicated if the history or laboratory studies suggest a problem specific to these systems.

Psychological and relational factors that require assessment include:

1. quality of the relationship;
2. feelings about the partner, e.g. positive regard, anger, or loss of respect;
3. impact of extramarital liaisons;
4. sexual orientation incompatibility between the self and partner;
5. history of childhood or adult sexual trauma;
6. negative parental transferences and current or prior history of affective disorder;
7. life circumstances that result in negative emotions, e.g. business failures, death of relatives.

1.2.3 MANAGEMENT AND PROGNOSIS

Sexual desire disorder

Psychotherapeutic interventions for hypoactive sexual desire are generally combinations of behavioural, cognitive, psychodynamic, and marital techniques. No specific treatment regimens have been agreed upon anecdotally by clinicians, nor have any been validated by scientific study. Outcome studies of eclectic treatments demonstrate that 50 to 70 per cent of men and women with disorders of sexual desire appear to achieve modest gains immediately following therapy. However, a marked deterioration in desire is noted at 3-year follow-up ([56,57,58]. Half of the individuals who report success after treatment do not maintain heightened desire 3 years later. Paradoxically, however, couples in these studies report improved and sustained levels of sexual satisfaction despite the regression in levels of sexual desire.

There are reports that testosterone may be helpful to certain groups of women in restoring sexual desire, such as surgically menopausal women [59].Davidson *et al* [60] proposed that androgens may act to facilitate and maintain sensitivity to or pleasurable awareness of both sexual thoughts and activity. In a review of empirically validated treatments for sexual dysfunction Heiman and Meston[61] state: 'Although testosterone has been shown to increase sexual desire in men and women, its effect may be limited to these individuals with abnormally low levels of bioavailable testosterone. No controlled studies in which the effect of testosterone on humans who had adequate testosterone levels but low desire was directly tested.' Segraves and Althof [62] echo this statement by saying, 'There is no

pharmacotherapy for primary psychological hypoactive sexual desire with established efficacy'.

Sexual arousal disorders

Few empirically validated or anecdotal reports of psychological treatment interventions can be found for arousal disorders in women.Spence [46] has proposed that clinicians employ techniques to facilitate increased arousal, such as fantasy training, use of erotic materials, attention-focusing skills, Kegel exercises (voluntary relaxation and contraction of the pubococcygeus muscle), and enhancing the partner's sexual skills. Concomitantly, she suggests techniques to reduce factors that may inhibit sexual arousal, such as cognitive restructuring, relaxation training, systematic desensitization of anxiety-provoking situations, and addressing the relationship issues that generate negative affects. No treatment data is available on her strategy. The lack of reported treatment studies for this female disorder may reflect the paucity of patients presenting with an arousal disorder clearly attributable to a psychological cause; most arousal complaints appear to be the result of inadequate lubrication.

Thus most female arousal disorders are initially treated with topical lubricants. Chronic medical conditions and medications that may be responsible for decreasing arousal must be carefully evaluated.

Orgasmic disorders

Several studies [63,64,65] have documented the success of masturbatory training programmes in facilitating orgasm in women who have never achieved orgasm.

Kuriansky and Sharpe [66] reported that 15 per cent of their subjects were not able to sustain orgasmic attainment at a 2-year follow-up.

Sensate focus is used as a means of densensitizing performance anxiety or sensitizing the woman to pleasurable bodily areas and erotic sensations. The success rate of this treatment alone is less than that of directed masturbation, however; in combination the two treatments appear to have a synergistic effect. [61]

The long-term results of treatment for female orgasmic dysfunction have to be evaluated in the context of two facts: first, over time women demonstrate an increased capacity to achieve orgasm with partner stimulation as well as with coital activity; women who drop out of treatment programmes also report improved orgasmic functioning 2 years after seeking therapy. Second, prognosis appears more positive for women with lifelong orgasmic dysfunction than for women who acquire the dysfunction after a period of normal functioning. The poorer outcome for an acquired orgasmic dysfunction is thought to be due to psychological or relationship causes not addressed in masturbatory training programmes. Thus, assessment of these factors is important prior to embarking on a masturbatory training programme. In fact, Heiman and Meston [61] suggest that ‘some combination of sex education, sexual skills training, communication on general and

sexual issues, body image, and directed masturbation' appear to be most efficacious in resolving orgasm disorders.

Dyspareunia and vagismus

Medical interventions for dyspareunia target the disease entity believed to be causing the pain, and include such dissimilar interventions as intravaginal application of oestrogen cream or anaesthetic ointment, surgical repair of the vulvar region, and the extraction of abnormal growths in the adjacent viscera[67].When dyspareunia has been a long-standing problem medical correction is seldom sufficient treatment, regardless of physical pathology; the psychological fear of the pain recurring persists.[68,69]. Fordney[68] reported that 16 out of 18 women who underwent medical procedures for dyspareunia did not improve until completing a course of sex therapy. Similarly, Schover *et al* [69] noted that the factors that predicted the best post-surgical outcome for a group of women with vulvar vestibulitus were their willingness to engage in psychological treatment, higher socio-economic status, and specific localized areas of vulvar pain.

Vaginismus is typically treated through a combination of the following:

1. banning intercourse;
2. *in vivo* graduated self-insertion of dilators of increasing size;
3. systematic desensitization;
4. Kegel exercises ;
5. interpretation of resistance and psychodynamic fears.

Masters and Johnson [30] reported a 100 per cent success rate in their treatment of 29 women. Similarly, Scholl reported that 83 per cent of his sample successfully completed therapy and were having intercourse at the 1-year follow-up[70].Spence [46] suggests that more treatment sessions are required when women have experienced the dysfunction over extended periods of time, have undergone surgery, have thoughts that they are anatomically abnormal, or have negative attitudes toward their genitals.

1.3 EPIDEMIOLOGY

1.3.1 INTERNATIONAL DATA

Sexual complaints were voiced by 43% of 1749 US women interviewed in the 1992 National Health and Social Life Survey (NHSLS) who had been sexually active in the previous year [71] .The most common concerns were low sexual desire (33%), difficulty achieving orgasm (24%), and problems with lubrication (19%). Women reported decreasing prevalence of sexual problems with increasing age, with the exception of lubrication/arousal complaints. Younger women complained of diminished desire and difficulty achieving orgasm as compared with older women, and unmarried women described problems with orgasm at 1.5 times the rate of married women. Higher educational attainment was associated with fewer complaints of diminished sexual pleasure and sexual anxiety than was seen in women with lower educational attainment. Cultural differences were also reported: Hispanic women had fewer sexual complaints than did either black women, who described lower sexual desire and satisfaction, or white

women, who reported more sexual pain. However, Hispanic women may be less likely to report sexual problems than other women. In addition, for women in the NHSLS, a history of sexual trauma or declining social status negatively impacted sexual functioning, and poor physical health was associated with sexual pain.

Similar findings were described in a postal questionnaire in England [72], with comparable distribution, but lower rates in a survey in Denmark[73]. The British study also examined psychosocial factors, such as marital conflicts, and found an association with problems with arousal, orgasm, and pleasure. Anxiety and depression were also found to be associated with such complaints in the study in England and another in Iceland [74,75]. More than half of the women surveyed reported an interest in receiving professional help for a sexual problem, but only 10% had received an intervention [72].

Some studies have reported, that women were significantly more likely than men to report at least one sexual function problem lasting at least 1 month in the past year, as well as ‘‘persistent’’ sexual function problems [76].

Available literature suggest a prevalence of 43% and 46.9%of sexual dysfunction in women in general population [77, 78]. A study of women attending a hospital clinic reported a prevalence of 63% [79]. Risk factors identified include age,educational attainment, poor physical and emotional health and negative experiences in sexual relationships and overall well being [77]. Other factors noted are an uncaring partner,present illness, excessive domestic duties, lack of adequate foreplay, present medication, competition among wives in a polygamous family setting, previous sexual abuse, and guilt-feeling of previous pregnancy termination among infertile women [79] , multiparity and menopause status [78].

1.3.2 INDIAN DATA

There is little information regarding the prevalence and nature of sexual problems among women in a community setting in India.

1.4 ISSUES RELATED TO RESPONSE RATES

Studies that address sensitive topics, such as female sexual difficulty and dysfunction, often achieve poor response rates that can bias results. A study by Hayes etal[80] which included studies that reported response rates on female sexual function (only 54 out of 1380 publications met the inclusion criteria).They concluded that response rates in prevalence studies addressing female sexual difficulty and dysfunction are frequently low and have decreased by an average of just over 1% per annum since the late 60s. Participation may improve by conducting interviews in person. Studies that investigate a broad range of ages may be less representative of older women, due to a poorer response in older age groups. Lower response rates in studies that investigate desire difficulty suggest that sexual desire is a particularly sensitive topic

1.5 RATIONALE FOR THE STUDY

There is currently little information regarding the prevalence and nature of sexual problems among women in a community setting in India. The taboos and myths that surround the issue of sexual functioning in the Indian culture, often results in a reluctance to report as well as enquire regarding problems in this area. This study was to assess the extent of the problem, improve the understanding of the issues and plan for strategies for appropriate intervention.

AIMS AND OBJECTIVES

This study was done to determine the nature, prevalence, risk factors and the explanatory models of sexual dysfunction in women in the community.

METHODOLOGY

3.1 SPECIFIC OBJECTIVES

To determine the nature, prevalence, risk factors and the explanatory models of sexual dysfunction in women in the community.

3.2 STUDY DESIGN

Observational study.

3.3 SETTING

This was a community study in Kaniyambadi block. Participants were recruited and interviewed during a single point of contact .The study was carried out over a period of 12 months.

3.4 PARTICIPANTS

The villages in Kaniyambadi block were randomly selected for participation in the study. Women from selected villages were chosen by stratified sampling according to age and contacted for possible recruitment to the study. Informed consent was obtained. Currently married subjects between the ages of 18 and 65 years, who speak Tamil, were eligible to take part. The study was restricted to married women as it was felt that asking details regarding sexual practices and problems to unmarried young women was not culturally appropriate and difficult considering the social and cultural climate in the region. Subjects with severe language, hearing or cognitive impairment were excluded. The health worker of the CHAD program, who is from the village being studied and familiar to the participants, accompanied the researcher and introduced the researcher to each of the subjects.

3.5 VARIABLES

Subjects who consented to take part in the study were screened for sexual dysfunction. Those who reported problems were further evaluated in detail. Beliefs about the etiology of the illness, it's course, the time of onset of symptoms, the meaning of sickness, the diagnosis, the methods of treatment and roles and expectations of the subjects involved in the process were assessed. The participants were screened for the presence of common mental disorders. Data on socio-demographic variables and other risk factors were also obtained.

3.6 DATA MEASUREMENT

The following instruments were used in the study

-Female Sexual Function Index (FSFI) for screening for sexual dysfunction.

-Tamil version of the modified Short Explanatory Model Interview (SEMI) for beliefs about the etiology of the illness.

-The General Health Questionnaire-12 (GHQ-12) was used to screen for common mental disorders (CMD)

-Proforma for recording socio-demographic variables and other risk factors

3.6.1 Female Sexual Function Index (FSFI)

The FSFI [81] is a measure of sexual functioning in women. It is a 19-item questionnaire, which has been developed as a brief, multidimensional self-report instrument for assessing the key dimensions of sexual function in women. The scale has received initial psychometric evaluation, including studies of reliability, convergent validity, and discriminant validity .It is easy to administer, and has demonstrated ability to discriminate between clinical and nonclinical populations. The questionnaire was

designed and validated for assessment of female sexual function and quality of life in clinical trials or epidemiological studies.

3.6.2 The Short Explanatory Model Interview

The Short Explanatory Model Interview (SEMI) [82] is used in a modified version. This consists of open-ended questions to elicit the beliefs concerning the clinical problem, perceived causes, consequences, severity and its effects on body, emotion, social network, home-life and on work, severity, possible course of action, help seeking behavior and the role of the doctor/ healer. This interview explores *emic* perspectives of illness. The language is simple and does not include any medical or technical words or phrases. Probes are also employed to confirm the concepts mentioned and to explore areas, which the subject does not volunteer. A verbatim record of the responses will be made. The responses will later be grouped into categories using the recommended procedure.

3.6.3 General Health Questionnaire-12

The 12-item General Health Questionnaire (GHQ-12) is increasingly used to screen for common mental disorders (CMD) in primary care and has been validated in different languages and cultures. It is a quick, reliable and sensitive short form – ideal for research studies. It is a self-administered questionnaire that focuses on two major areas – the inability to carry out normal functions and the appearance of new and distressing phenomena.

The Tamil version has been validated for use in a rural setting in southern India; a total score of 4 or more implies a high probability of a common mental disorder [83].

3.7 SAMPLE SIZE

EpiInfo (ver 5.0) (1990) was employed to calculate the sample size for the prevalence study using the following assumptions: estimated prevalence 45% estimate of error ± 8%. The sample size obtained was 194.But the study was carried out on 280 participants.

3.8 STATISTICAL ANALYSIS

The statistical software SPSS for Windows (version 16.0.1) was employed for the analysis of data. Mean and standard deviation were employed to describe continuous variables, while frequency distributions will be obtained for categorical data. The chi square test and the Student's t-test were used to assess the significance of associations for categorical and continuous variables respectively.

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RESULTS

4 .1 SUBJECTS

4.1.1 THE STUDY SAMPLE

A total of 282 subjects were contacted from four villages.5 subjects refused consent. The age and literacy of those who consented (henceforth known as the sample) and those who refused to participate in the study were compared. These factors were not significantly different between the 2 groups.

4.2 SOCIODEMOGRAPHIC PROFILE OF SAMPLE

Table 4.1 documents the sociodemographic profile of the sample. The mean age of the participants was 40.9 years with a range between 19 and 65 years. All the participants lived along with their families and none lived alone. Most lived in their own home (91%). The majority of women were housewives (172= 62.1%) and 60 (21.7%) were employed as coolie labourers. Many patients were from a low socio-economic background. The mean monthly family income was rupees 2585.30. 4.7% had been unable to buy food in the past month due to financial problems and 6.5% had only two meals a day. 199 (71.8%) of the respondents said that the family had financial debts. A majority (65%) of the participants were able to read and write. 11(4.0%) had diabetes, 12(4.3%) had hypertension and 34 (12.3%) had various other medical illnesses. 29 (10.5%) were on regular medication, most commonly antihypertensives and oral hypoglycaemic agents.

4.3 SEXUAL AND MARITAL DATA OF SAMPLE

Tables 4.2 .1 and 4.2.2 document the sexual and marital details of the sample. Among the sample the number of pregnancies ranged from nil to 10 with a mean of 3.08. The average number of living children was 2.44. Number of male children ranged from 0-4 (mean 1.26) while the number of female children ranged from 0-7 (mean of 1.18). A majority (61.7%) were premenopausal. 34 (12.3%) reported having white discharge per vagina.

2 (0.7) participants mentioned that their partner had symptoms suggestive of venereal disease. 25 (9.0%) said that their partners had contact with commercial sex workers while 19 (6.9%) had partners who were in long-term extra-marital relationships. 47 (17.0%) had husband's who were reported to be regularly using alcohol. While 59 (21.3%) participants admitted to physical abuse in their marital relationship, none reported sexual abuse.

Responses to the sexual health questionnaire: 13 (4.7) of the participants reported having sexual concerns and 16 (5.8) mentioned being dissatisfied with their sex lives. None of the participants reported having more than one partner. A majority (98.2%) stated that they had only one sexual partner to ensure protection against sexually transmitted disease while 2 (0.7%) did not use any specific methods. A majority (63.2%) of the study population used contraception; the most common method was tubectomy, the partner was sterilized in 3 cases (1.2%). Most participants (75.1%) reported that their first information about sex had been from their husband; other sources included friends, relatives, books, sex education programmes and doctors. The most common response to the question of what sex meant to them was that it was for recreation (67.5%) and

procreation (36.8%); others considered it a duty (10.8%) or a sin (0.7%). 52 (18.8%) participants reported being dissatisfied with their marital life. Common reasons for dissatisfaction included alcohol abuse by the husband, husband's lack of work and financial difficulties and a lack of love and concern on the part of the husband. 35.4% of the sample mentioned a lack of privacy at home.

Table 4.1 Sociodemographic profile of sample

Characteristic	**Score**	**Range**
Age, years: mean (s.d.)	40.9 (13.4)	19-65
Literacy, *n* (%)		
Read and write	180 (65)	
Illiterate	97 (35)	
Schooling, years: mean (s.d)	5.1 (4.2)	0-17
Housing, *n* (%)	252 (91.0)	
Own	23 (8.3)	
Rented	2 (0.7)	
Squatting		
Residence, *n* (%)		
Rural	277 (100)	
Meals per day, *n* (%)		
2	18 (6.5)	
3	259 (93.5)	
Unable to buy food in the past one month, *n* (%)		
Yes	13 (4.7)	
No	264 (95.3)	
Living arrangements, *n* (%)		
With family	277(100)	
Monthly family income, rupees: mean (s.d.) [**n=198]**	2585.3 (3031.29)	250-20000
Don't know, *n* (%)	79 (28.5)	
Debt, *n* (%)		
No	78 (28.2)	
Yes	199 (71.8)	
Amount of debt, rupees: mean (s.d) [n=**225]**	64088.8 (117951)	0-1000000
Don't know *n* (%)	52 (18.8)	
Occupation, *n* (%)		
Housewife	172 (62.1)	
Coolie	60 (21.7)	
Other	45 (16.2)	
Diabetes, *n* (%)		
No	266 (96.0)	
Yes	11 (4.0)	
Hypertension, *n* (%)		
No	265 (95.7)	

Yes	12 (4.3)	
Other physical illness, *n* (%) No Yes	 243 (87.7) 34 (12.3)	
Medication use, *n* (%) No Yes	 248(89.5) 29 (10.5)	

Table 4.2.1 Sexual and marital profile of sample

Characteristic	**Score**	**Range**
Number of Pregnancies: mean (s.d.)	3.08 (1.7)	0-10
Number of Abortions: mean (s.d.)	.31 (0.67)	0-4
Number of Stillbirths: mean (s.d.)	.08 (.29)	0-2
Number of Live births: mean (s.d.)	2.66 (1.579)	0-10
Number of Living children: mean (s.d.)	2.44 (1.376)	0-7
Number of Male children: mean (s.d.)	1.26 (.935)	0-4
Number of Female children: mean (s.d.)	1.18 (1.209)	0-7
Menopausal, *n* (%) No Yes	 171 (61.7) 106 (38.3)	
Regular alcohol use by husband, *n* (%) No Yes	 230 (83.0) 47 (17.0)	
Vaginal discharge, *n* (%) No Yes	 243 (87.7) 34 (12.3)	
Symptoms of venereal disease in partner, *n* (%) No Yes	 275 (99.3) 2 (0.7)	
Physical abuse, *n* (%) No Yes	 218 (78.7) 59 (21.3)	
Sexual abuse, *n* (%) no	277 (100)	
Partner contact with CSW, *n* (%) No Yes	 252 (91.0) 25 (9.0)	
Partner in long-term extramarital relationship, *n* (%) No Yes	 258 (93.1) 19 (6.9)	
GHQ case, *n* (%) No Yes	 265 (95.7) 12 (4.3)	

Table 4.2.2 Sexual Health Questionnaire

Characteristic	**Score No. (%)**	**Range**
Sexual concerns		
No	264 (95.3)	
Yes	13 (4.7)	
Duration of problems, years: mean (s.d.)	5.25(8.09)	0.25-30
Satisfied with sexual functioning		
No	16 (5.8)	
Yes	261(94.2)	
Duration of dissatisfaction, years: mean (s.d.)	4.08(3.72)	0.25-10
More than one partner, no	277 (100)	
Protection against sexually transmitted diseases		
No specific precautions	2 (0.7)	
Single partner	272(98.2)	
Abstinence	2 (0.8)	
Local hygiene	1 (0.4)	
Contraceptive use		
No	102 (36.8)	
Yes	175 (63.2)	
Type of contraceptive		
Nil	102 (36.8)	
Condom	4 (1.4)	
IUCD	6 (2.2)	
Tubectomy	154 (55.6)	
Abstinence	3 (1.1)	
Hysterectomy	5 (2.0)	
Partner sterilized	3 (1.2)	
First information about sex		
Friends	6 (2.2)	
Relatives	55 (19.9)	
Books	2 (0.7)	
Husband	208(75.1)	
Sex education programmes	5 (1.8)	
Doctor	1 (0.4)	
Purpose of sex (multiple responses)		
For procreation	102 (36.8)	
For recreation	187 (67.5)	
A sin	2 (0.7)	

A duty	30 (10.8)	
Satisfaction with marital relationship		
No	52 (18.8)	
Yes	224 (80.9)	
Not sure	1 (0.4)	
Reason for dissatisfaction in marriage		
Nil	225(81.2)	
Alcohol abuse by partner	24 (8.66)	
Lack of work and financial difficulties	16 (5.77)	
Poor marital relationship	11 (3.97)	
Partner in extramarital relationship	7 (2.52)	
Physical abuse	5 (1.8)	
	2 (0.72)	
Partner has suspicions regarding wife's fidelity	1 (0.36)	
Medical illness in partner	1 (0.36)	
Large age gap between partners	1 (0.36)	
No children		
Adequate privacy at home		
No	98 (35.4)	
Yes	179(64.6)	

4.4 SEXUAL DYSFUNCTION-PREVALENCE, NATURE, EXPLANATORY MODELS and RISK FACTORS

4.4.1 PREVALENCE

Table 4. 4.1 documents the scores on the Female Sexual Function Index for each domain including desire, arousal, lubrication, orgasm, satisfaction, pain as well as a total score. Using the median of the total FSFI score of this population as cut-off, 52% (144 of 277) of the sample have a sexual dysfunction while 64.3% (178) participants have dysfunction using a cut-off of 26.55, as suggested by the authors of the FSFI (Table 4.4.2).

4.4.2 NATURE

Based on the FSFI and using the median scores as cut-off, 55.2% had a sexual desire disorder, 52 % had arousal, lubrication and orgasmic disorders, 51.6% had pain and 50.9% had problems with satisfaction (Table 4.4.2).

Table 4.4.1 FSFI scores

Domain	Score Mean	SD	Median	Range
Desire	2.4	1.17	2.4	1.2-5.4
Arousal	2.13	2.35	0	0-6.0
Lubrication	2.69	2.88	0	0-6.0
Orgasm	2.13	2.47	0	0-6.0
Satisfaction	4.09	1.44	3.6	0.8-6.0
Pain	2.75	2.91	0	0-6.0
Total	16.21	12.43	**7.6**	2-35.4

Table 4.4.2 Number of women with sexual dysfunction in the community (by FSFI)

Domain	Number	%
Sexual dysfunction, FSFI score less than or equal to 7.6	144	52.0
Sexual dysfunction, FSFI score less than or equal to 26.55	178	64.3
Desire disorder	153	55.2
Arousal disorder	144	52
Lubrication disorder	144	52
Orgasm disorder	144	52
Satisfaction disorder	141	50.9
Pain disorder	143	51.6

4.4.3 EXPLANATORY MODELS ASSOCIATED WITH SEXUAL DYSFUNCTION

23 (8.3%) respondents who reported having sexual concerns or problems

completed the Short Explanatory Model Interview. The responses to the SEMI are summarized in Table 4.4.4.1

Table 4.4.3.1 Responses to the Short Explanatory Model Interview

Characteristic	Number	Percentage
Have you had any sexual concerns or problems? Yes	23	8.3
Have you seen a doctor or a nurse about any sexual problems? Yes	7	2.5
Do you believe that your problem is due to black magic?Yes	0	0
Do you believe that your problem is due to karma? Yes	0	0
Do you believe that your problem is due to punishment from God?Yes	1	0.4
Do you believe that your problem is due to evil spirits?Yes	1	0.4
Do you believe that your problem is due to excessive domestic duties? Yes	6	2.2
Do you believe that your problem is due to menopause/problems in your menstrual cycle?Yes	4	1.4
Do you believe that your problem is due to the pregnancies you have had?Yes	1	0.4
Do you believe that your problem is due to the abortions you have had ? Yes	1	0.4
Do you believe that your problem is due to an inability to conceive ? Yes	0	0
Do you believe that your problem is due to other obstetric/gynaecological problems ? Yes	2	0.7
Do you believe that your problem is due to an unhappy marriage?Yes	8	2.9
Do you believe that your problem is due to lack of adequate foreplay during sexual intercourse?Yes	0	0
Do you believe that your problem is due to masturbation?Yes	0	0
Do you believe that your problem is due to past sexual abuse?Yes	0	0
Do you believe that your problem is due to any physical disease ? Yes	6	2.2

Do you believe that your problem is due to stress ? Yes	9	3.2
Will it help you, if you visit a doctor or a nurse for treatment for your problem ? Yes	7	2.5
Will it help you, if you visit a traditional healer for treatment for your problem ?Yes	0	0
Will it help you, if you visit a mantrivadi for treatment for your problem?Yes	0	0
Will it help you, if you visit a temple or a church or a mosque for your problem ?Yes	2	0.7
Will it help you, if you observe any diet restrictions or special diet for your problem ?Yes	3	1.1
Will it help you, if you use any herbal remedies for your problem ?Yes	0	0
Do you know if there is anything else which may help your problem ? Yes	4	1.4

When asked to list the nature of their sexual problems,the 23 respondents who answered the SEMI mentioned a variety of problems,the most common was reduced interest and pain or burning during intercourse.

Table 4.4.3.2 Response to the question: "Have you had any sexual concerns or problems;list them ?"

Sexual problem	Number	Percentage
Abstinent from sex	2	8.7
Pain or burning during sex	6	26.1
White discharge per vagina	3	13.0
Reduced interest in sex	7	30.4
Decreased arousal	1	4.3
Aversion to sex	1	4.3
Reduced satisfaction with sex	2	8.7
Inability to achieve orgasm	1	4.3

7 respondents had sought medical help for their sexual problems; the most common cause was pain or burning during intercourse.

Table 4.4.3.3. Responses to the question: "Have you seen a doctor or a nurse about any sexual problems? Can you tell me the reason for your visit?"

Characteristic	Number	Percentage
Burning/pain during sex	5	71.4
Reduced interest in sex	1	14.3
Inadequate knowledge regarding sex	1	14.3

Table 4.4.3.4. Responses to the question: "What do you call these problems? Probe: If you had to give them names what would they be? "

Characteristic	Number	Percentage
Burning/pain during sex	5	27.8
Reduced interest in sex	5	27.8
Reduced satisfaction from sex	2	11.1
Problem achieving orgasm	1	5.6
White discharge	2	11.1
Don't know	3	16.7

Various reasons were offered for the sexual problem including body heat and problems related to the spouse.

Table 4.4.3.5. Responses to the question: "Who or what is the cause of you getting this?"

Characteristic	Number	Percentage
Body heat self/husband	3	13.0
Caesarean section	1	4.3
Tubectomy	2	8.7
Hysterectomy	1	4.3
Alcohol use in husband	3	13.0
Cut pubic hair	1	4.3
Local itch	1	4.3
Menstrual problems	2	8.7
Husband's extramarital affair	3	13.0
Premature ejaculation in husband	1	4.3

Menopause	1	4.3
Old age	1	4.3
Don't know	3	13.0

2 participants felt a change in their husband's behaviour would help reduce their problems.

Table 4.4.3.6. Responses to the question: "Do you know if there is anything else which may help your problem ?"

Characteristic	Number	Percentage
Husband should change	1	25
Husband should stop drinking alcohol	1	25
Regular menses	1	25
Local hygiene	1	25

All study participants were asked a general question about sexual activity (Table 4.4.4.7). 56 respondents stated that they were abstinent from sex for varying periods of time from 1 month to 25 years and 110 said that they had reduced interest in sex. Various reasons were mentioned as the cause of reduced sexual interest. (Table 4.4.4.8). 24 reported that not having sex was not perceived as a 'problem'.

Table 4.4.3.7 Responses to the question: "Can you tell me what are your sexual problems ?"

Sexual problem	Number	Percentage
Abstinent from sex	56	29.9
Pain during sex	9	4.8
White discharge per vagina	2	1.1
Reduced interest in sex	110	58.8
Decreased arousal	1	0.5
Aversion to sex	4	2.1
Reduced satisfaction with sex	4	2.1
Reduced fertility	1	0.5

Table 4.4.3.8 The reasons for abstinence/reduced interest in sex.

Sexual problem	Number	Percentage
Pain during sex	9	3.9
For religious reasons	2	0.88

Husband's physical illness	5	2.2
Own physical problems	3	1.3
To avoid pregnancy	5	2.2
Sex not a priority	47	20.6
Children grown-up	33	14.5
Old age	40	17.5
There is no need for sex	30	13.2
Lack of mental peace	3	1.3
Husband not interested in sex	4	1.8
Husband has contact with CSW	3	1.3
Sex after menopause is wrong	1	0.44
Sex after menopause will cause tumours	1	0.44
Husband away at work	10	4.4
Husband's extra-marital affair	3	1.3
Post delivery abstinence	5	2.2
Child's illness	1	0.44
Death in family	2	0.88
Pregnancy	2	0.88
Tired after daily work	1	0.44
Sex only for procreation, which is now complete	1	0.44
Menopause	3	1.3
No love in marriage	3	1.3
There are other bigger problems in life	5	2.2
Only males want it	1	0.44
I'm happier without it	1	0.44
The urge should be controlled	4	1.8

4.4.4 FACTORS ASSOCIATED WITH SEXUAL DYSFUNCTION

Using the t-test, for categorical variables and Pearson's correlation for continuous variables the following factors were found to be associated with female sexual dysfunction:

1.***Based on FSFI total score*** (Tables 4.4.4.1 and 4.4.4.2):

Demographic factors: greater age, illiteracy, financial debt, diabetes, hypertension, other medical illness and regular medication use.

Sexual and marital factors: Greater number of pregnancies, live births, live children- male and female; menopause, husband's regular use of alcohol, symptoms of venereal disease in spouse, partner visiting commercial sex workers or in an extra-marital relationship and physical abuse. Those who reported having sexual concerns, dissatisfaction with their sexual functioning and dissatisfaction in their marriage, people who used no specific method of protection against STDs, those whose husband's had had vasectomies, and those who reported inadequate privacy at home. Using an IUCD and having a single partner as protection against STD was associated with less sexual dysfunction than the other methods of contraception. Those who felt sex was meant for only for procreation and those that considered it a duty had more dysfunction, while those who felt sex was for recreation and not a sin had less sexual dysfunction

Table 4.4.4.1 Factors associated with sexual dysfunction (FSFI total score).

Variable	Mean	SD	t /r	Degrees of freedom	*P* value
Age	40.9	13.38	-0.58		0.000
Number of meals a day	2.93	.24	0.081		NS
Monthly income in rupees	2585.3	3031.29	0.114		NS
Debt in rupees	64088.8	117951.98	-0.031		NS
Years of schooling	5.9	4.21	0.458		0.000
Literacy; illiterate literate	9.57 19.78	9.64 12.31	-7.08	275	0.000
Housing; not own house own house	16.90 16.14	12.96 12.40	.291	275	NS
Ability to buy food;yes no	16.51 9.98	12.42 11.23	2.036	13.489	NS
Debt;no yes	19.21 15.03	12.68 12.16	2.542	275	0.012
Diabetes,no yes	16.61 6.50	12.46 6.51	4.801	13.247	0.000
Hypertension, no yes	16.63 6.95	12.44 7.84	4.049	13.641	0.001
Other physical illness,no yes	17.31 8.31	12.55 7.98	5.667	58.834	0.000
Medication use, no yes	17.13 8.28	12.50 8.40	5.056	44.023	0.000

Table 4.4.4.2 Sexual and Marital factors associated with sexual dysfunction (FSFI total score)

Variable	Mean	SD	t /r	Degrees of freedom	*P* value
Number of pregnancies:	3.0	1.68	-0.407		0.000
Number of abortions:	.3	.66	-0.070		NS
Number of stillbirths:	.09	.29	-0.103		NS
Number of live births:	2.6	1.57	-0.389		0.000
Number of live children:	2.4	1.37	-0.344		0.000
Number of male children:	1.2	.93	-0.220		0.000
Number of female children:	1.1	1.20	-0.221		0.000
Menopausal; no yes	22.17 6.58	11.36 6.75	14.32	274.605	0.000
Husband regular user of alcohol, no yes	16.83 13.14	12.55 11.45	1.982	70.50	0.051
Vaginal discharge, no yes	15.74 19.58	12.43 12.07	-1.695	275	NS
Partner symptoms of genital disease, no yes	16.15 23.85	12.45 1.343	-6.352	2.638	0.011
Physical abuse, no yes	17.89 9.99	12.68 9.108	5.396	125.655	0.000
Partner contact with CSW,no yes	17.04 7.848	12.51 7.60	5.369	38.393	0.000
Partner in extramarital affair ,no yes	16.86 7.35	12.48 7.39	5.097	26.267	0.000
Do you have any sexual concerns?, no yes	16.50 10.34	12.56 7.41	2.801	15.616	0.013
-for how long:	5.250	8.0944	r=0.248		NS
Are you satisfied with your sexual functioning? , no yes	8.43 16.68	7.17 12.53	-4.223	21.098	0.000
-for how long: mean (s.d)	4.078	3.7190	r=0.105		NS
How do you protect yourself from STD?, *n* (%); Nil specific Single partner Other methods	4.40 16.40 7.03	.00 12.45 5.26	15.86 -5.37 2.96	274 5.55 2.25	0.000 0.002 NS
Do you use contraceptives?, no yes	14.66 17.11	11.97 12.63	-1.61	220.693	NS
Contraception method, *n* (%); IUCD Husband vasectomy Hysterectomy Abstinence Tubectomy Condom	30.13 4.40 9.76 22.40 16.79 24.77	2.88 .00 8.98 16.28 12.62 11.50	-10.18 15.89 1.60 -0.86 -0.87 -1.39	9.88 273 4.28 275 275 275	0.000 0.000 NS NS NS NS
How did you learn about sex? , *n* (%); Husband Relative Friend Book Doctor Sex education program	16.26 15.62 11.93 19.30 5.40 26.44	12.30 12.95 9.80 19.37 12.12	-0.12 0.38 1.07 -0.22 0.87 -1.90	112.00 79.94 5.36 1.006 275 4.15	NS NS NS NS NS NS
What is your opinion on sexual activity?, *n* (%);					

Procreation Recreation A sin A duty Recreation and procreation	8.339 19.667 25.450 10.676 18.713	8.6055 12.7099 2.0506 8.9200 12.3027	7.06 -5.00 -5.69 3.42 -1.468	127.65 273.412 1.608 44.56 60.74	0.000 0.000 0.047 0.001 NS
Are you satisfied with your marital relationship?, no yes	9.68 17.78	8.73 12.67	-5.478	107.194	0.000
Do you have adequate privacy at home? , no yes	11.30 18.89	10.56 12.58	-5.33	230.357	0.000
GHQcase, yes, *n* (%); 	16.41 11.77	12.47 10.85	1.43	12.354	NS

2.***Using the median score of the FSFI in the study population*** (Tables 4.4.4.3 and 4.4.4.4):

Demographic factors: greater age, less number of years of schooling and illiteracy, financial debt, diabetes, hypertension, other medical illness and regular medication use.

Sexual and marital factors: Greater number of pregnancies, live births, live children- male and female; menopause, absence of vaginal discharge, partner visiting commercial sex workers or in an extra-marital relationship and physical abuse. Those who reported dissatisfaction in their marriage and those who reported inadequate privacy at home. Using an IUCD, and considering sex as recreation was associated with less sexual dysfunction while those who felt sex was for procreation had more dysfunction.

Table 4.4.4.3 Factors associated with sexual dysfunction (FSFI median score).

Variable	Control	Case	t /r	Degrees of freedom	*P* value
Age, years: mean (s.d.)	32.85 (8.764)	48.36 (12.587)	-11.975	256.083	0.000
Number of meals a day: mean (s.d)	2.95 (0.208)	2.92 (2.95)	1.303	264.251	NS
Monthly income in rupees: mean (s.d)	2834.95 (2.92)	2314.74 (3078.502)	1.208	196	NS
Debt in rupees: mean (s.d)	59473.68 (119064.213)	68828.83 (117147.760)	-0.594	223	NS
Years of schooling: mean (s.d)	7.79 (3.654)	4.18 (3.961)	7.888	275.000	0.000
Literacy, *n* (%): illiterate	22 (22.7)	75 (77.3)	38.38	1	0.000
Housing, *n* (%);own house	13 (52.0)	12 (48.0)	0.175	1	NS
Inability to buy food, *n* (%); yes	3 (23.1)	10 (76.9)	3.39	1	NS
Debt, *n* (%); yes	88 (44.2)	111 (55.8)	4.07	1	0.044
Diabetes, *n* (%); yes	1 (9.1)	10 (90.9)	6.95	1	0.008
Hypertension, *n* (%); yes	1 (8.3)	11 (91.7)	7.91	1	0.005
Other physical illness, *n* (%); yes	8 (23.5)	26 (76.5)	9.30	1	0.002
Medication use, *n* (%); yes	5 (17.2)	24 (82.8)	12.28	1	0.000
GHQ total score: mean (s.d)	0.37 (1.35)	0.58 (1.99)	-1.041	275	NS

Variable	Control	Case	t /chi square	Degrees of freedom	*P* value
Number of pregnancies: mean (s.d)	2.41 (1.237)	3.71 (1.797)	-7.070	254.764	.000
Number of abortions: mean (s.d)	0.29 (0.598)	0.34 (0.731)	-.677	275	NS
Number of stillbirths: mean (s.d)	0.05 (0.224)	0.10 (0.349)	-1.473	246.002	NS
Number of live births: mean (s.d)	2.02 (1.111)	3.24 (1.719)	-7.070	246.900	.000
Number of live children: mean (s.d)	1.96 (1.076)	2.89 (1.473)	-6.009	261.434	.000
Number of male children: mean (s.d)	1.04 (0.763)	1.47 (1.030)	-3.946	262.813	.000
Number of female children: mean (s.d)	0.92 (1.027)	1.42 (1.315)	-3.533	267.767	.000
Menopausal, *n* (%); yes	11 (10.4)	95 (89.6)	97.44	1	0.000
Husband regular user of alcohol, *n* (%); yes	19 (40.4)	28 (59.6)	1.306	1	NS
Vaginal discharge, *n* (%); no	111 (45.7)	132 (54.3)	4.326	1	0.038
Partner symptoms of genital disease, *n* (%); no	131 (47.6)	144 (52.4)	2.181	1	0.14
Physical abuse, *n* (%); yes	18 (30.5)	41 (69.5)	9.024	1	0.002
Partner contact with CSW, *n* (%); yes	6 (24.0)	19 (76.0)	6.34	1	0.012
Partner in extramarital affair, *n* (%); yes	3 (15.8)	16 (84.2)	8.48	1	0.004
Do you have any sexual concerns?, *n* (%); yes	7 (53.8)	6 (46.2)	0.186	1	NS
-for how long: mean (s.d)	7.3571 (10.44)	2.7917 (3.59)	1.015	11	NS
Are you satisfied with your sexual functioning? , *n* (%); no	128 (49.0)	133 (51.0)	1.91	1	NS
-for how long: mean (s.d)	3.50 (3.74)	4.34 (3.86)	-0.407	14	NS
How do you protect yourself from STD?, *n* (%); Nil specific Single partner Other methods	0(0) 132(48.5) 1(33.3)	2(100) 140(51.5) 2(66.7)	1.86 1.601. 0.262	1 1 1	Ns NS NS
Do you use contraceptives?, no	43 (42.2)	59 (57.8)	2.219	1	NS
Contraception method, *n* (%); IUCD Husband vasectomy Hysterectomy Abstinence Tubectomy Condom	6(100) 0(0) 2(40.0) 2(66.7) 77(50) 3(75.0)	0 (0) 3(100) 3(60.0) 1(33.3) 77(50) 1(25.0)	6.64 2.801 0.131 0.423 0.548 1.184	1 1 1 1 1 1	0.010 NS NS NS NS NS
How did you learn about sex? , *n* (%); Husband Relative Friend Book	101(48.6) 24(43.6) 3(50.0) 1(50) 0(0)	107(51.4) 31(56.4) 3(50.0) 1(50) 1(100)	0.099 0.527 0.010 0.003 0.927	1 1 1 1 1	NS NS NS NS NS

Doctor Sex education program	4(80.0)	1(20.0)	2.087	1	NS
What is your opinion on sexual activity?, *n* (%); Procreation Recreation A sin A duty Recreation and procreation	 10(17.2) 82(57.3) 2(100) 12(40.0) 27(61.4)	 48(82.8) 61(42.7) 0(0) 18(60.0) 17(38.6)	 27.832 10.305 2.181 0.866 3.734	 1 1 1 1 1	 0.000 0.001 NS NS NS
Are you satisfied with your marital relationship?, *n* (%); no	16 (30.8)	36 (69.2)	7.628	1	0.006
Do you have adequate privacy at home? , *n* (%); No,	30 (30.6)	68 (69.4)	18.40	1	0.000
GHQcase, yes, *n* (%);	5 (41.7)	7 (58.3)	0.202	1	NS

Table 4.4.4.4 Sexual and marital factors associated with sexual dysfunction (FSFI median score).

3.***Using a cut-off score of 26.55 as prescribe for the FSFI*** (Tables 4.4.4.5 and 4.4.4.6):

Demographic factors: greater age, illiteracy, financial debt, diabetes, hypertension, other medical illness and regular medication use.

Sexual and marital factors: Greater number of pregnancies, live births, live children- male and female; menopause, absence of vaginal discharge, partner visiting commercial sex workers or in an extra-marital relationship and physical abuse, those who reported dissatisfaction in their marriage and those who reported inadequate privacy at home. Using an IUCD, and considering sex as recreation was associated with less sexual dysfunction while those who felt sex was for procreation had more dysfunction.

Table 4.4.4.5 <u>Factors associated with sexual dysfunction (FSFI cut off score)</u>.

Variable	Control	Case	t /r	Degrees of freedom	*P* value
Age, years: mean (s.d.)	32.00(8.10)	45.87(13.18)	-10.83	272.197	0.000
Number of meals a day: mean (s.d)	2.95(.22)	2.93(.26)	0.727	275	NS
Monthly income in rupees: mean (s.d)	2952.63(3077.80)	2356.56(2991.82)	1.348	196	NS
Debt in rupees: mean (s.d)	60705.88(131816.95)	66142.86(109127.18)	-0.335	223	NS
Years of schooling: mean (s.d)	8.11(3.58)	4.69(4.04)	7.259	223.954	0.000
Literacy, *n* (%): illiterate	14(14.4)	83(85.6)	29.507	1	0.000
Housing, *n* (%);own house	90(35.7)	162(64.3)	0.001	1	NS
Inability to buy food, *n* (%); yes	3(23.1)	10(76.9)	0.952	1	NS
Debt, *n* (%); yes	62(31.2)	137(68.8)	6.467	1	0.011
Diabetes, *n* (%); yes	0(0)	11(100)	6.371	1	0.012
Hypertension, *n* (%); yes	1(8.3)	11(91.7)	4.102	1	0.043
Other physical illness, *n* (%); yes	1(2.9)	33(97.1)	18.154	1	0.000
Medication use, *n* (%); yes	2(6.9)	27(93.1)	11.733	1	0.001
GHQ total score: mean (s.d)	0.1818(0.6121)	0.6461(2.0758)	-2.775	226.67	0.006

Table 4.4.4.6 Sexual and marital factors associated with sexual dysfunction (FSFI cut-off score).

Variable	Control	Case	t /chi square	Degrees of freedom	*P* value
Number of pregnancies: mean (s.d)	2.25(1.14)	3.54(1.75)	-7.388	268.049	0.000
Number of abortions: mean (s.d)	0.23(0.49)	0.36(0.74)	-1.073	267.427	NS
Number of stillbirths: mean (s.d)	0.03(0.17)	0.11(0.34)	-2.46	272.508	0.015
Number of live births: mean (s.d)	1.95(1.11)	3.05(1.66)	-6.578	266.043	0.000
Number of live children: mean (s.d)	1.88(1.06)	2.76(1.43)	-5.812	253.03	0.000
Number of male children: mean (s.d)	1.02(.72)	1.39(1.01)	-3.543	256.979	0.000
Number of female children: mean (s.d)	0.86(0.99)	1.37(1.28)	-3.662	247.179	0.000
Menopausal, *n* (%); yes	5(4.7)	101(95.3)	71.956	1	0.000
Husband regular user of alcohol, *n* (%); yes	10(21.3)	37(78.7)	5.156	1	0.023
Vaginal discharge, *n* (%); no	84(34.6)	159(65.4)	1.184	1	NS
Partner symptoms of genital disease, *n* (%); no	0(0)	2(100)	1.12	1	NS
Physical abuse, *n* (%); yes	6(10.2)	53(89.8)	21.343	1	0.000
Partner contact with CSW, *n* (%); yes	1(4.0)	24(96.0)	12.054	1	0.001
Partner in extramarital affair, *n* (%); yes	1(5.3)	18(94.7)	8.25	1	0.004
Do you have any sexual concerns?, *n* (%); yes	0(0)	13(100)	7.586	1	0.006
Are you satisfied with your sexual functioning? , *n* (%); no	0(0)	16(100)	9.444	1	0.002
How do you protect yourself from STD?, *n* (%);	0(0)	2 (100)	1.120	1	NS
Nil specific	99(36.4)	173(63.6)	2.832	1	NS
Single partner	0(0)	3(100)	1.687	1	NS
Other methods					
Do you use contraceptives?, no	32(31.4)	70(68.6)	1.341	1	NS
Contraception method, *n* (%);	5(83.3)	1(16.7)	6.049	1	0.014
IUCD	0(0)	3(100)	1.687	1	NS
Husband vasectomy	0(0)	5(100)	2.832	1	NS
Hysterectomy	2(66.7)	1(33.3)	1.263	1	NS
Abstinence	57(37.0)	97(63.0)	0.245	1	NS
Tubectomy	3(75.0)	1(25.0)	2.724	1	NS
Condom					
How did you learn about sex? , *n* (%);	73(35.1)	135(64.9)	0.151	1	NS
Husband	20(36.4)	35(63.6)	0.012	1	NS
Relative	1(16.7)	5(83.3)	0.971	1	NS
Friend	1(50.0)	1(50.0)	0.178	1	NS
Book	0(0)	1(100)	0.558	1	NS
Doctor	4(80.0)	1(20.0)	4.343	1	NS
Sex education program					
What is your opinion on sexual activity?, *n* (%);					
Procreation	5(8.6)	53(91.4)	23.492	1	0.000
Recreation	71(49.7)	72(50.3)	24.905	1	0.000
A sin	1(50.0)	1(50.0)	0.178	1	NS
A duty	3(10.0)	27(90.0)	9.706	1	0.002
Recreation and procreation	19(43.2)	25(56.8)	1.261	1	NS
Are you satisfied with your marital relationship?, *n* (%); no	3(5.8)	49(94.2)	25.038	1	0.000
Do you have adequate privacy at home? , *n* (%); No,	18(18.4)	80(81.6)	19.929	1	0.000
GHQ case, yes, *n* (%);	1(8.3)	11(91.7)	4.102	1	0.043

4.5 SUMMARY

282 subjects were contacted and 277 subjects (98.23%) consented to the interview. Subjects who consented and those who refused did not differ with respect to age, lieracy and socioeconomic status. The majority of the subjects who consented were literate (65%), housewives (62.1%) and all lived with their family. The mean age was 40.9 years (S.D. 13.4). 11(4.0%) had diabetes, 12(4.3%) had hypertension and 34 (12.3%) had various other medical illnesses. 29 (10.5%) were on regular medication.

Using the median of the total FSFI score of this population as cut-off, 52% of the sample had sexual dysfunction while 64.3% participants had dysfunction using the FSFI recommended cut-off of 26.55.

The most common explanatory models offered for sexual problems included an unhappy marriage, stress and physical problems

Factors associated with female sexual dysfunction included demographic factors such as greater age, illiteracy, financial debt, and medical illness as well as sexual and marital factors such as obstetric score, menopause, husband's regular use of alcohol, poor quality of marital relationship, contraceptive issues and privacy.

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DISCUSSION

5.1 INTRODUCTION

Female sexual dysfunction is a problem that has been identified in different languages and cultures. However, Indian data is lacking. This study attempted to study the prevalence, nature and risk factors of sexual problems among women in a community setting in rural TamilNadu. This section discusses the methodological issues and the results.

5.2 METHODOLOGICAL CONSIDERATIONS

1) Translation During the translation of the screening instruments and interview schedule into Tamil, the translators took care to use language as spoken by the local people, to ensure that it would be appropriate to the study population. This would however mean that this particular version may not be applicable to people who speak other dialects of Tamil.

2) The sample size was sufficiently large to draw valid conclusions from the study.

3) Subjects 1.77% of the subjects contacted did not participate in the study, resulting in a 98.23% second stage response rate. However analysis showed that the refusers did not differ significantly in age and literacy from the consenters, allowing cautious generalization of results to the entire study sample.

4) Setting The interview procedures were carried out in the subject's home. Despite the attempt to ensure privacy, in some cases the lack of it and the sensitive nature of the issues discussed could have influenced the results of the administered instruments.

5) Procedure Though the majority of the subjects were literate, to ensure uniformity, the instruments were not self-administered but were instead read out to them using the recommended procedure.

6) Instruments Subjects were initially screened for sexual problems using a sexual history questionnaire, which was followed by confirmatory assessment using a standardized instrument. The FSFI was chosen to identify female sexual dysfunction though it has not itself has not been validated for use in Tamil. However, since the FSFI is very similar to the clinical interview that is used to examine patients, it was thought to be adequate for the purpose of this study. Other instruments used included the GHQ-12 and the SEMI that have been validated for use in this population[82,83]

5. 3 PREVALENCE OF FEMALE SEXUAL DYSFUNCTION IN RURAL TAMIL NADU

Female sexual dysfunction is known to have a community prevalence rate of between 43% and 46.97% [77, 78] while the prevalence in a clinic population was 63% [79]. Our study has found a prevalence rate of 52% using the median of the total FSFI score of this population as cut-off, and 64.3% using a cut-off of 26.55, as suggested by the authors of the FSFI. The commonest type of sexual dysfunction was sexual desire disorder (55.2%) followed by arousal, lubrication and orgasmic disorders (52%), pain disorder (51.6%) and problems with satisfaction (50.9%).

These rates are higher than that reported in literature. This relatively high rate among women in the community could be contributed to by the following: The mean age of the study population was 40.9 years, suggesting that it was composed of slightly older people who would have greater rates of sexual dysfunction. The cut-off scores for detecting dysfunction based on the FSFI have not been standardized for this population. Therefore threshold cases may have been identified falsely as having dysfunction. The high rate also suggests that the problem of female sexual dysfunction is much more common than

assumed. As these disorders can result in distress, dissatisfaction and poorer quality of life in the individual and her family it is important to foster a greater awareness of these disorders among health workers and improve their diagnostic skills so that they may recognize patients with such disorders and provide appropriate management.

5. 4 RISK FACTORS FOR FEMALE SEXUAL DYSFUNCTION IN RURAL TAMIL NADU

Risk factors identified in univariate analysis include greater age, illiteracy, financial debt, and medical illness. Women who were multiparous and who were menopausal had more dysfunction. Women who had a partner who physically abused them, used alcohol regularly, had symptoms of venereal disease, visited commercial sex workers or was in an extra-marital relationship had greater rates of sexual dysfunction. Those who reported having sexual concerns, dissatisfaction with their sexual functioning and dissatisfaction in their marriage were more likely to have dysfunction. Issues related to protection from sexually transmitted disease (STD) and contraception appeared to be significantly associated with sexual dysfunction: people who used no specific method of protection against STDs and those whose husband's had undergone a vasectomy had more sexual dysfunction. This is postulated to be due to the fears of exposure to sexually transmitted disease or anxiety about promiscuous behaviour in the husband. Having a single partner as protection against STD was associated with less sexual dysfunction than the other methods of protection. Women who used an intrauterine contraceptive device had less dysfunction, possibly due to the fact that they felt more in control of their contraception and reproductive choices. Understandably, those who reported inadequate privacy at

home had greater rates of dysfunction. Those who felt sex was for procreation and a duty had more dysfunction, while those who felt sex was for recreation and was not a sin had less sexual dysfunction.

The correlates of sexual dysfunction identified in our population are consistent with other studies that have looked into this problem; however the positive correlations with issues of protection, contraception, privacy and attitudes have not been reported earlier.

5. 5 BELIEFS AND ATTITUDES ABOUT FEMALE SEXUAL DYSFUNCTION IN RURAL TAMIL NADU

None of the participants reported having more than one partner and a majority mentioned that this was their protection against sexually transmitted disease. Most participants used contraception, the most common method was tubectomy. This high rate is probably an indication of greater medical coverage as the study population belongs to a block intensively serviced by the Community Health Department of the Christian Medical College,Vellore.

A majority of the participants reported that their first information about sex was from their husband; this is in keeping with a culture where sex is considered taboo and a sensitive issues that is rarely discussed. This suggests the need for more sex education programmes that will serve to increase knowledge and decrease anxiety regarding sex .

While only a few mentioned sexual concerns,a much larger group reported dissatisfaction in their marital lives, suggesting that sexual issues are not a primary concern for many women, as compared to the emotional issues in the marital relationship. Other than a lack

of love and concern in the relationship, financial problems and alcohol abuse by the spouse were the main reasons for marital distress suggesting that psychosocial interventions could help alter the problem.

The belief that sex was for procreation was a common belief that was significantly associated with dysfunction. Such a belief results in a focus not on pleasure but on conception and fulfilling societal expectations , resulting in significant anxiety.

5. 6 EXPLANATORY MODELS FOR FEMALE SEXUAL DYSFUNCTION IN RURAL TAMIL NADU

A majority of the respondents felt that their sexual problems were due to stress and unhappiness in their marital lives suggesting that the women felt that it is necessary to have emotional well-being to be sexually fulfilled. Thus, providing greater support for women in their day to day lives would help reduce morbidity and dysfunction. A fourth of the sample with sexual concerns felt that meeting a doctor or nurse would help sort out their problems; none thought traditional healers could help. This may be due to the fact that traditional healers are more often men.

A large percentage of respondents reported reduced interest in sex and elaborated that sex was not a priority in their lives. Many also felt that as age increased it was only natural to have reduced interest, and that it was also inappropriate to be concerned about sex with grown children in the home. These appear to be the prevalent beliefs in a culture that does not encourage open discussion about sex, especially among women who are expected to be submissive.

This study has brought out some of the common beliefs of the women in this region regarding sex and sexual dysfunction. The current psychological methods of treatment of these conditions are derived from the West .Incorporating locally accepted beliefs and appropriate culturally acceptable protocols will help in cost-effectiveness and patient compliance with intervention strategies.

5. 7 DISEASE VERSUS DYSFUNCTION

Our data indicates that sexual dysfunction cannot be considered a single problem nor equated with disease. Many women did not regard lack of sexual desire as a serious difficulty; many felt it was a normal process of aging .Thus it is not clearly evident that the relatively common complaint of reduced desire is an obstacle to satisfactory sexual relations nor that a medical solution is indicated.

5. 8 IMPORTANCE OF SEXUAL HISTORY IN HEALTH CARE

There are some factors that may have an impact on women reporting sexual problems:

1. Many women may not be concerned about reduced sexual functioning and may feel it is a part of normal aging.

2. Some may be inhibited about expressing their problems as sex is a culturally sensitive issue and they may fear ridicule or criticism.

3. Some women may be restricted by their partner's fears or insecurities regarding their own sexual functioning, treatment or lack of interest.

Physicians can overcome these problems by being direct, forthright, non-judgmental and culturally sensitive while discussing the woman's sexual functioning. This will facilitate open discussion and many would appreciate the opportunity to discuss their concerns. Asking open-ended questions is a useful strategy (e.g." Sometimes people are unable to take an interest in sex or have difficulty during sex. How is your sex life?"). Providing privacy encourages disclosure. Picking up cues from the patient's responses is useful in identifying her main worries and concerns.

5. 9 STRENGTHS AND LIMITATIONS

Limitations of the study

1. Due to its cross-sectional design, data collection was carried out solely via self-report. Longitudinal studies are needed to examine the fluctuating nature of the presentations and changes in their explanatory models.

2. Given the sensitive nature of the topic under study, some respondents may have been reluctant to discuss their true concerns.

Strengths of the study

1. The study was based in the community and therefore included a heterogeneous population in terms of age, socioeconomic status, education etc.

2. The participants were selected in a stratified manner to avoid selection bias during recruitment.

3. A single interviewer who was aware of the social and cultural backgrounds of the participants and was well versed in the local language conducted the interview. This ensured that there was no significant reporting bias.

5. 10 RECOMMENDATIONS AND FUTURE DIRECTIONS FOR RESEARCH

The detection rates of female sexual problems are poor. The reasons for this include presentation with somatic symptoms which are a culturally acceptable form of distress, high frequency of sub threshold conditions in primary care, time constraints in clinical practice and professional's prejudiced beliefs about the problem.

Future research goals should focus on :

- ✓ Refining understanding of sexual functioning in relation to cultural diversity
- ✓ Developing cost-effective strategies which can be applied in primary care practice
- ✓ Qualitative research to focus on attitudes and beliefs of people about sexuality which will help us identify areas of deficiency which can help us be more focused on educational efforts and better intervention
- ✓ To define the risks further, future studies should also examine the medical correlates in prospective samples.

1. Female sexual dysfunction is a common problem in the community as suggested by the prevalence rates of 52% to 64.3%.
2. The commonest type of sexual dysfunction was sexual desire disorder (55.2%) followed by arousal, lubrication and orgasmic disorders (52%), pain disorder (51.6%) and problems with satisfaction (50.9%).
3. Factors associated with female sexual dysfunction included demographic factors such as greater age, illiteracy, financial debt, and medical illness as well as sexual and marital factors such as obstetric score, menopause, husband's regular use of alcohol, poor quality of marital relationship, contraceptive issues and privacy.

   The most common explanatory models offered for sexual problems included an unhappy marriage, stress and physical problems.
4. Many women reported a reduction in sexual desire however felt that it was not a problem but a part of normal aging.
5. This study has examined a little-studied topic, has provided information on female sexual dysfunction in this community and raises issues to be addressed in future studies.

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Prevalence, clinical features and explanatory models of sexual dysfunction in women in a rural community

SOCIODEMOGRAPHIC AND CLINICAL DATA

Serial Number:

Village:

Name----------

Age in years----------

Marital status---------- (i)single (ii)married (iii)separated (iv)divorced (v)widower

Literacy---------- (i)illiterate (ii)read only (iii)read and write

No.of years of schooling----------

Housing ----------(i)own (ii)rented (iii)squatting

Residence----------(i)urban (ii)rural

No.of square meals per day----------

Have been unable to buy food in the past month------(i)yes(ii)no

Living arrangements----------(i)alone (ii)with family

Family income----------

Debt----------(i)no(ii)yes

Amount of debt in rupees----------

Occupation----------

Physical illness- diabetes------(i)no (ii)yes

Physical illness- hypertension-(i)no (ii) yes

Physical illness-others----------(i)no (ii) yes (details)

Medication use ----------(i)no (ii) yes (details)

Number of pregnancies----------

Number of abortions/stillbirths----------

Number of live births----------

Number of live children----------

Male----------

Female----------

Any other details----------

Menstrual history----------(i)menstruating (ii) menopausal

Does your husband use alcohol regularly?----------(i)no (ii) yes

Do you have vaginal discharge?----------(i)no (ii) yes

Does your partner have any symptoms related to the reproductive tract? ------(i)no (ii) yes

Have you been/are you being physically abused?----------(i)no (ii) yes

Have you been/are you being sexually abused?----------(i)no (ii) yes

Does your husband have contact with commercial sex workers?----------(i)no (ii) yes

Is your husband in a long term relationship with another woman?----------(i)no (ii) yes

GENERAL HEALTH QUESTIONNAIRE

We should like to know if you have had any medical complaints and how your health has been in general in the past few weeks. Please answer all the questions. Remember that we want to know about the present and recent complaints, not those that you had in the past.

HAVE YOU RECENTLY

1) been unable to concentrate on whatever you are doing
(i)better then usual (ii)same as usual (iii)less than usual (iv)much less than usual

2) lost much sleep over worry
(i)not at all (ii)no more than usual (iii)rather more than usual (iv) much more than usual

3) felt that you are playing a useful part in things
(i)more so than usual (ii) same as usual (iii)less useful than usual
(iv) much less than usual

4)felt capable of making decisions about things
(i)more so than usual (ii)same as usual (iii)less so than usual (iv)much less capable

5)felt constantly under strain
(i)not at all (ii)no more than usual (iii)rather more than usual (iv) much more than usual

6)felt you couldn't overcome your difficulties
(i)not at all (ii)no more than usual (iii)rather more than usual (iv) much more than usual

7)been able to enjoy your normal day to day activities
(i)more so than usual (ii) same as usual (iii)less so than usual
(iv) much less than usual

8)been able to face up to your problems
(i)more so than usual (ii) same as usual (iii)less able than usual
(iv) much less able

9)been feeling unhappy and depressed
(i)not at all (ii)no more than usual (iii)rather more than usual (iv) much more than usual

10)been losing confidence in self
(i)not at all (ii)no more than usual (iii)rather more than usual (iv) much more than usual

11)been thinking of yourself as a worthless person
(i)not at all (ii)no more than usual (iii)rather more than usual (iv) much more than usual

12)been feeling reasonably happy, all things considered
(i)more so than usual(ii) same as usual(iii)less so than usual(iv) much less than usual

Prevalence, clinical features and explanatory models of sexual dysfunction in women in a rural community

INTRODUCTION:

Thank you for agreeing to talk to me. I would like to ask you some questions about your sexual functioning and how it affects your life. The questions have already been written out and are of a personal nature. I would like to stress that all your answers will be strictly confidential. The information we obtain may help us find problems related to your sexual functioning and problems that are identified can be addressed. Others may also benefit from the overall conclusions at the end of the study.

Sexual history questionnaire:

1.Do you have any sexual concerns?

1.No.

2.Yes .If yes, how long have you have you had these concerns?----------

2.Are you satisfied with your sexual functioning?

1.No. If no, how long have you been dissatisfied with your sexual function?-------

2.Yes

3.If you are sexually active, have you had more than one partner?

1.No

2.Yes

4. If you are sexually active, what do you do to protect yourself from HIV, AIDS, or other sexually transmitted diseases?

1.No specific precautions

2.Single partner

3.Condom

4.Others

5.Do you use contraceptives?

1.No

2.Yes i. Condoms

ii.IUCD

iii.Pills

iv.Sterilized

v.Abstinence

vi.Others

5.When and how did you first learn about sex?

1.Friends
2.Relatives
3.Books
4.Magazines
5.Movies
6.Others

7.What is your opinion on sexual activity?

1.For procreation
2.For recreation
3.A sin
4.A duty
5.A spiritual act

8.Are you satisfied with your marital relationship?

1.No I _____
II _____
III _____
2.Yes

9.Do you have adequate privacy at home for sexual activity?

1.No

2.Yes

FSFI SCORING APPENDIX

	Question Response Options
1. Over the past 4 weeks, how **often** did you feel sexual desire or interest?	5 = Almost always or always 4 = Most times (more than half the time) 3 = Sometimes (about half the time) 2 = A few times (less than half the time) 1 = Almost never or never
2. Over the past 4 weeks, how would you rate your **level** (degree) of sexual desire or interest?	5 = Very high 4 = High 3 = Moderate 2 = Low 1 = Very low or none at all
3. Over the past 4 weeks, how **often** did you feel sexually aroused ("turned on") during sexual activity or intercourse?	0 = No sexual activity 5 = Almost always or always 4 = Most times (more than half the time) 3 = Sometimes (about half the time) 2 = A few times (less than half the time) 1 = Almost never or never
4. Over the past 4 weeks, how would you rate your **level** of sexual arousal ("turn on") during sexual activity or intercourse?	0 = No sexual activity 5 = Very high 4 = High 3 = Moderate 2 = Low 1 = Very low or none at all
5. Over the past 4 weeks, how **confident** were you about becoming sexually aroused during sexual activity or intercourse?	0 = No sexual activity 5 = Very high confidence 4 = High confidence 3 = Moderate confidence 2 = Low confidence 1 = Very low or no confidence

6. Over the past 4 weeks, how **often** have you been satisfied with your arousal (excitement) during sexual activity or intercourse?

0 = No sexual activity
5 = Almost always or always
4 = Most times (more than half the time)
3 = Sometimes (about half the time)
2 = A few times (less than half the time)
1 = Almost never or never

7. Over the past 4 weeks, how **often** did you become lubricated ("wet") during sexual activity or intercourse?

0 = No sexual activity
5 = Almost always or always
4 = Most times (more than half the time)
3 = Sometimes (about half the time)
2 = A few times (less than half the time)
1 = Almost never or never

8. Over the past 4 weeks, how **difficult** was it to become lubricated ("wet") during sexual activity or intercourse?

0 = No sexual activity
1 = Extremely difficult or impossible
2 = Very difficult
3 = Difficult
4 = Slightly difficult
5 = Not difficult

9. Over the past 4 weeks, how often did you **maintain** your lubrication ("wetness") until completion of sexual activity or intercourse?

0 = No sexual activity
5 = Almost always or always
4 = Most times (more than half the time)
3 = Sometimes (about half the time)
2 = A few times (less than half the time)
1 = Almost never or never

10. Over the past 4 weeks, how **difficult** was it to maintain your lubrication ("wetness") until completion of sexual activity or intercourse?

0 = No sexual activity
1 = Extremely difficult or impossible
2 = Very difficult
3 = Difficult

4 = Slightly difficult
5 = Not difficult

11. Over the past 4 weeks, when you had sexual stimulation or intercourse, how **often** did you reach orgasm (climax)?

0 = No sexual activity
5 = Almost always or always
4 = Most times (more than half the time)
3 = Sometimes (about half the time)
2 = A few times (less than half the time)
1 = Almost never or never

12. Over the past 4 weeks, when you had sexual stimulation or intercourse, how **difficult** was it for you to reach orgasm (climax)?

0 = No sexual activity
1 = Extremely difficult or impossible
2 = Very difficult
3 = Difficult
4 = Slightly difficult
5 = Not difficult

13. Over the past 4 weeks, how **satisfied** were you with your ability to reach orgasm (climax) during sexual activity or intercourse?

0 = No sexual activity
5 = Very satisfied
4 = Moderately satisfied
3 = About equally satisfied and dissatisfied
2 = Moderately dissatisfied
1 = Very dissatisfied

14. Over the past 4 weeks, how **satisfied** have you been with the amount of emotional closeness during sexual activity between you and your partner?

0 = No sexual activity
5 = Very satisfied
4 = Moderately satisfied
3 = About equally satisfied and dissatisfied
2 = Moderately dissatisfied
1 = Very dissatisfied

15. Over the past 4 weeks, how **satisfied** have you been with your sexual relationship with your partner?

5 = Very satisfied
4 = Moderately satisfied
3 = About equally satisfied and dissatisfied
2 = Moderately dissatisfied
1 = Very dissatisfied

16. Over the past 4 weeks, how **satisfied** have you been with your overall sexual life?

5 = Very satisfied
4 = Moderately satisfied
3 = About equally satisfied and dissatisfied
2 = Moderately dissatisfied
1 = Very dissatisfied

17. Over the past 4 weeks, how **often** did you experience discomfort or pain during vaginal penetration?

0 = Did not attempt intercourse
1 = Almost always or always
2 = Most times (more than half the time)
3 = Sometimes (about half the time)
4 = A few times (less than half the time)
5 = Almost never or never

18. Over the past 4 weeks, how **often** did you experience discomfort or pain following vaginal penetration?

0 = Did not attempt intercourse
1 = Almost always or always
2 = Most times (more than half the time)
3 = Sometimes (about half the time)
4 = A few times (less than half the time)
5 = Almost never or never

19. Over the past 4 weeks, how would you rate your **level** (degree) of discomfort or pain during or following vaginal penetration?

0 = Did not attempt intercourse
1 = Very high
2 = High
3 = Moderate
4 = Low
5 = Very low or none at all

Prevalence, clinical features and explanatory models of sexual dysfunction in women in a rural community

SHORT EXPLANATORY MODEL INTERVIEW

Serial Number:

Village:

1. Have you had any sexual concerns or problems?
   1)No
   2)Yes(list all).

2. .Have you seen a doctor or a nurse about any sexual problems? Can you tell me the reason for your visit? (List all reasons).
   I _____
   II _____
   III _____

3. What do you call these problems? Probe: If you had to give them names what would they be?
   I _____
   II _____
   III _____

4. When did you first notice these problems? Specify identified problem. Probe: How long ago? When did it start?
   I _____
   II _____
   III _____

5. Who or what is the cause of you getting this?

6. Do you believe that your problem is due to black magic?
   1)No
   2)Yes

7. Do you believe that your problem is due to karma?
   1)No
   2)Yes

8. Do you believe that your problem is due to punishment from God?
    1)No
    2)Yes

9. Do you believe that your problem is due to evil spirits?
    1)No
    2)Yes

10. Do you believe that your problem is due to excessive domestic duties?
    1)No
    2)Yes

11. Do you believe that your problem is due to menopause/problems in your menstrual cycle?
    1)No
    2)Yes

12. Do you believe that your problem is due to the pregnancies you have had?

    1)No
    2)Yes

13. Do you believe that your problem is due to the abortions you have had ?
    1)No
    2)Yes

14. Do you believe that your problem is due to an inability to conceive ?
    1)No
    2)Yes

15. Do you believe that your problem is due to other obstetric/gynaecological problems ?
    1)No
    2)Yes

16. Do you believe that your problem is due to an unhappy marriage?
    1)No
    2)Yes

17. Do you believe that your problem is due to lack of adequate foreplay during sexual intercourse?
    1)No
    2)Yes

18. Do you believe that your problem is due to masturbation?
    1)No
    2)Yes

19. Do you believe that your problem is due to past sexual abuse?
    1)No
    2)Yes

20. Do you believe that your problem is due to any physical disease ?
    1)No
    2)Yes

21. Do you believe that your problem is due to stress ?
    1)No
    2)Yes

22. Will it help you, if you visit a doctor or a nurse for treatment for your problem ?
    1)No
    2)Yes

23. Will it help you, if you visit a traditional healer for treatment for your problem ?
    1)No
    2)Yes

24. Will it help you, if you visit a mantrivadi for treatment for your problem?
    1)No
    2)Yes

25. Will it help you, if you visit a temple or a church or a mosque for your problem ?
    1)No
    2)Yes

26. Will it help you, if you observe any diet restrictions or special diet for your problem ?
    1)No
    2)Yes

27. Will it help you, if you use any herbal remedies for your problem ?
    1)No
    2)Yes

28. Do you know if there is anything else which may help your problem ?
    1)No
    2)Yes

ஒப்புதல் படிவம்

ஆய்வின் தலைப்பு:
சமுதாயத்தில் உள்ள பெண்களின் பாலியல் பிரச்சினைகளின் தன்மை, பரவல் விகிதம், காரணிகள் மற்றும் விளக்க மாதிரிகள்.

நிறுவனம் :
கிறிஸ்தவ மருத்துவக் கல்லூரி, வேலூர்

ஆய்வின் தன்மை மற்றும் நோக்கம் :

அன்றாட வாழ்வியல் பாலியல் குறித்த கஷ்டங்கள் அடிக்கடி வருவதுண்டு, ஆனபோதிலும் இவைகளைக் குறித்து ஆலோசிப்பது கடினமானது. சமுதாயத்தில் உள்ள பெண்களின் பாலியல் பிரச்சனைகளின் தன்மைகள் குறித்த உங்களது பொதுவான கருத்துகள் மற்றும் உங்கள் விளக்கமும் கண்டறிய நாங்கள் விரும்புகிறோம்.

பின்பற்றவேண்டிய செயல் முறை:

இந்த ஆய்வானது வேலூர் கிறிஸ்தவ மருத்துவக் கல்லூரியின் சமூகநலத்துறையும், மன நலத்துறையும் இணைந்து நடத்தும் ஒன்றாகும். உங்களுக்குத் தெரிந்த ஒரு நல ஊழியர் இந்த ஆய்வினை நடத்தும் மருத்துவரை உங்களுக்கு அறிமுகப்படுத்துவார். இந்த ஆய்வின் தன்மைபற்றி அவர் உங்களுக்கு விளக்கி, உங்களது சம்மதத்தைப் பெறுவார். பாலியல் சம்பந்தப்பட்ட பல்வேறு விளக்கங்களை திட்டமான படிவங்கள் மூலமாக அவர் சேகரிப்பார். இந்த ஆய்வில் சில மிகவும் அந்தரங்கமான கேள்விகள் கேட்கப்பட்டிருக்கலாம். அப்படிப்பட்ட கேள்விகளுக்கு பதில் அளிக்கவோ அல்லது மறுக்கவோ உங்களுக்கு உரிமை உண்டு.

எதிர் பார்க்கப்படும் கால அளவு:
ஏறக்குறைய அரை மணி நேரத்தில் ஒரே அமர்வில் மதிப்பீடு எடுக்கப்படும்.

ஆய்வினால் உள்ள நன்மைகளின் சாத்தியக்கூறு:
நாங்கள் சேகரிக்கும் தகவல்கள் உங்களது பாலியல் செயல்பாடுகள் குறித்த பிரச்சனைகளை கண்டறிய உதவக்கூடும். மேற்கொண்டு சிகிச்சை தேவைப்பட்டாலோ அல்லது உங்களுக்கு உதவி தேவைப்பட்டாலோ அது குறித்து ஆலோசனை வழங்கப்படும். இந்த ஆய்வின் இறுதியில் இதன் முடிவு மூலம் மற்றவர்களும் கூட பயனடையக்கூடும்.

இரகசியத்தன்மை:
இந்த ஆய்வில் பெறப்பட்ட அனைத்து விவரங்கள் மற்றும் குறிப்புகள் எப்பொழுதும் ரகசியமாக வைக்கப்பட்டு இந்த ஆய்வினை நடத்தும் மருத்துவருக்கு மட்டுமே தரப்படும். உங்கள் சுய விவரங்கள் சேகரிக்கப்பட்டு ஆய்வுக்கு மட்டுமே பயன்படுத்தப்படும். உங்களது பெயர் அல்லது அடையாளம் எந்த அறிக்கையிலோ அல்லது வெளியீடுகளிலோ தெரிவிக்கப்படமாட்டாது.

ஆய்விலிருந்து பின்வாங்கும் உரிமம் :
ஆய்விலிருந்து எந்த கட்டத்திலும் நீங்கள் விலகலாம். இந்த ஆய்வில் பங்கெடுக்கமாட்டேன் என்று நீங்கள் எடுக்கும் முடிவு உங்கள் பிற்கால மருத்துவ அல்லது மனநல சிகிச்சையை எவ்விதத்திலும் பாதிக்காது.
மேற்கொண்டு விவரங்களுக்கு அணுகவேண்டிய முகவரி:

1. Dr. ஜோணிமா A.V.
மனநல மருத்துவப் பிரிவு
கிறிஸ்தவ மருத்துவக் கல்லூரி
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2. Dr. ஜாஸ்மின் ப்ரசாத்
சமூக நலத்துறைப் பிரிவு
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மின்னஞ்சல்விலாசம் : **chad@cmcvellore.ac.in**

சம்மதம்:

..... ஆகிய எனக்கு சமுதாயத்தில் உள்ள பெண்களின் பாலியல் செயலின்மை குறித்த ஆய்வு பற்றி விளக்கப்பட்டது. ஆய்வாளர் ஆய்வு பற்றிய விவரங்களை விளக்கினார். நான் சுயமாக இந்த ஆய்வில் பங்கெடுக்கிறேன். மேலும் எனது சொந்த விருப்பத்தின்படி நேர்முகக்காணலில் பங்கெடுக்க ஒப்புக்கொள்கிறேன்.

பங்கேற்பவரின் கையொப்பம் தேதி:

ஆய்வாளரின் கையொப்பம் தேதி:

Prevalence, clinical features and explanatory models of sexual dysfunction in women in a rural community

SOCIODEMOGRAPHIC AND CLINICAL DATA

Serial Number:

Village:

Name----------

Age in years ----------

Marital Status ---------- (i) single (ii) married (iii) separated (iv) divorced (v) widower

Literacy ---------- (i) illiterate (ii) read only (iii) read and write

No. of years of schooling ----------

Housing ---------- (i) own (ii) rented (iii) squatting

Residence ---------- (i) urban (ii) rural

No. of square meals per day ----------

Have been unable to buy food in the past month ---------- (i) yes (ii) no

Living arrangements ---------- (i) alone (ii) with family

Family income ----------

Debt ---------- (i) no (ii) yes

Amount of debt in rupees ----------

Occupation ----------

Physical illness – diabetes ---------- (i) no (ii) yes

Physical illness – hypertension------- (i) no (ii) yes

Physical illness – others ---------- (i) no (ii) yes (details)

Medication used ---------- (i) no (ii) yes (details)

Number of pregnancies ----------

Number of abortions / stillbirths ----------

Number of live births ----------

Number of live children ----------

Male ----------

Female ----------

Any other details ----------

Menstrual history ---------- (i) menstruating (ii) menopausal

Does your husband use alcohol regularly? ---------- (i) no (ii) yes

Do you have vaginal discharge? ---------- (i) no (ii) yes

Does your partner have any symptoms related to the reproductive tract? ---------- (i) no (ii) yes

Have you been / are you being physically abused? ---------- (i) no (ii) yes

Have you been / are you being sexually abused? ---------- (i) no (ii) yes

Does your husband have contact with commercial sex workers? ---------- (i) no (ii) yes

Is your husband in a long relationship with another women? ---------- (i) no (ii) yes

FSFI அளவீடு

கேள்வி	தேர்ந்தெடுக்கும் பதில்
1. கடந்த 4 வாரங்களில் எத்தனை முறை பாலுறவில் ஆசை அல்லது விருப்பம் வந்தது?	5 = ஏறக்குறைய எப்பொழுதும் 4 = அனேகமுறை (அரைபங்கு நேரங்களுக்கு மேல்) 3= பாதி சமயங்களில் (ஏறக்குறைய அரை மடங்கு) 2 = சில சமயங்களில் (அரை மடங்குக்கு குறைவாக) 1 = ஒருபொழுதும் அல்லது ஒருபொழுதுமே இல்லை
2. கடந்த 4 வாரங்களில் உங்களது பாலுறவில் ஆசை அல்லது விருப்பத்தை எவ்வாறு அளவிடுவீர்கள்?	5 = மிக அதிகம் 4 = அதிகம் 3= மித அளவு 2 = குறைந்த அளவு 1 = மிகக்குறைவு அல்லது இல்லவே இல்லை
3. கடந்த 4 வாரங்களில் பாலுறவின்போது எத்தனை முறை கிளர்ச்சி அடைந்தீர்கள்?	0 = பாலுறவே இல்லை 5 = ஏறக்குறைய எப்பொழுதும் 4 = அனேகமுறை (அரைபங்கு நேரங்களுக்கு மேல்) 3= பாதி சமயங்களில் (ஏறக்குறைய அரை மடங்கு) 2 = சில சமயங்களில் (அரை மடங்குக்கு குறைவாக) 1 = ஒருபொழுதும் அல்லது ஒருபொழுதுமே இல்லை
4. கடந்த 4 வாரங்களில் பாலுறவின்போது அடைந்த கிளர்ச்சி எவ்வாறு அளவிடுவீர்கள்?	0 = பாலுறவே இல்லை 5 = மிக அதிகம் 4 = அதிகம் 3= மித அளவு 2 = குறைந்த அளவு 1 = மிகக்குறைவு அல்லது இல்லவே இல்லை
5. கடந்த 4 வாரங்களில் பாலுறவின்போது கிளர்ச்சி அடைவது குறித்து எவ்வளவு திடநம்பிக்கை கொண்டிருந்தீர்கள்?	0 = பாலுறவே இல்லை 5 = மிக அதிக நம்பிக்கை 4 = அதிகம் நம்பிக்கை 3= மித அளவு நம்பிக்கை 2 = குறைந்த அளவு நம்பிக்கை 1 = மிகக்குறைவு அல்லது இல்லவே இல்லை
6. கடந்த 4 வாரங்களில் பாலுறவின்போது அடைந்த கிளர்ச்சி மூலம் எத்தனை முறை திருப்தி அடைந்தீர்கள்?	0 = பாலுறவே இல்லை 5 = மிக மிகக் கடினமாயிருந்தது / முடியவே இல்லை 4 = மிகக் கடினமாயிருந்தது 3= கடினமாயிருந்தது 2 = சிறிதளவு கடினமாயிருந்தது 1 = கடினமாக இல்லை

7. கடந்த 4 வாரங்களில் பாலுறவின்போது எத்தனை முறை ஈரப்பதம் அடைந்தீர்கள்?

0 = பாலுறவே இல்லை
5 = ஏறக்குறைய எப்பொழுதும்
4 = அனேகமுறை (அரைபங்கு நேரங்களுக்கு மேல்)
3= பாதி சமயங்களில் (ஏறக்குறைய அரை மடங்கு)
2 = சில சமயங்களில் (அரை மடங்குக்கு குறைவாக)
1 = ஒருபொழுதும் அல்லது ஒருபொழுதுமே இல்லை

8. கடந்த 4 வாரங்களில் பாலுறவின்போது ஈரப்பதம் அடைவது எவ்வளவு கடினமாயிருந்தது?

0 = பாலுறவே இல்லை
5 = மிக மிகக் கடினமாயிருந்தது / முடியவே இல்லை
4 = மிகக் கடினமாயிருந்தது
3 = கடினமாயிருந்தது
2 = சிறிதளவு கடினமாயிருந்தது
1 = கடினமாக இல்லை

9. கடந்த 4 வாரங்களில் பாலுறவின்போது ஈரப்பதம் அடைவதை இறுதிவரை எத்தனைமுறை நிலைப்படுத்தினீர்கள்?

0 = பாலுறவே இல்லை
5 = ஏறக்குறைய எப்பொழுதும்
4 = அனேகமுறை (அரைபங்கு நேரங்களுக்கு மேல்)
3= பாதி சமயங்களில் (ஏறக்குறைய அரை மடங்கு)
2 = சில சமயங்களில் (அரை மடங்குக்கு குறைவாக)
1 = ஒருபொழுதும் அல்லது ஒருபொழுதுமே இல்லை

10. கடந்த 4 வாரங்களில் பாலுறவின்போது உறவு முடியும்வரை ஈரப்பதத்தை நிலைப்படுத்துவது எவ்வளவு கடினமாக இருந்தது?

0 = பாலுறவே இல்லை
5 = ஏறக்குறைய எப்பொழுதும்
4 = அனேகமுறை (அரைபங்கு நேரங்களுக்கு மேல்)
3= பாதி சமயங்களில் (ஏறக்குறைய அரை மடங்கு)
2 = சில சமயங்களில் (அரை மடங்குக்கு குறைவாக)
1 = ஒருபொழுதும் அல்லது ஒருபொழுதுமே இல்லை

11. கடந்த 4 வாரங்களில் பாலுறவின்போது எத்தனை முறை உறவின் உச்ச கட்டத்தை அடைந்தீர்கள்?

0 = பாலுறவே இல்லை
5 = ஏறக்குறைய எப்பொழுதும்
4 = அனேகமுறை (அரைபங்கு நேரங்களுக்கு மேல்)
3= பாதி சமயங்களில் (ஏறக்குறைய அரை மடங்கு)
2 = சில சமயங்களில் (அரை மடங்குக்கு குறைவாக)
1 = ஒருபொழுதும் அல்லது ஒருபொழுதுமே இல்லை

12. கடந்த 4 வாரங்களில் பாலுறவின்போது உச்ச கட்டத்தை அடைதல் எவ்வளவு கடினமாக இருந்தது?

0 = பாலுறவே இல்லை
5 = மிக மிகக் கடினமாயிருந்தது / முடியவே இல்லை
4 = மிகக் கடினமாயிருந்தது
3= கடினமாயிருந்தது
2 = சிறிதளவு கடினமாயிருந்தது
1 = கடினமாக இல்லை

13. கடந்த 4 வாரங்களில் பாலுறவின்போது உச்ச கட்டத்தை அடையும் திறனில் உங்களுக்கு எவ்வளவு திருப்தி இருந்தது?

0 = பாலுறவே இல்லை
5 = மிக திருப்தியாக இருந்தது
4 = மிதமான அளவு திருப்தி இருந்தது
3= திருப்தியும் அதிருப்தியும் சமமாக இருந்தது
2 = மிதமான அளவு அதிருப்தி இருந்தது
1 = மிகவும் அதிருப்தியாய் இருந்தது

14. கடந்த 4 வாரங்களில் பாலுறவின்போது உங்களுக்கும் உங்கள் துணைவருக்கும் இடையே உணர்ச்சி பூர்வமான நெருக்கத்தில் எவ்வளவு திருப்தி இருந்தது?

0 = பாலுறவே இல்லை
5 = மிக திருப்தியாக இருந்தது
4 = மிதமான அளவு திருப்தி இருந்தது
3= திருப்தியும் அதிருப்தியும் சமமாக இருந்தது
2 = மிதமான அளவு அதிருப்தி இருந்தது
1 = மிகவும் அதிருப்தியாய் இருந்தது

15. கடந்த 4 வாரங்களில் உங்கள் துணைவருடன் பாலுறவில் எவ்வளவு திருப்தி அடைந்தீர்கள்?

5 = மிக திருப்தியாக இருந்தது
4 = மிதமான அளவு திருப்தி இருந்தது
3= திருப்தியும் அதிருப்தியும் சமமாக இருந்தது
2 = மிதமான அளவு அதிருப்தி இருந்தது
1 = மிகவும் அதிருப்தியாய் இருந்தது

16. கடந்த 4 வாரங்களில் ஒட்டு மொத்த தாம்பத்திய வாழ்வில் எவ்வளவு திருப்தி அடைந்தீர்கள்?

0 = பாலுறவுக்கு முயற்சிக்கவில்லை
5 = ஏறக்குறைய எப்பொழுதும்
4 = அனேகமுறை (அரைபங்கு நேரங்களுக்கு மேல்)
3= பாதி சமயங்களில் (ஏறக்குறைய அரை மடங்கு)
2 = சில சமயங்களில் (அரை மடங்குக்கு குறைவாக)
1 = ஒருபொழுதும் அல்லது ஒருபொழுதுமே இல்லை

17. கடந்த 4 வாரங்களில் பிறப்பு உறுப்பில் நுழைதலின் போது எத்தனை முறை வலி அல்லது அசௌகரியம் அடைந்தீர்கள்?

0 = பாலுறவுக்கு முயற்சிக்கவில்லை
5 = ஏறக்குறைய எப்பொழுதும்
4 = அனேகமுறை (அரைபங்கு நேரங்களுக்கு மேல்)
3= பாதி சமயங்களில் (ஏறக்குறைய அரை மடங்கு)
2 = சில சமயங்களில் (அரை மடங்குக்கு குறைவாக)
1 = ஒருபொழுதும் அல்லது ஒருபொழுதுமே இல்லை

18. கடந்த 4 வாரங்களில் பிறப்பு உறுப்பில் ஊடுறுவுதலை தொடர்ந்து எத்தனை முறை வலி அல்லது அசௌகரியம் அடைந்தீர்கள்?

0 = பாலுறவு முயற்சிக்கவில்லை
5 = ஏறக்குறைய எப்பொழுதும்
4 = அனேகமுறை (அரைபங்கு நேரங்களுக்கு மேல்)
3= பாதி சமயங்களில் (ஏறக்குறைய அரை மடங்கு)
2 = சில சமயங்களில் (அரை மடங்குக்கு குறைவாக)
1 = ஒருபொழுதும் அல்லது ஒருபொழுதுமே இல்லை

19. கடந்த 4 வாரங்களில் பிறப்பு உறுப்பில் ஊடுறுவுதலின் போது வலி அல்லது அசௌகரியம் ஏற்பட்டதை அளவிடுவீர்கள்?

0 = பாலுறவே முயற்சிக்கவில்லை
5 = மிக அதிகம்
4 = அதிகம்
3= மித அளவு
2 = குறைந்த அளவு
1 = மிகக்குறைவு அல்லது இல்லவே இல்லை

கிராம சமுதாயத்தில் உள்ள பெண்களின் பாலியல் செயலிழப்பின் மருத்துவத் தன்மை, வியாபகம், மற்றும் விளக்க மாதிரிகள்

குறுகிய விளக்க மாதிரி பேட்டிகாணல்

வரிசை எண் :
கிராமம் :

1. உங்களுக்கு பாலியல் குறித்த கரிசனை அல்லது பிரச்சனை இருக்கிறதா?
   1) இல்லை
   2) ஆம் (எல்லாவற்றையும் குறிப்பிடவும்)

2. பாலியல் குறித்த ஏதாவது பிரச்சனைகளுக்காக மருத்துவரை அல்லது தாதியரை அணுகினீர்களா? (எல்லாக் காரணங்களையும் குறிப்பிடவும்)
   I .....
   II .....
   III .....

3. இந்த பிரச்சனைகளை எவ்வாறு அழைப்பீர்கள்? சோதிக்கவும்: அவைகளுக்கு பெயர் கொடுப்பதும் என்றால் அவைகள் எவை?
   I .....
   II .....
   III .....

4. இந்த பிரச்சனைகளை முதலாவது கண்டறிந்தது எப்பொழுது? கண்டறிந்தவற்றை குறிப்பிடவும். சோதிக்கவும்: எவ்வளவு காலத்திற்கு முன்னால்? அது எப்பொழுது ஆரம்பித்தது?
   I .....
   II .....
   III .....
5. நீங்கள் இந்த பிரச்சனையை பெற்றுக்கொள்ள யார் அல்லது எது காரணம்?

6. உங்கள் பிரச்சனை மந்திரவாதத்தால் வந்தது என்று நம்புகிறீர்களா?
   1) இல்லை
   2) ஆம்

7. உங்கள் பிரச்சனை உங்கள் கர்மவினையால் வந்தது என்று நம்புகிறீர்களா?
   1) இல்லை
   2) ஆம்

8. உங்கள் பிரச்சனை கடவுளிடமிருந்து தண்டனையாக வந்தது என்று நம்புகிறீர்களா?
   1) இல்லை
   2) ஆம்

9. உங்கள் பிரச்சனை கெட்ட ஆவிகளினால் வந்தது என்று நம்புகிறீர்களா?
   1) இல்லை
   2) ஆம்

10. உங்கள் பிரச்சனை அதிகப்படியான வீட்டு வேலைகளால் வந்தது என்று நம்புகிறீர்களா?
   1) இல்லை
   2) ஆம்

11. உங்கள் பிரச்சனை மாதவிடாய் நின்று போனதாலோ அல்லது மாதவிடாய் தொடர்பாக வந்தது என்று நம்புகிறீர்களா?
   1) இல்லை
   2) ஆம்

12. உங்கள் பிரச்சனை உங்களது கர்ப்பங்களால் வந்தது என்று நம்புகிறீர்களா?
    1) இல்லை
    2) ஆம்

13. உங்கள் பிரச்சனை உங்களுக்கு ஏற்பட்ட கருச்சிதைவுகளால் வந்தது என்று நம்புகிறீர்களா?
    1) இல்லை
    2) ஆம்

14. உங்கள் பிரச்சனை கருத்தரிக்க இயலாமையால் வந்தது என்று நம்புகிறீர்களா?
    1) இல்லை
    2) ஆம்

15. உங்கள் பிரச்சனை இதர மகப்பேறு காரணங்களால் வந்தது என்று நம்புகிறீர்களா?
    1) இல்லை
    2) ஆம்

16. உங்கள் பிரச்சனை மகிழ்ச்சியற்ற திருமண வாழ்வால் வந்தது என்று நம்புகிறீர்களா?
    1) இல்லை
    2) ஆம்

17. உங்கள் பிரச்சனை உடலுறவின்போது போதிய அளவு காதல் விளையாட்டு இல்லாததால் வந்தது என்று நம்புகிறீர்களா?
    1) இல்லை
    2) ஆம்

18. உங்கள் பிரச்சனை சுய இன்ப பழக்கத்தால் வந்தது என்று நம்புகிறீர்களா?
    1) இல்லை
    2) ஆம்

19. உங்கள் பிரச்சனை பழைய பாலியல் வதைமினால் வந்தது என்று நம்புகிறீர்களா?
    1) இல்லை
    2) ஆம்

20. உங்கள் பிரச்சனை ஏதாவது நோமினால் வந்தது என்று நம்புகிறீர்களா?
    1) இல்லை
    2) ஆம்

21. உங்கள் பிரச்சனை மன அழுத்தத்தினால் வந்தது என்று நம்புகிறீர்களா?
    1) இல்லை
    2) ஆம்

22. உங்கள் பிரச்சனைக்காக ஒரு மருத்துவரை அல்லது தாதியரை அணுகினால் உதவியாக இருக்குமா?
    1) இல்லை
    2) ஆம்

23. உங்கள் பிரச்சனைக்காக ஒரு பரம்பரை வைத்தியரை அணுகினால் உதவியாக இருக்குமா?
    1) இல்லை
    2) ஆம்

24. உங்கள் பிரச்சனைக்காக ஒரு மந்திரவாதியை அணுகினால் உதவியாக இருக்குமா?
    1) இல்லை
    2) ஆம்

25. உங்கள் பிரச்சனைக்காக ஒரு கோயில், தேவாலயம் அல்லது மசூதிக்கு சென்றால் உதவியாக இருக்குமா?
    1) இல்லை
    2) ஆம்

26. உங்கள் பிரச்சனைக்காக உணவுக்கட்டுப்பாடு அல்லது சிறப்பு உணவு பழக்கம் கடைபிடித்தால் உதவியாக இருக்குமா?
    1) இல்லை
    2) ஆம்

27. உங்கள் பிரச்சனைக்காக பச்சிலை மருந்துகளை பயன்படுத்தினால் உதவியாக இருக்குமா?
    1) இல்லை
    2) ஆம்

28. உங்கள் பிரச்சனைக்கு வேறு ஏதாவது வழிகள் உதவும் என்று தெரியுமா?
    1) இல்லை
    2) ஆம்

GENERAL HEALTH QUESTIONNAIRE – 12

1 சமீபகாலமாக தாங்கள் செய்யும் வேலைகளில் தங்களால் அதிகம் கவனம் செலுத்த முடிகிறதா?

A வழக்கத்தைவிட நன்றாக

B வழக்கம் போலவே

C வழக்கத்தைவிட குறைவாக

D வழக்கத்தைவிட மிகவும் குறைவாக

2 சமீபகாலமாக கவலையால் தூக்கத்தை இழந்துவிட்டார்களா **?**

A இல்லை

B வழக்கத்தைவிட அதிகமாக இல்லை

C வழக்கத்தைவிட மிக அதிகமாக

d வழக்கத்தைவிட மிக மிக அதிகமாக

3 சமீபகாலமாக தாங்கள் வாழ்க்கையில் உபயோகமான வேலைகளில் ஈடுபட்டு வருவதாக உணர்கிறீர்களா ?

A வழக்கத்தைவிட நன்றாக

B வழக்கம் போலவே

C வழக்கத்தைவிட குறைவாக

D வழக்கத்தைவிட மிகவும் குறைவாக

4 சமீப காலமாக வாழ்க்கையில் / செயல்களில் முடிவு எடுக்கும் திறமை இருக்கிறதா ?

A வழக்கத்தைவிட நன்றாக

B வழக்கம் போலவே

C வழக்கத்தைவிட குறைவாக

D வழக்கத்தைவிட மிகவும் குறைவாக

5 சமீபகாலமாக எப்போதும் மன அழுத்தத்தில் உள்ளதாக உணர்கறீகளா ?

A இல்லை

B வழக்கத்தைவிட அதிகமாக இல்லை

C வழக்கத்தைவிட மிக அதிகமாக

d வழக்கத்தைவிட மிக மிக அதிகமாக

6 சமீபகாலமாக தாங்கள் பிரச்சனைகளில் இருந்து மீள முடியாமல் இருப்பதாக

A இல்லை

B வழக்கத்தைவிட அதிகமாக இல்லை

C வழக்கத்தைவிட மிக அதிகமாக

d வழக்கத்தைவிட மிக மிக அதிகமாக

7 சமீபகாலமாக தங்களின் அன்றாட நடவடிக்கைகளை அனுபவித்து உணர முடிகிறதா ?

A வழக்கத்தைவிட நன்றாக

B வழக்கம் போலவே

C வழக்கத்தைவிட குறைவாக

D வழக்கத்தைவிட மிகவும் குறைவாக

8 சமீபகாலமாக தங்களால் பிரச்சனைகளை எதிர்கொள்ள முடிகிறதா?

A இல்லை

B வழக்கத்தைவிட அதிகமாக இல்லை

C வழக்கத்தைவிட மிக அதிகமாக

d வழக்கத்தைவிட மிக மிக அதிகமாக

9 சமீபகாலமாக தாங்கள் நம்பிக்கை இழந்து வருகிறீர்களா ?

A இல்லை

B வழக்கத்தைவிட அதிகமாக இல்லை

C வழக்கத்தைவிட மிக அதிகமாக

d வழக்கத்தைவிட மிக மிக அதிகமாக

10 சமீபகாலமாக தாங்கள் நம்பிக்கை இழந்து வருகிறீர்களா ?

A இல்லை

B வழக்கத்தைவிட அதிகமாக இல்லை

C வழக்கத்தைவிட மிக அதிகமாக

d வழக்கத்தைவிட மிக மிக அதிகமாக

11 சமீபகாலமாக தாங்கள் ஒரு லாயக்கற்ற / மதிப்பற்ற நபராக தங்களை எண்ணுகிறீர்களா ?

A இல்லை

B வழக்கத்தைவிட அதிகமாக இல்லை

C வழக்கத்தைவிட மிக அதிகமாக

d வழக்கத்தைவிட மிக மிக அதிகமாக

12 சமீபகாலமாக பொதுவாக எல்லாவற்றிலும் போதுமாக அளவு மகிழ்ச்சியுடன் இருப்பதாக உணர்கிறீர்களா?

A வழக்கத்தைவிட நன்றாக

B வழக்கம் போலவே

C வழக்கத்தைவிட குறைவாக

D வழக்கத்தைவிட மிகவும் குறைவாக

பாலியல் வரலாறு குறித்த கேள்வித்தாள்

1 உங்களுக்கு உடலுறவு குறித்த பிரச்சினை ஏதாவது
   1 இல்லை
   2 ஆம் . ஆம் எனில் எவ்வளவு நாட்களாக உங்களுக்கு இந்த பிரச்சனைகள் உள்ளன,

2 உங்களது உடலுறவு செயல்பாட்டுத் திறனால் நீங்கள் திருப்தி அடைகிறீர்களா ?
   1 இல்லை இல்லை எனில் எவ்வளவு நாட்களாக நீங்கள் அதிருப்தியாக இருக்கீறிர்கள் ?
   2 ஆம்

3 உடலுறவில் உங்களுக்கு ஒன்றுக்கு மேற்பட்ட துணைவர்கள் இருந்தது உண்டா ?
   1 இல்லை
   2 ஆம்

4 நீங்கள் உடலுறவில் ஈடுபடும் வேளைகளில் HIV , எய்ட்ஸ் மற்றும் பால்வினை நோய்களிலிருந்து உங்களை பாதுகாத்துக்கொள்ள என்ன செய்கிறீர்கள் ?
   1 எவ்வித பாதுகாப்பும் இல்லை
   2 ஒரே துணைவர்
   3 ஆண் அல்லது பெண் உறை
   4 மற்றவை

5 நீங்கள் கருத்தடை சாதனங்களை பயன்படுத்துகிறீர்களா ?
   1 இல்லை
   2 ஆம்
      1 ஆண் உறை
      2 காப்பர் டி
      3 கருத்தடை மாத்திரைகள்
      4 குடும்ப கட்டுபாடு அறுவை சிகைச்சை
      5 உடலுறவை தவிர்த்தல்
      6 மற்றவை

6 முதல் முறையாக உடலுறவு பற்றி எப்போது எவ்வாறு கற்றுக் கொண்டீர்கள்?
   1 நண்பர்கள்
   2 உறவினர்கள்
   3 புத்தகங்கள்
   4 பத்திரிகைகள்
   5 திரைப்படங்கள்
   6 மற்றவை

7 உடலுறவு பற்றி உங்களது பொதுவான கருத்து என்ன?
   1 இனப்பெருக்கத்திற்காக
   2 இன்பத்திற்காக
   3 ஒரு பாவச்செயல்
   4 ஒரு கடமை
   5 ஒரு புனித செயல்

8 உங்களது திருமண வாழ்க்கை திருப்த்தியாக உள்ளதா ?
   1 இல்லை
      1
      2
      3
   2 ஆம்

9 உடலுறவுக்கு தேவையான போதிய தனிமை வசதி உங்கள் வீட்டில் இருக்கிறதா ?
   1 இல்லை,
   2 ஆம்