Dr. Ruma Shukla

M.B.B.S., DGO Gold medalist, FICOG, FIMS.

Consultant and head, department of Obstetrics and Gynecology, MA in Clinical Psychology Sexual Medicine Specialist, Shukla Hospital And Investigation Centre, Indore.

Affiliations :

- **Member Of Fogsi, Life Member OF IMS, Life Member Of ISAR, Life Member Of IMA.**

Community Involvement :

- **Past President Of Indore Obstetrics and Gynecological Society 2019.**
- **Conducted 'Salute to Womanhood' Programmed In Indore With LOK Sabha Speaker Smt. Sumitra Mahajan In 2015.**
- **H.I.V. & AIDS Prevention Programmed By IMA & NACO – 2017.**
- **Conducted Adolescent Health Programmed In Various School And Colleges Of Indore In Association With Adolescent Committee Of Fogsi & Johnson and Johnson Group Year 2007 – 2008.**

Awards :

- **Gold Medal – Dr. Subhalaxmi Gold Medal In Obstetrics & Gynecology 1983.**
- **Merit Scholarship – M.B.B.S. Year 1979 – 1980.**
- **NSS – National Scholarship Exam 1976.**

Publications : Various Publications In National And International Journals.

Special Interest : Sexual Medicine, High Risk Pregnancy And Ultrasonography.

Sexual Disorder as a Cause of Infertility

In Two Third Of Infertility Cases Sexual Disorder Present

INTRODUCTION

Sexual function is a key component of a woman's **physical**, **psychological**, **social health** and quality of life.

It represent **3 P'S - Procreation**

- Pleasure

- Partnership that is intimate bonding

Infertility Treatment Affecting Sex

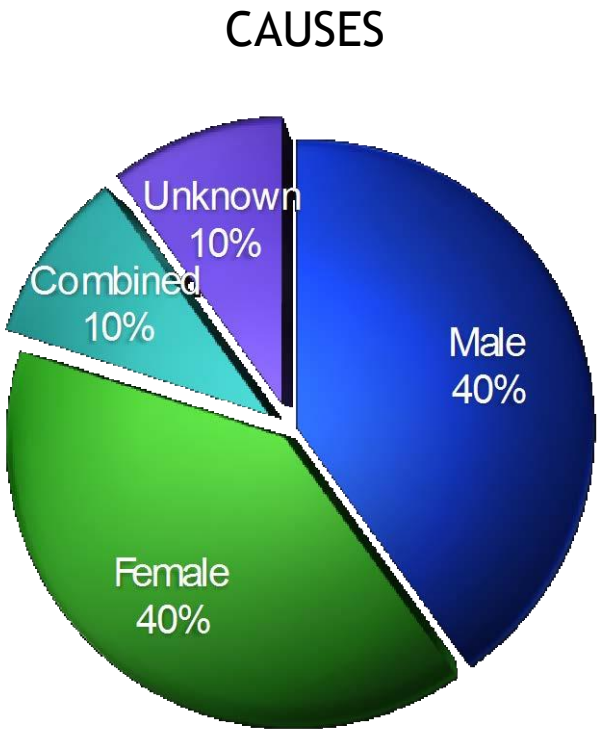
- Sexual intercourse may lose its spontaneity and erotic value because the main aim becomes conception.

- This may affect the ability for intimate sexuality and can provoke certain sexual dysfunctions.

- treatment of infertility dictates the frequency and timing of sexual intercourse; so the intimate event becomes regulated, controlled and couples sense that the medical team is symbolically present also during their most personal act.

- **period of diagnosis and treatment of infertility is the most stressful period of their life**

prevalence



Med Aspects Hum Sex. 2001;41.

- 15% of couples suffer infertility
- Out of those infertile couples, 43% women and 31% men experience sexual dysfunction
- 13% women are distressed about it

Nat Clin Pract Urol. 2007; 4:460.
Curr Psych Rep. 2000; 2:189.
JAMA. 1999; 281:537.
Obstet Gynecol. 2008; 112:970.

What's the incidence of infertility?

Middle East Fertility Society

Middle East Fertility Society Journal

www.mefsjournal.org
www.sciencedirect.com

ORIGINAL ARTICLE

Incidence and prevalence of sexual dysfunction in infertile females

Rohina S. Aggarwal *, Vineet V. Mishra, Anil F. Jasani

- **Female sexual dysfunction has a definite role in infertility**
- **Most common dysfunction observed was arousal (70%) in infertile patients.**
- **Sometimes appropriate treatment of female sexual dysfunction can preclude the use of expensive & unnecessary treatment for infertility.**
- It is the cause or the effect to be determined in the infertile patients before treating the couple.

Treatment

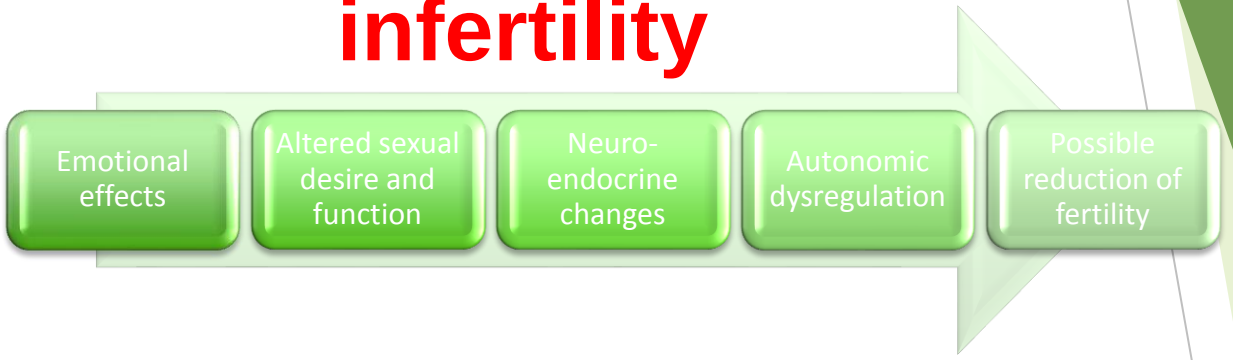
Psychosocial factors
Emotional/Cognitive

- Elevated stress level
- Performance anxiety
- Anticipation
- Waiting
- Being focused
- Disappointement

Post - Treatment

- Depression
- Confrontation with the the definitive loss
- Mourning
- Reorientation

Stress and infertility

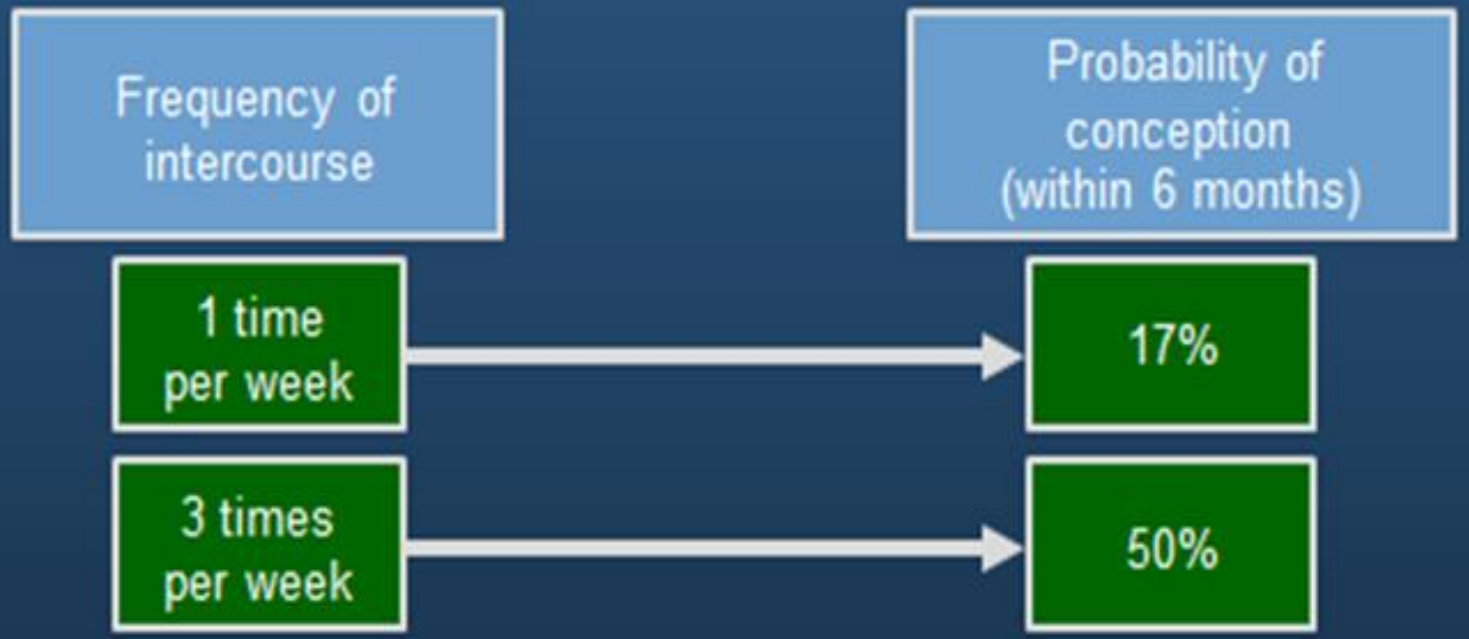


Infertility and stress

Is there a Coital factor of Infertility?

Factors Affecting Fertility: *Frequency of Intercourse*

Coital frequency is positively correlated with pregnancy rates



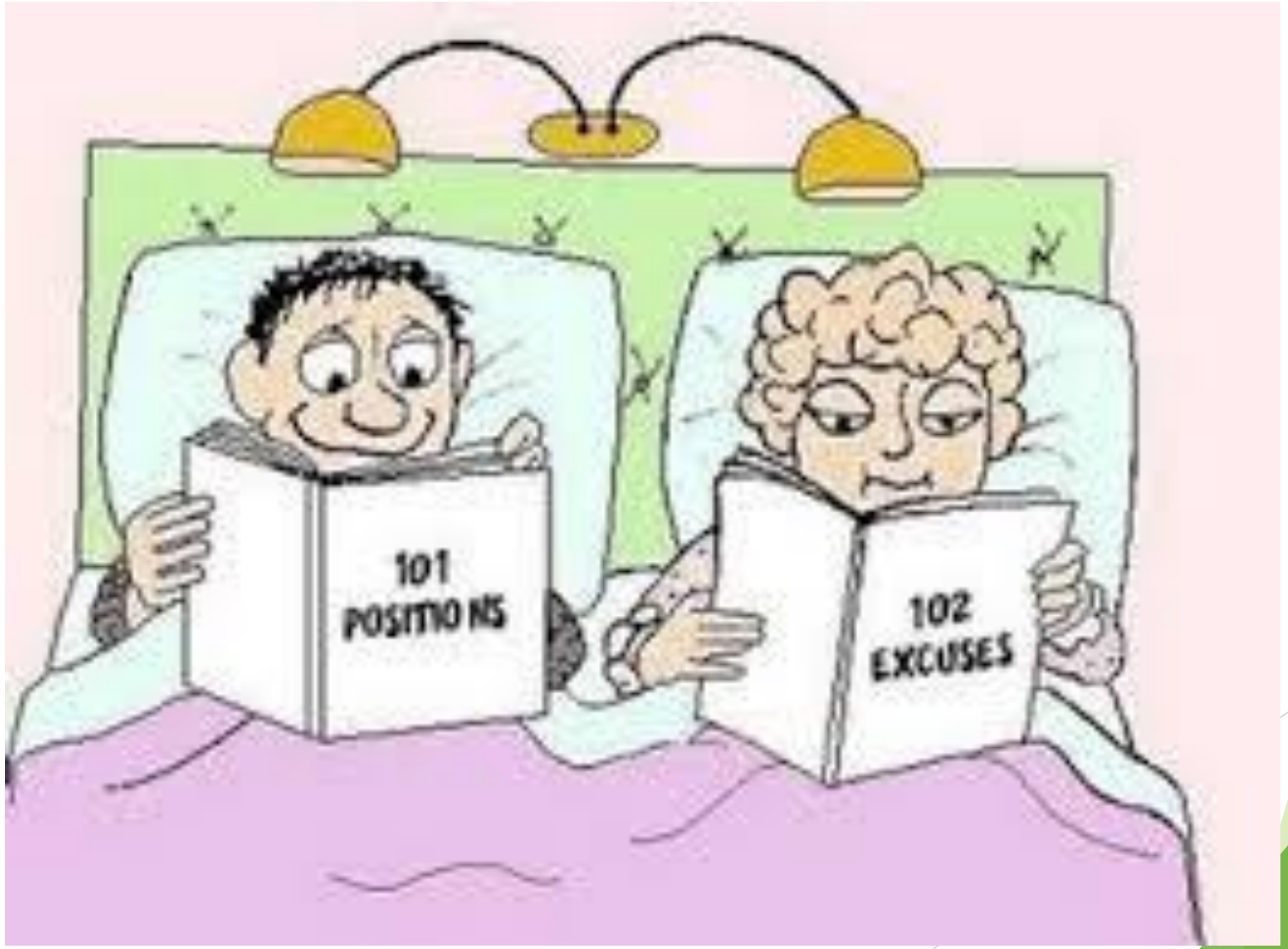
Evaluating the Coital Factor

- Ask Sexual history…in every patient.
- Are they having sex?
- Frequency of coitus?
- Is full penetration possible?
- Does he ejaculate inside?
- Douching / passing urine after coitus?
- Any issues with sex ?

HOW SEXUAL DYSFUNCTION IS A CULPRIT IN INFERTILITY ??

- There are mainly two sexual disorder which cause Infertility in women -
- **FSIAD** – Female Sexual Interest and Arousal Disorder
- **GPP/PD** – Genito Pelvic Pain / Penetration Disorder
- There is **reciprocal relationship** between Infertility and Sexual Disorder.

FEMALE SEXUAL INTEREST AND AROUSAL DISORDER



Diagnostic & statistical Manual (DSM) – 5 – 2015

Female FSIAD - 'lack of, or significantly reduced, sexual interest/arousal', manifesting as at least three of the following symptoms:

- ➢ no or little interest in sexual activity.
- ➢ no or few sexual thoughts,
- ➢ no or few attempts to initiate sexual activity or respond to partner's initiation.
- ➢ no or little sexual pleasure/excitement in 75–100% of experiences
- ➢ no or little sexual interest in internal or external erotic stimuli.
- ➢ no or few genital / non-genital sensations in 75–100% of experiences.
- ➢ For both diagnoses, symptoms must persist for at least six months.

CAUSES

Contributory factors to low sexual desire are **hormonal**, **neurobiological**, and **psychosocial factors.**

1. Ageing
2. Medical comorbidities
3. Psychological & personality- Negativity, lack of sexual autonomy, absence of erotic thoughts, low body image , relationships , past experiences
4. Hormonal- POF, Female Androgen Deficiency Syndrome.
5. Drugs- Antidepressant, Antihypertensive SSRI.
6. Gynecological interventions – Episiotomy, previous vaginal surgery.
7. Pelvic Cancers surgery, chemotherapy & radiotherapy

DIAGNOSIS

- History Make The Patient Comfortable And Avoid Embarrassment
- Ensure Privacy
- Assure Confidentiality
- Non Judgmental
- Allow Sufficient Time
- Social history – Relationship, substance abuse, sexual abuse.
- Sexual History -Interview of both partners, separately & together
- Medication , Drug Abuse, Alcohol
- Past medical history
- General, Systemic &Mental State Examination.
- Pelvic examination

Sexual History--Asking the Right Questions

- The following questions should be asked during the taking of sexual history.
- Initiation – who initiates? Is this her preference?
- Frequency of coitus – How does she feel about the frequency?
- Is the type and amount of genital stimulation adequate for her?
- Is lubrication adequate and satisfactory for her before intercourse?
- Length of time of intercourse – Is it too long? Does it become painful?
- Ability to achieve orgasm – Difficult? Easy? Distressed by no orgasm ?
- Does she experience any pain? If so, when? Before, during or after intercourse
- Distractions, stress and fatigue.
- Fore-play, masturbational practices
- Your partner's sexual problems

Screening Tools

➢ Decreased Sexual Desire Screener – 5 Question instrument, self rated .

Female Sexual Function Index – 19 items, 6 domains which include desire, arousal, lubrication, pain, orgasm and satisfaction.

➢ Brief HASDD Screener

➢ PROMIS Sexual function and satisfaction brief profile.

➢ the Fertility Problem Inventor

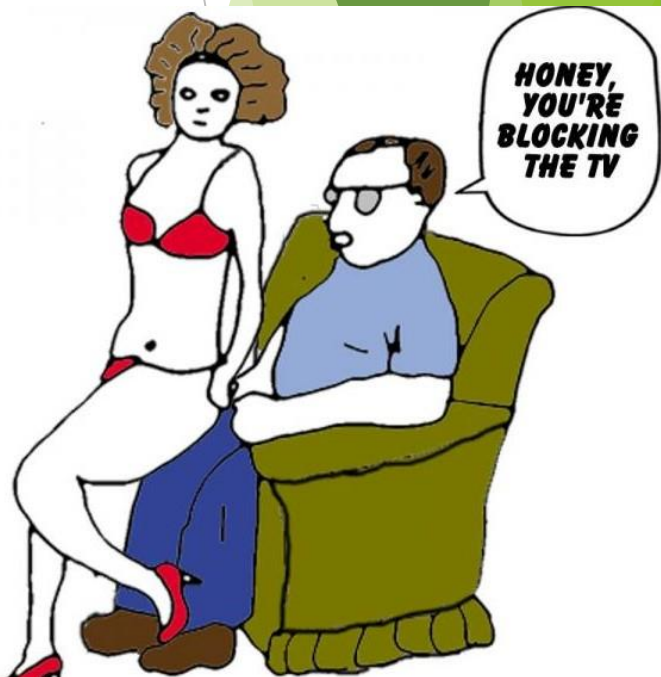
➢ The Golombok Rust Inventory of SexualSatisfaction (**GRISS**) can be utilised.

Investigations

- CBC and Sugar,Urine
- LFT, RFT
- Hamonal Profile –
  - Thyroid & prolactin
  - Testosterone level
  - Estrogen level & Progesterone
  - FSH & LH
  - Rule out – POF, PCOS ,
  - Other Endocrine Problem.

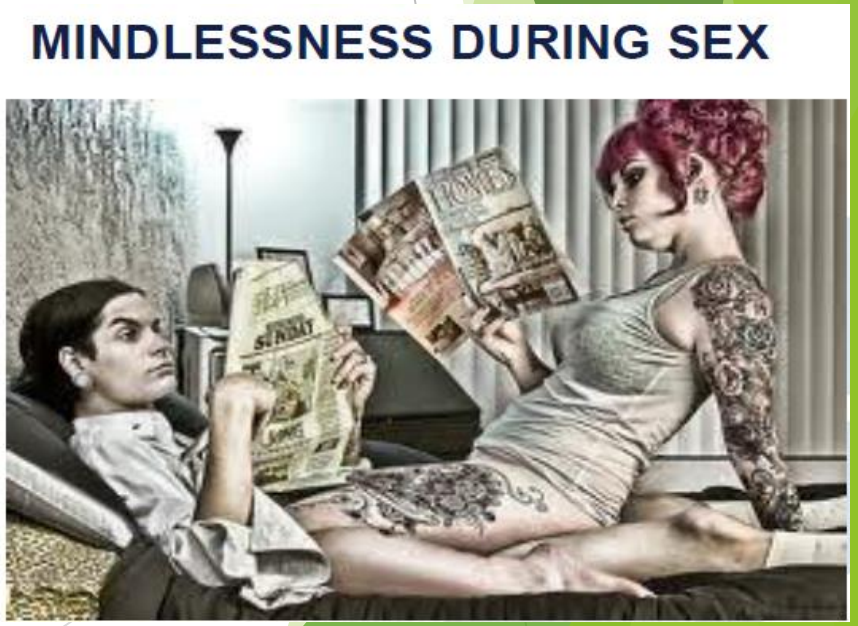
Non – Pharmacological Management

- Lifestyle changes could also relieve stress and help improve a woman's libido. These include:
- Exercising regularly.
- Setting aside time for intimacy.
- Sexual experimentation (such as different positions, role-playing, or sex toys).
- Practicing stress-relieving techniques, such as mindfulness-based interventions, Yoga, Meditation.



Psychotherapy is a recognized treatment strategy for HSDD, typically focused on modifying thoughts, beliefs, behaviors, emotions, and relationship issues /behaviors that interfere with desire.

- **PLISSIT model (Permission, Limited Information, Specific Suggestions, and Intensive Therapy)**
- **ALLOW- ask/ legitimize/ limitations/ open up/ work together**
- **MEBES –mind/ emotions/ body energy/ spirit**



SENSATE FOCUS

- Introduced by the **Masters and Johnson team**. Series of graded touching exercises to reduce anxiety & improve intimacy.
- It works by refocusing the participants on their own sensory perceptions and sensuality.
- No focus on goal-oriented behavior and genitals or penetrative sex.
- This changes sexual behavior by focusing on pleasure and not on sexual form and planned sexual activity and self-exploration instead of avoidance of sexual activity.
- Reduces performance anxiety.
- Increases awareness of pleasurable sensation.

Pharmacotherapy of sexual problems

Flibanserin

FDA-approved agent for generalized acquired hypoactive sexual desire in premenopausal women

Dose -100 mg once daily at bedtime. Side effect - Severe hypotension and syncope

Contraindications - Alcohol use
Hepatic impairment

Buspirone,

➢a serotonin 1A partial agonist, is approved as an anxiolytic for the management of generalized anxiety disorder or the short-term relief of symptoms of anxiety, and it is used as an off-label treatment for HSDD

➢5 mg BD

Bremelanotide

- **Bremelanotide (Vyleesi)**- a melanocortin- 4 receptor agonist; originally studied for sunless tanning, was noted to increase sexual arousal and desire. Bremelanotide inj, tab and nasal spray. US FDA Approved
- 1.75 mgs Sc injection for premenopausal women; once in 24 hrs; Not more than 8 dose per month; 45 minutes before activity.
- Increase blood pressure
- If doesn't work, stop after 8 weeks

Bupropion

- An anti depressant Off – label treatment for HSDD those sustain release tablet 50-400mg OD

Testosterone

- Transdermal testosterone therapy using the 300-mcg/d patch has been consistently reported in multiple studies to be effective for the treatment of HSDD.
- Testosterone gel 1% w/w- 3-6 mth
- Maximum duration of therapy is generally from 3 to 12 months.
- The long-terms of testosterone theraphy can not be assured.
- Testosterone has a positive effect on sexual response, sexual satisfaction and orgasm.

Side effects of Testosterone

- Cosmetic- hirsutism and acne, usually mild
- Irreversible virilizing changes (eg, voice deepening, clitoromegaly) are rare, occur only with excessive dosing.
- Most androgens are aromatized to estrogens → on breast, endometrium and cardiovascular system.

Case 1

- 27 yrs Old Woman
- Married – 3 yrs
- Primary Infertility
- Trying to get pregnancy
- Menstrual History – Regular Cycle, pain less
- Clinical Examination – Normal
- P/v – Normal & Investigation - Normal
- Sexual History – Pt said having intercourse weekly twice.

- Woman C/o they could not perform sex on periovulatory period and husband having ED during follicular study period.
- Woman also C/o of severe pain, discomfort and lack of lubrication during periovulatory period

When do you advice sex in infertile couples?

Peri-Ovulatory Sex :Intercourse just before ovulation maximises chance of conception

Ovum life expectancy is 1-2 days

Sperm survive about 5 days in female genital tract

- In men Performance anxiety ,Temporary ED, Sex become obligatory, repetitive and routine.
- Temporary Anejaculation
- Ejaculation issues , sexual avoidance or even aversion to sex
- In women
- Loss of Libido around ovulation
- Lack of arousal
- Lack of lubrication

Male sexual dysfunction

- During infertility , sexual intercourse becomes obligatory, repetitive and routine
- Few emotional rewards and little excitement
- Development of performance anxiety , sexual avoidance or even aversion to sex
- Complain of feeling like “stud service”

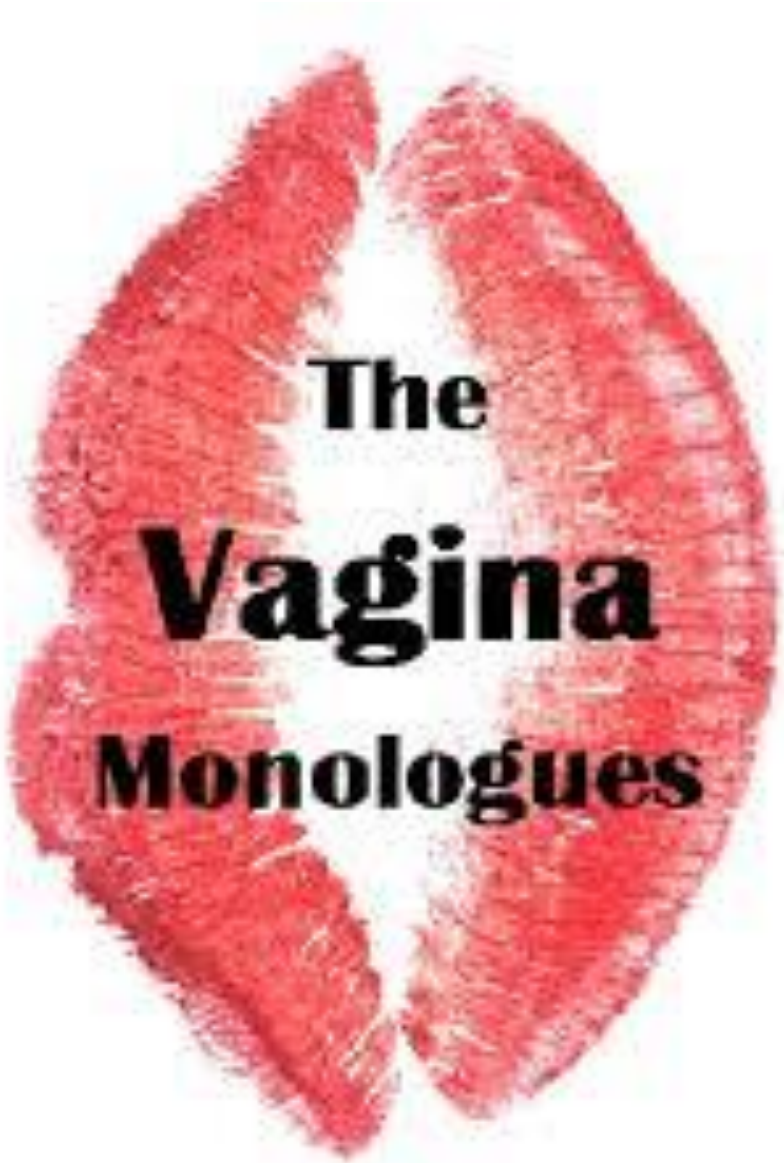
Tips for Infertile Couples on Keeping Sex Enjoyable

- Renew commitment to each other
- Devote time to activities and interests you as a couple really enjoy
- Try sexual ‘play’
- Be creative and inventive
- Take your time
- Try erotic books , board games, videos , etc.

Genito-Pelvic Pain/Penetration Disorders – GPP/PD

Includes

- Vaginismus
- Dyspareunia
- Vestibulodynia


The
Vagina
Monologues

VAGINISMUS

(International Definitions Committee 2005)

Vaginismus indicates the persistent or recurrent difficulties of the woman to allow vaginal entry of a penis, a finger, and/or any object, despite the woman's expressed wish to do so.

Its **INVOLUNTARY** and **UNCONTROLLED**

Incidence

Vaginismus affects approximately **0.6– 7%** of females worldwide

In clinical settings, the incidence may be as high as **5–17%**

Including the Partner in Treatment

5–45% of men have reported ERECTION DYSFUNCTION (ED) or PREMATURE EJACULATION (PE)

European Journal of Obstetrics & Gynecology and Reproductive Biology
Volume 276, September 2022, Pages 134-138

Full length article

Obstetric outcomes of 297 women treated for vaginismus

Ebru Zulfikaroglu [a], Selen Yaman [b]

Conclusion ---

- Vaginismus patients should be treated prior to being deemed infertile.
- Vaginal delivery after vaginismus treatment seems to be safe, with no increased perineal morbidity or vaginismus recurrence.

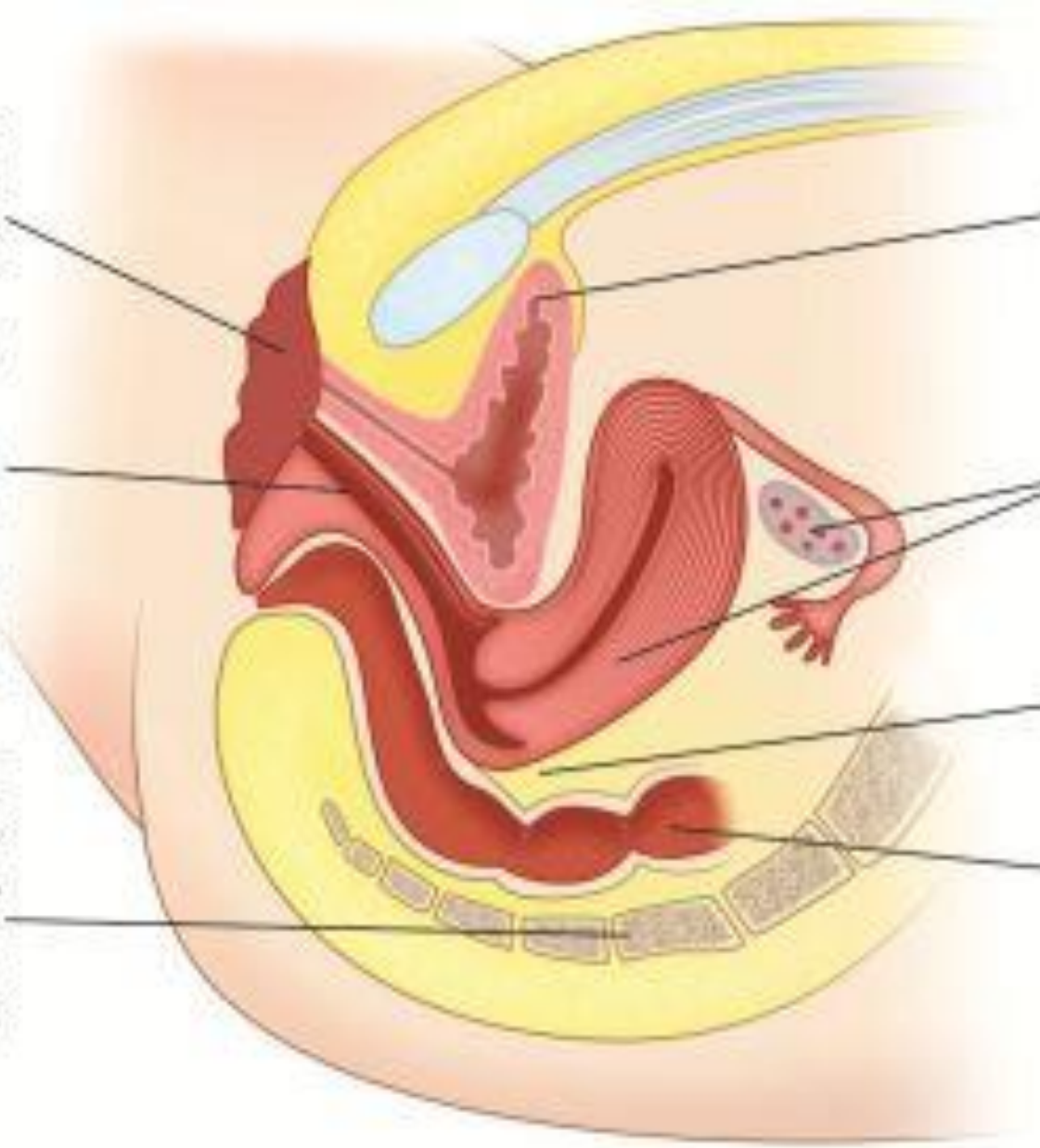
Etio–Pathology
Non-Organic Causes

- Vaginismus - body's expression of the psychological fear of penetration, shares features of:
  - Psychosomatic disorder
  - Phobia
  - Conversion disorder.
- functions much the same as any reflex to avoid injury.
- Secondary to fear and anxiety, may cause a defensive contraction of the perivaginal muscles
- Women with Vaginismus found to have a Negative Perspective Over Sexual Activity.

Organic Causes

- Lesions Of The External Genitalia – Vaginismus As A Result Of Natural Protective Reflex To Pain. Hymenal Abnormalities
- STD's, Genital Herpes, Warts, Thrush
- Obstetric Trauma Or Mechanical Injury Induced Painful Scars
- Endometriosis
- Pudendal Neuralgia
- Pelvic Inflammatory Disease
- Co-Morbidities - Diabetes, Multiple Sclerosis, Or Spinal Cord Injury - May Result In Poor Lubrication, Insufficient Vaginal Expansion.
- Pelvic Floor Muscles Are Indirectly Innervated By **The Limbic System** And Are Thus Potentially Reactive To **Emotional States**

Causes of GPP/PD



Vulval causes: Infections, lichen sclerosus, previous perineal surgery or trauma, rigid hymen

Vaginal causes: Septum, vaginitis, inadequate lubrication, atrophy, vaginismus, prolapse

Musculoskeletal causes: Extreme obesity, bilateral adductor deformity, prolapsed disk

Urologic causes: Urethritis, caruncle, cystitis, chronic UTI, urethral syndrome

Pelvic causes: PID, ovarian cyst, ectopic pregnancy, prolapsed ovary, endometrosis, fibroid, previous surgery, adenomyosis

Gastrointestinal causes: IBD, diverticulitis, proctitis, piles, etc.

Clinical Presentation

➢ Most Of These Cases Present As **Unconsummated Marriag**

➢While Evaluating fertility Concerns

Effects

➢ Significant **PERSONAL DISTRESS** to Patient And Partner

➢ Predisposing Factor For **Anxiety Disorders**

➢ **DIVORCE** Is A Common Outcome For Many Of These Patients

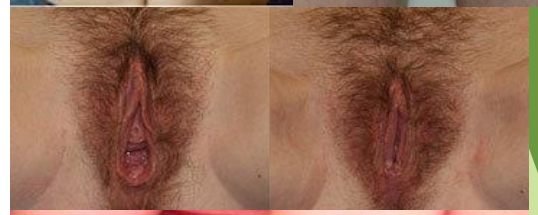
➢ **Male Partner Developing Sexual Dysfunction** Like Erectile Dysfunction, Premature Ejaculation

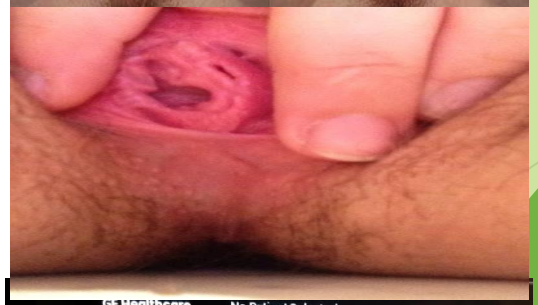
Case 2

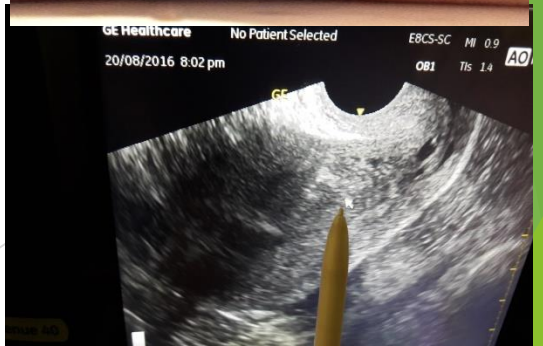
- 27years Mrs.K married 10months not able to have sex,
- She is averse to sex, on suggestion of gynaec examination, she was unwilling, keeping thighs adducted,

Physical presentations of the female partner that might prevent intercourse

- A woman's hymen may be a barrier to intercourse. Some women have a very thick hymen.
- While most of these conditions can be addressed with counseling and physical therapy, including use of vaginal dilators, in most cases a septate hymen needs to be repaired surgically.
- Male ext genitalia examination

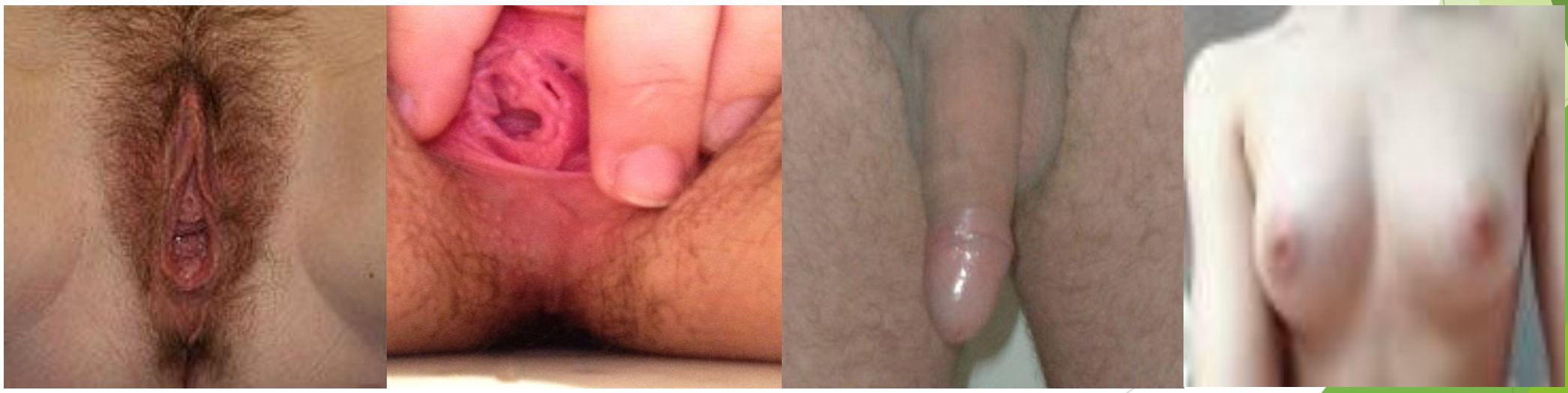






Lack of anatomical knowledge

- **Frequently, lack of knowledge about sexual anatomy and physiology may contribute to a situation whereby attempting intercourse feels awkward and un-natural.**
- **Often all that is needed is some basic anatomical information and positioning advice**



foreplay

A couple may report that the woman's vagina feels dry and excess friction prevents intercourse. In this case, the couple may be advised to ensure that intercourse take place when the woman is sufficiently aroused after plenty of exciting foreplay.

Over the counter lubricants or oils may be very helpful.

Male factors

- erectile dysfunction was found to be the top ranking cause accounting for 79.37%
- followed by premature ejaculation 12.01%,
- Lack of sexual desire 3.92%,
- homosexual orientation 2.79%,
- sexual aversion disorder 1.31%

Psychology Research and Behavior Management

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ORIGINAL RESEARCH

Sexual Function, Self-Esteem, and Quality of Life in Infertile Couples Undergoing in vitro Fertilization: A Dyadic Approach

Results: According to the APIMeM analysis, sexual function of individuals with infertility was directly and indirectly connected with their QoL, mediated through their self-esteem. The women's sexual function was found to be positively associated with their partner's QoL, with the women's self-esteem acting as a complete mediator. The men's sexual function was found to be positively associated with partner's QoL, with the men's self-esteem acting as a complete mediator.

Conclusion: The findings suggest that boosting participants' self-esteem can help them and their partners have a better QoL. Also, therapies aimed at improving and sustaining self-esteem of couples with infertility could help mitigate the negative influence of low sexual function on their QoL.

DYSPAREUNIA

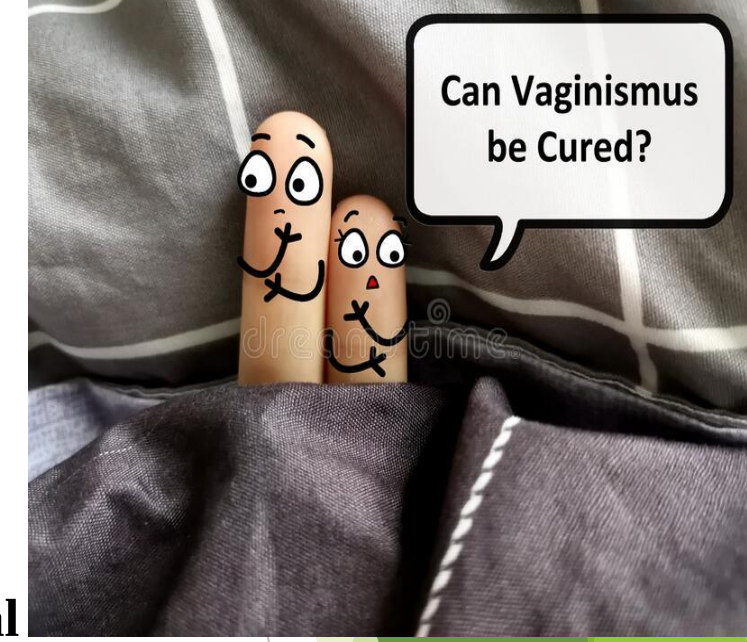
- The Diagnostic and Statistical Manual of Mental Disorders, Vth edition defines Dyspareunia as a Genito-pelvic pain disorder, a subcategory of sexual dysfunction.
- The pain must be **persistent or recurrent,** and cause marked distress or interpersonal difficulty.
- **Primary Dyspareunia:** starts from the first intercourse.
- **Secondary Dyspareunia:** occurs after some time of pain free intercourse.

TYPES

SUPERFICIAL	DEEP
➢ Vulvodynia ➢ Vulvar Vestibulits ➢ Vaginitis ➢ Urethritis	➢ Endometriosis ➢ Pelvic Adhesions ➢ Adnexal Pathology ➢ Retroverted Uterus ➢ Chronic cervicitis, PID, Endometritis ➢ Pelvic Congestion

BOTH:- Inadequate Lubrication
Vaginal Atrophy
Postpartum

TREATMENT



- Assure That Treatment Options Are Available
- Address The Medical Condition to patient / couple
- **Sex Education** And Counselling
- Lubricants, Anaesthetic Creams
- Pelvic Floor Exercises
- Systematic Vaginal Desensitisation - Use Of **Dilators, Fingers, special instruments**
- Pharmacotherapy – Anxiolytics
- Biofeedback
- Psychotherapy, Hypnotherapy
- Cognitive Behavioural Therapy
- Sex Therapy – **Sensate Focus**
- Recently use of **BOTOX, Cosmatic Rejuvenation, PRP etc**

CONCLUSION

Treatment of SD save time, efforts & money on investigations & treatments of infertility.

FSIAD --is a highly prevalent but often underdiagnosed condition that can be effectively managed by appropriate assessment and individualized treatment.

GPP/PD– can be treated with newer modalities and psychotherapy.

FERTILITY TREATMENT – should include - Sexual Therapy

- Psychotherapy

to improve overall Quality Of Life of the couple

The moment you are ready to quit is usually the moment right before miracles happen, don’t give up.

Thank You