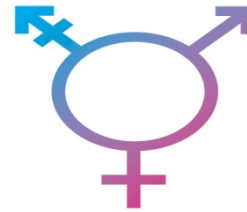


# Gender Dysphoria

Dr Bharat R Shah M.D.



SEX:

M ☐

F ☐



SEX:

M ☐

F ☐



SEX:

MY GENDER  
DOESN'T  
FIT IN YOUR  
BOXES



1

2

3

4

5

6

7

8

9

10

11

12



Barbie

Where on a spectrum might your  
gender identity be?

G.I. Joe



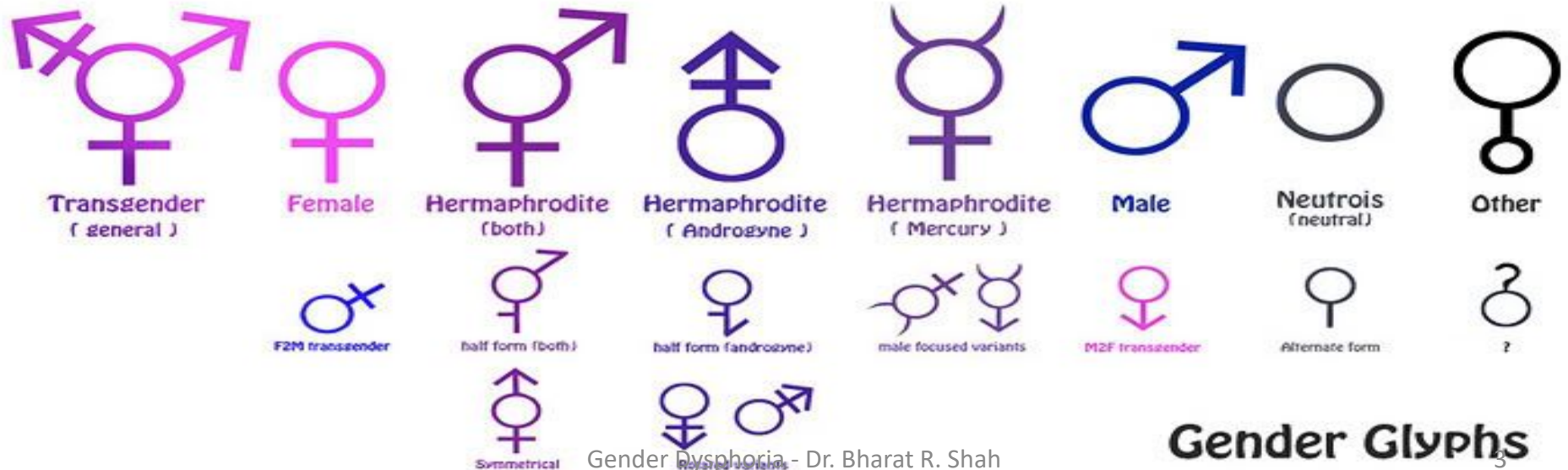
Times of India, Mumbai, 17 Nov 2016

# On Tinder, you now have 40 gender options

Liam Stack

Tinder, the popular dating app, has updated its op-

with reports of harassment of transgender people. The company previously allowed users to pick from one of two genders to pick from one of two genders but will



## Gender Glyphs

# LAVERNE COX



# Terms

- Sex – The genetic, hormonal and anatomical characteristics that determine if one is a biological male or a biological female.
- Gender – The psychological and cultural characteristics associated with biological sex.
- Gender role – Attitudes, behaviors and personality traits that a society, in a given cultural and historical context, associates with the male or female social role.
- Gender identity – Perception of one's self as male or female. In children, gender identity is related to the ability to reliably answer the question: "Are you a boy or a girl?"

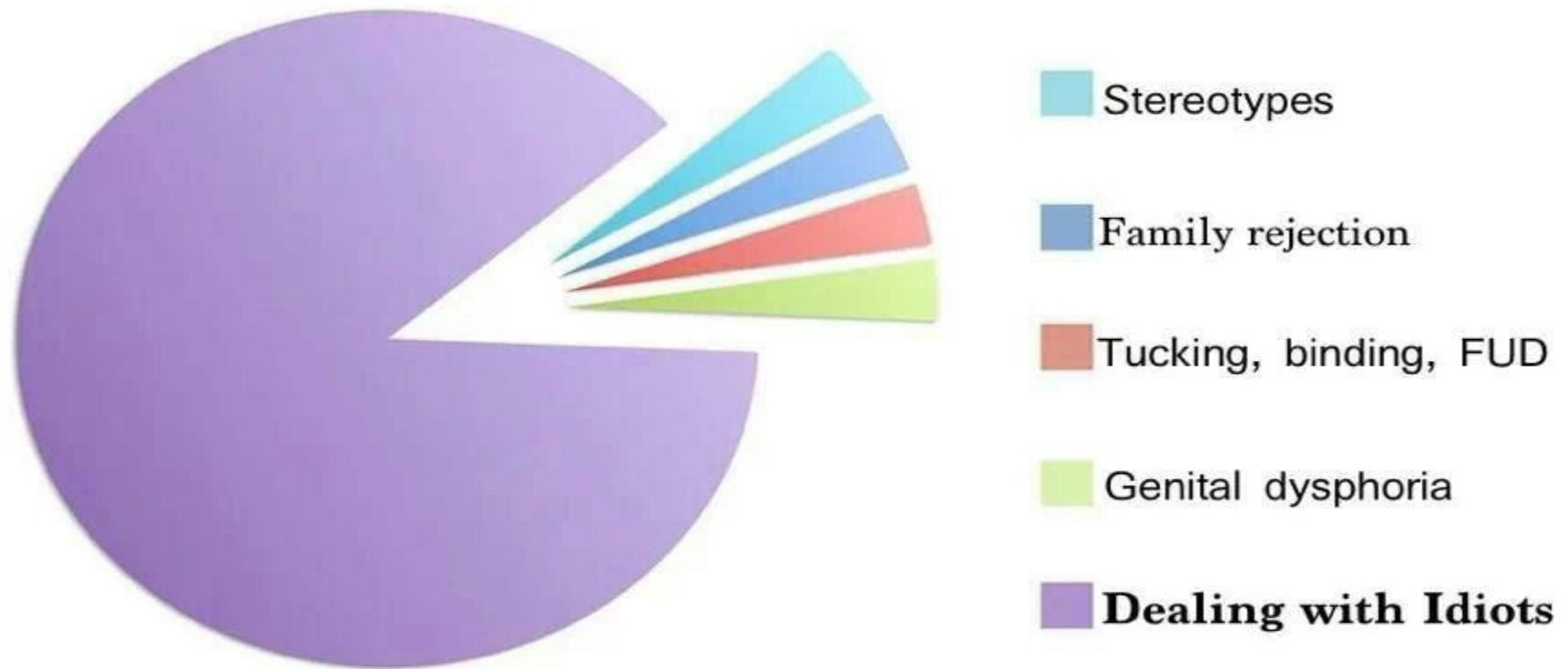
# More “Problematic” Terms

- Transgendered
- Transsexual
- Transman
- Transwoman
- Pangendered
- Cross dresser
- Drag King
- Gender Nonconforming People
- T-girl / T-boy
- Transvestite
- Agendered
- Bigendered
- Hermaphrodite
- Intersex
- Drag Queen

# Communication with Transgender

- You can't tell someone is trans by looking.
- Don't assume anything about their sexual orientation.
- If you don't know what pronoun to use, ask them. (And if you make a mistake, just apologize.)
- Don't ask what their "real name" or "birth name" is.
- Avoid backhanded compliments like "You look just like a real woman."
- Don't ask whether they plan to take hormones or have surgery.

# The hardest part about being transgender:



# Gender Diagnosis

## History of Gender Dx in the DSM

- DSM-I (1952) none
- DSM-II (1968) Sexual Deviations: Transvestitism
- DSM-III (1980) Psychosexual Disorders: Transsexualism
- Gender identity disorder of childhood
- DSM-III-R (1987) Disorders usually first evident in infancy, childhood or adolescence: Transsexualism, GID of childhood, GIDAANT
- DSM-IV (1994) Sexual and gender identity disorders: GIDAA, GIDC, Transvestic Fetishism
- DSM-IV-TR (2000) same
- DSM-5 (2013) Gender dysphoria: GDAA, GDC; Sexual Disorders: Transvestic Disorders

## History of Gender Dx in the ICD

International Classification of Diseases, published by the WHO, contains both mental and physical diagnostic categories

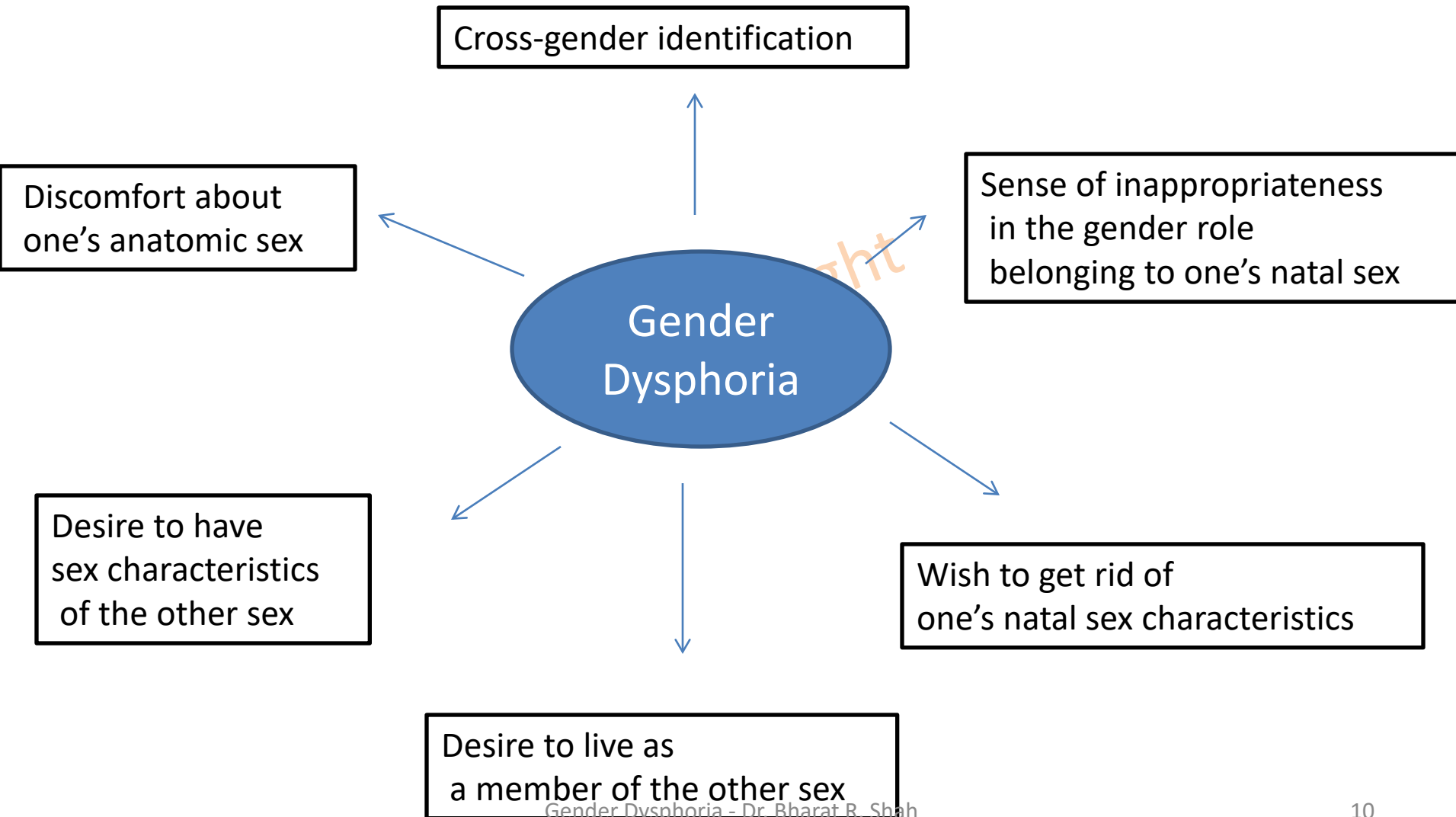
- ICD-6 (1948) none
- ICD-7 (1955) none
- ICD-8 (1965) Sexual deviations: Transvestitism
- ICD-9 (1975) Sexual deviations: Trans-sexualism, TV
- ICD-10 (1990) Gender identity disorders: TS, Dual Role TV, GIDC, Other GID, GID Unspecified
- ICD-11 (2015) **We need codings with less harm and more clinical utility!**

## The Issues of Gender Diagnosis

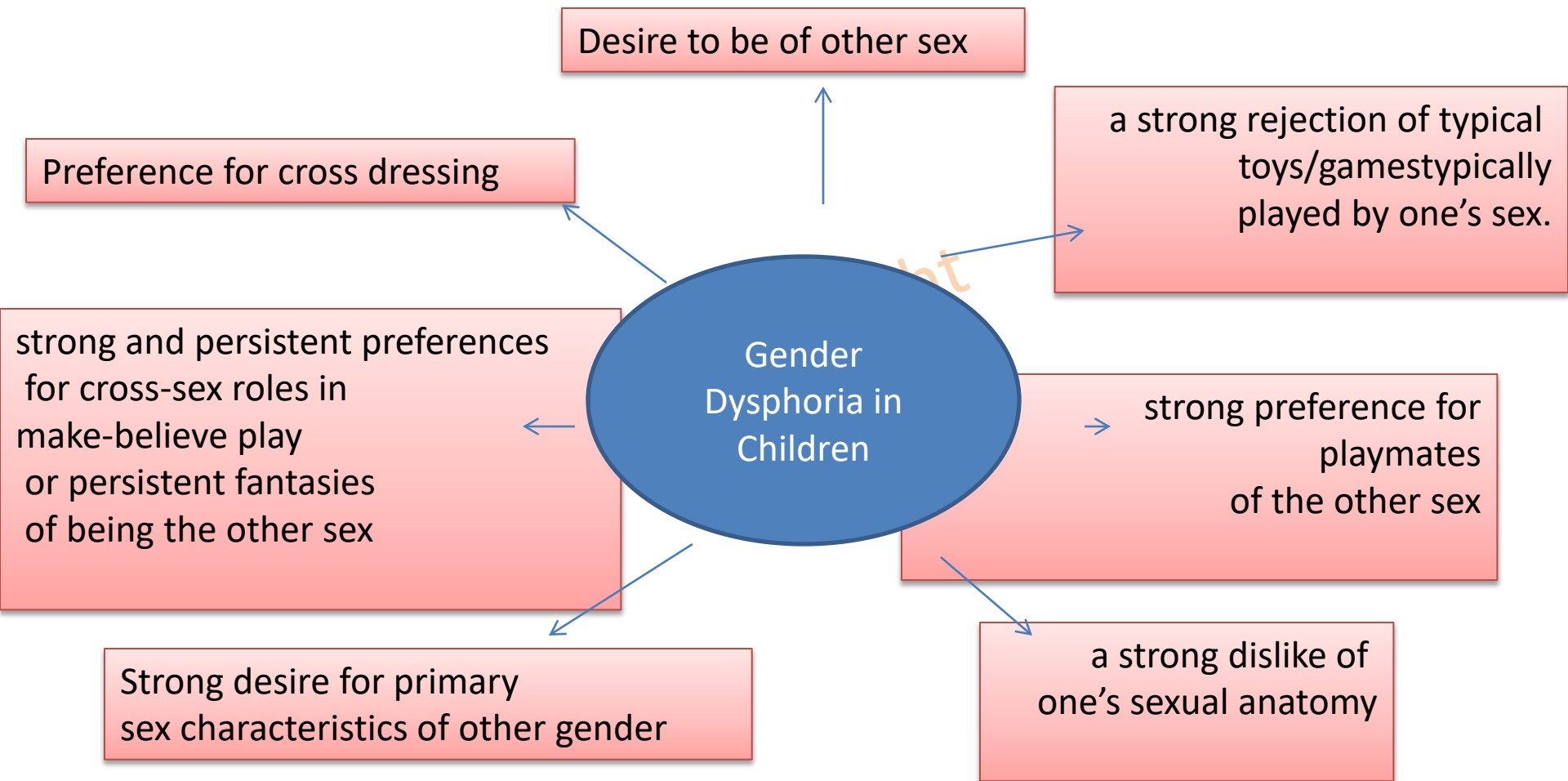
1. Social Stigma that equates nonconformity to assigned birth sex as mental defectiveness and sexual deviance.

2. Access vs. barriers to medical transition care, for those who need it

# Core Features



# DSM 5 , GD in Children



# DSM 5

- At least 6 months duration
- Is associated with significant distress and impairment in important areas of functioning
- Specifier: with a disorder of sex (congenital androgenital hyperplasia, androgen insensitivity syndrome)
- Specifier in Adolescents and Adults: Posttransition- full time living in desired gender with/without legalization, or at least one cross sex medical or treatment regimen

DSM IV TR : Gender Identity Disorder;  
Specifier (for sexually mature individual)-  
Sexually attracted to males/ females/ both/ neither

# What forms gender identity?

- Social factors
  - Genetic factors
  - Prenatal hormone exposure
  - Childhood experiences
  - Socialisation
- © Copyright
- Fundamentally the Nature(prenatal hormonal organization) Vs Nurture( postnatal life events) question is an open one

# Follow up

A longitudinal study on gender dysphoric females referred to a clinic between 2 and 3 years of age.

Only 12% were still gender dysphoric at age 18.

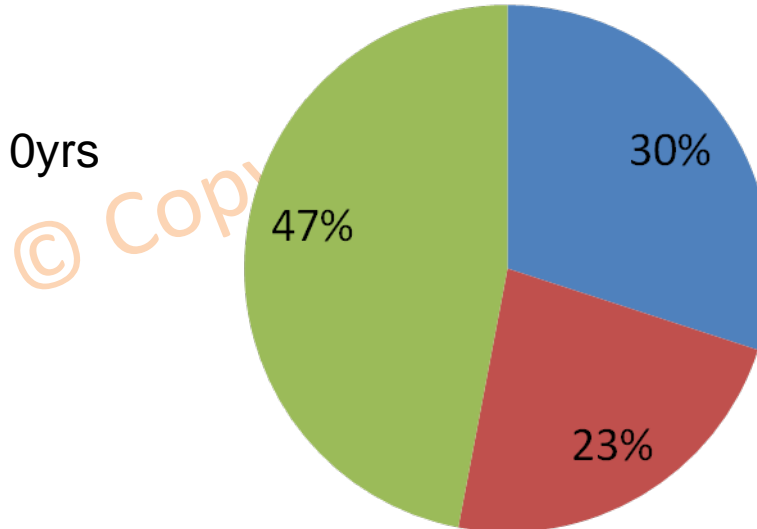
- Drummond KD et al, Dev Psychol. 2008 Jan;44(1)A follow-up study of girls with gender identity disorder

# Follow up

## outcome

■ did not respond ■ persistence ■ no more dysphoric

77 (m 59 , f 18) children  
evaluated after more than 10yrs



Wallen MS, J Am Acad Child Adolesc Psychiatry. 2008 Dec;47(12):1413-23.  
Psychosexual outcome of gender-dysphoric children.

# GD in children

- Persistence in males : 3-30%, in females: 12-50%
- Persistence is co-related to severity ascertained at the time of childhood assessment.
- Is it related to social environment/ treatment approach?
- Sexual attraction is usually for same sex, even in non persistence group. M-60 to100%, F-30 to50%

# GD in AA

- Early onset- which starts in childhood and persists
- Late onset

© Copyright

# Problems

- Isolation from peer groups
- Teasing and harassment
- School refusal
- Stigmatization
- Discrimination
- Victimization
- Negative self concept
- Unemployment
- Anxiety, Depression
- Suicidal ideas and behavior

# Differential Diagnosis

- Non conformity to gender roles
- Transvestism, Transvestic disorder
- Body Dysmorphic Disorder
- Schizophrenia and other psychotic disorders

Intersex condition	Description
<u>Congenital virilizing adrenal hyperplasia</u>	<u>Sex karyotype: XX.</u> Most common cause of sexual ambiguity, overproduction of adrenal androgens and virilization of the female fetus, androgenization can range from mild clitoral enlargement to external genitals that look like a normal scrotal sac, testes, and a penis, but hidden behind these external genitals are a vagina and a uterus.
<u>Androgen insensitivity syndrome</u>	<u>Sex karyotype: XY.</u> Normal female look at birth and so raised as girl. Cryptorchid testes, clitoromegaly, micropenis co-exist in some. Testosterone do not respond to tissue. Minimal or absent internal sexual organs (uterus, ovary, cervix).
<u>Turner's syndrome</u>	<u>Sex karyotype: XO.</u> Children have female genitalia, are short, anomalies like shield-shaped chest and a webbed neck. Tx: exogenous estrogen to develop female secondary sex characteristics.
<u>Klinefelter's syndrome</u>	<u>Sex karyotype: XXY.</u> normal male at birth. Excessive gynecomastia may occur in adolescence. Small testes without sperm production. They are tall with reduced fertility. Higher rate of GID.
<u>5-<math>\alpha</math>-Reductase Deficiency</u>	<u>Sex karyotype: XY.</u> unable to convert testosterone to dihydrotestosterone (DHT). ambiguous genitalia at birth with some sexual anomaly. Affected person appears to be female. Children are sometimes misdiagnosed as having AIS.
<u>Pseudohermaphroditism</u>	<p>Infants born with ambiguous genitals, <u>True hermaphroditism</u>: presence of both testes and ovaries.</p> <p>Male pseudohermaphroditism: incomplete differentiation of the external genitalia even though a Y chromosome is present; testes are present but rudimentary.</p> <p>Female pseudohermaphroditism: presence of virilized genitals in person who is XX</p>

# Treatment

- The World Professional Association for Transgender Health(WPATH) -*Standards of Care for the Health of Transsexual, Transgender, and Gender Nonconforming People, 7th Version*
- **Triadic Treatment Sequence**

# Triadic Treatment Sequence

- **Stage I:** Establish a therapeutic relationship, evaluation, diagnosis, education and psychotherapy as required.
- **Stage II:** If **applicable**, referral to Physician for Hormone Replacement therapy. Also used for confirmation or rejection of GD diagnosis.
- **Stage III:** Monitor gender role transition. If applicable, make referral for Gender Reassignment Surgery after a minimum of 1 year of living full time in the preferred gender role. Post-op follow-up as necessary.

# Treatment

- Accurate diagnosis
- Identifying co morbid psychopathology,
- Counseling the patient about the range of treatment options and their implications
- Engaging in psychotherapy
- Ascertaining eligibility and readiness for hormones and surgical therapy
- Making formal recommendations to medical and surgical colleagues

# Treatment

- Persistent, well-documented gender dysphoria
- Capacity to make a fully informed decision and to consent for treatment;
- If significant medical or mental health concerns are present, they must be reasonably well-controlled
- Helping the person with Real Life Experience

# The Real Life Experience (RLE)

- ? Becoming an outdated concept
- A transperson is expected to live in their preferred gender role for a period of time before surgery
- Allows time to realise the full and sometimes unexpected consequences of gender transition and demonstrates an ability to function
- The intention is to reduce the incidence of post-treatment regret but evidence for this is lacking

# Transitioning

## The Process of Changing Gender

- Coming out to family, friends, employers
- Change of name socially and legally
- Asking others to use the appropriate pronouns
- Changing name and gender on official documents
- Adapting to changes in
  - Personal relationships
  - Sexual functioning
- Bringing outward appearance in line with internal feelings
  - Clothing, jewellery, accessories, makeup, mannerisms
  - Hormones
  - Surgery
- Changing voice's pitch
- Gender Recognition Certificate

# Before hormonal treatment

- Demonstrable knowledge of what hormones medically can and cannot do and their social benefits and risks
- A documented real life experience should be undertaken for at least three months prior to the administration of hormones  
**Or**
- a period of psychotherapy of a duration specified by the mental health professional after the initial evaluation (usually a minimum of three months) should be undertaken

# Gender Realignment Surgery

- Assessment of eligibility and readiness
- Second psychiatric opinion required
- Not all transsexual people want to *or can* proceed with genital surgery
- Not a vital aspect of gender transition

# Before Surgery

- 12 months of continuous hormonal therapy for those without a medical contraindication
- 12 months of successful continuous full time real-life experience.

# Transwomen

- Laser hair removal
- Surgical Treatments
  - Breast augmentation
  - Tracheal shave /voice surgery
  - Genital surgery
    - Orchidectomy
    - Cosmetic vulvoplasty
    - Vaginoplasty
  - Facial surgery



# Transmen

- Mastectomy
- Hysterectomy
- Vaginectomy
- Testicular implants
- Metoidioplasty
- Phalloplasty

# Cross Dressing

- Cross-dressing is the act of wearing items of clothing and other accoutrements commonly associated with the opposite sex within a particular society. *Cross-dressing* denotes an action or a behavior without attributing or implying any specific causes for that behavior
- Disguise
- Protest against norms
- Part of sex arousal/play
- Gender dysphoria
- Transvestic Disorder – DSM 5 – 6 mns hist of recurrent and intense sexual arousal from cross dressing;

Specifier: with fetishism

with autogynephilia

# Human Sexual Response Cycle

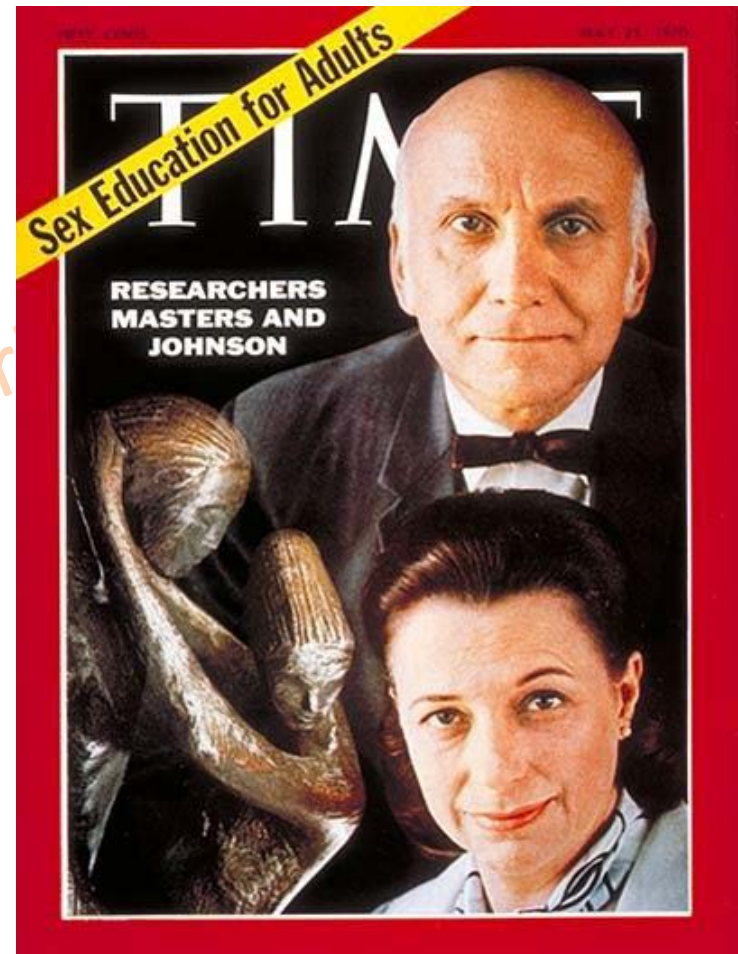
© Copyright

# Sexual disorders DNB Q's

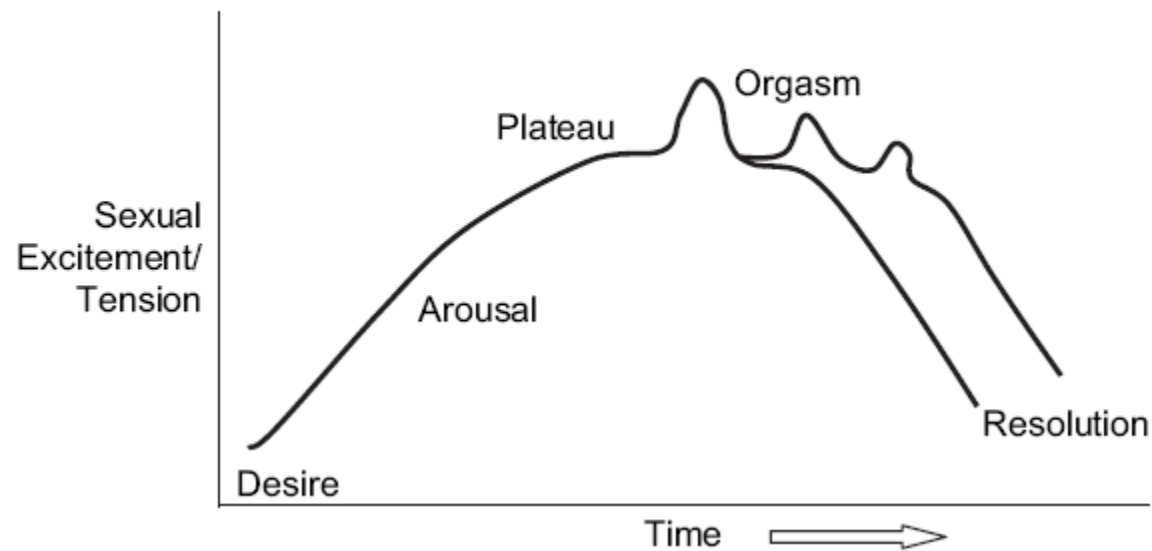
- Various stages of the **human sexual response cycle**. (June 2016, June 2015, 2013)
- Discuss the sexual **disorders associated with each stage** of the sexual response cycle. (June 2015, 2013)
- Management of **premature ejaculation**. Non pharmacological management of premature ejaculation. (June 2016, June 2015, December 2003)
- What are **gender identity disorders**? How will you manage a girl who demands sex change operation? (December 2014)
- Enumerate various **paraphilias** and write any one in detail. (2011)
- **Erectile dysfunction** and its treatment. Impotency in a male aged 40 years. (DEC-04, June 1992)
- Aetiology of **secondary sexual dysfunctions**. (JUN-96)

# Measuring sexual response

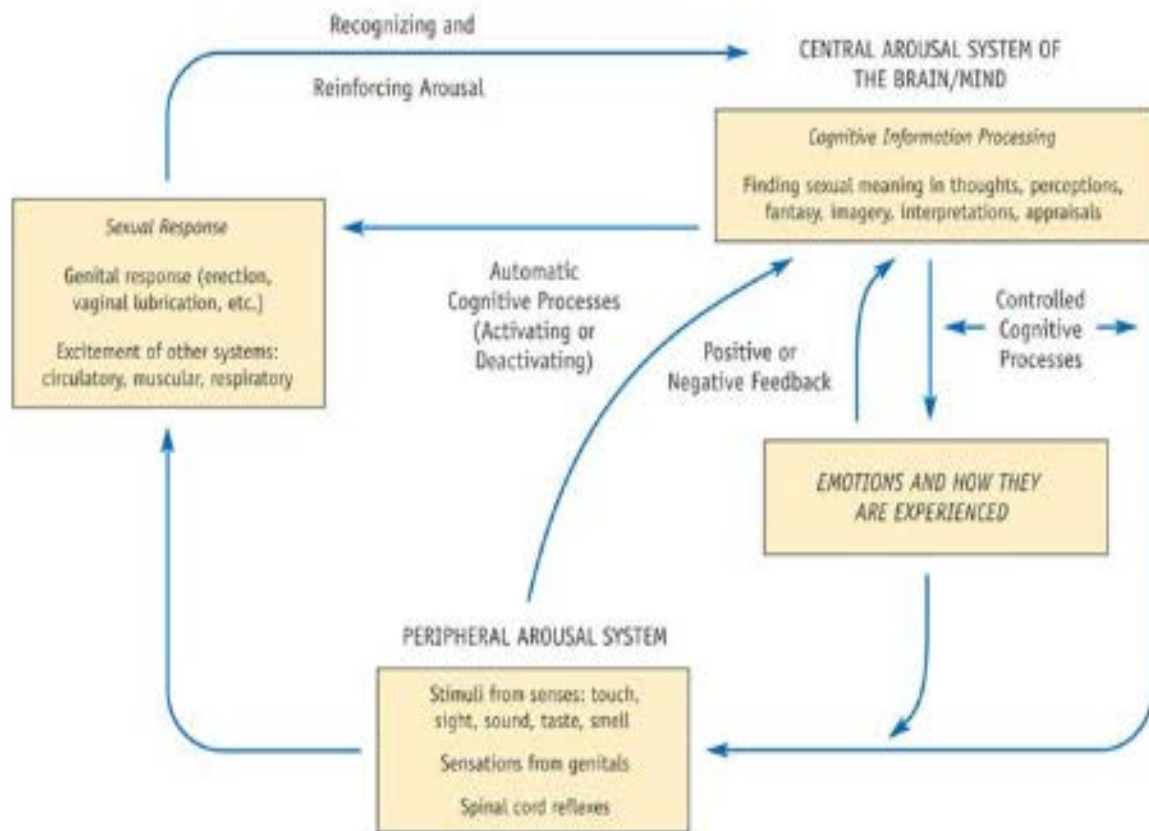
- Masters and Johnson recorded over 10,000 sexual episodes leading to orgasm. This included people engaged in masturbation, intercourse, and oral-genital sex. Many subjects were observed dozens of times in order to determine the variability in their responses.



# Masters and Johnson Model



*Masters WH, Johnson VE. Human sexual response. Boston: Little, Brown; 1966.*



Desire and Arousal controlled by excitatory and inhibitory Processes in the brain

- Sexual desire : Psychological motivation for sex, incentive to act, and appetite for sexual pleasure
- Sexual arousal : Excitation of the body as it responds to psychological and/or physical cues and stimulations

## **First phase: Excitement**

- Genital: Pelvic vaso-engorgement and vaginal lubrication
- Extra-genital: Flushing, nipple engorgement, muscle tension, changes in HR, BP & RR

## **Second phase: Plateau**

- High level of sexual excitement is maintained

## **Third phase: Orgasm**

**Last**—After one or multiple orgasms, return to the pre-stimulated state

# Kaplan's Three Stage Model

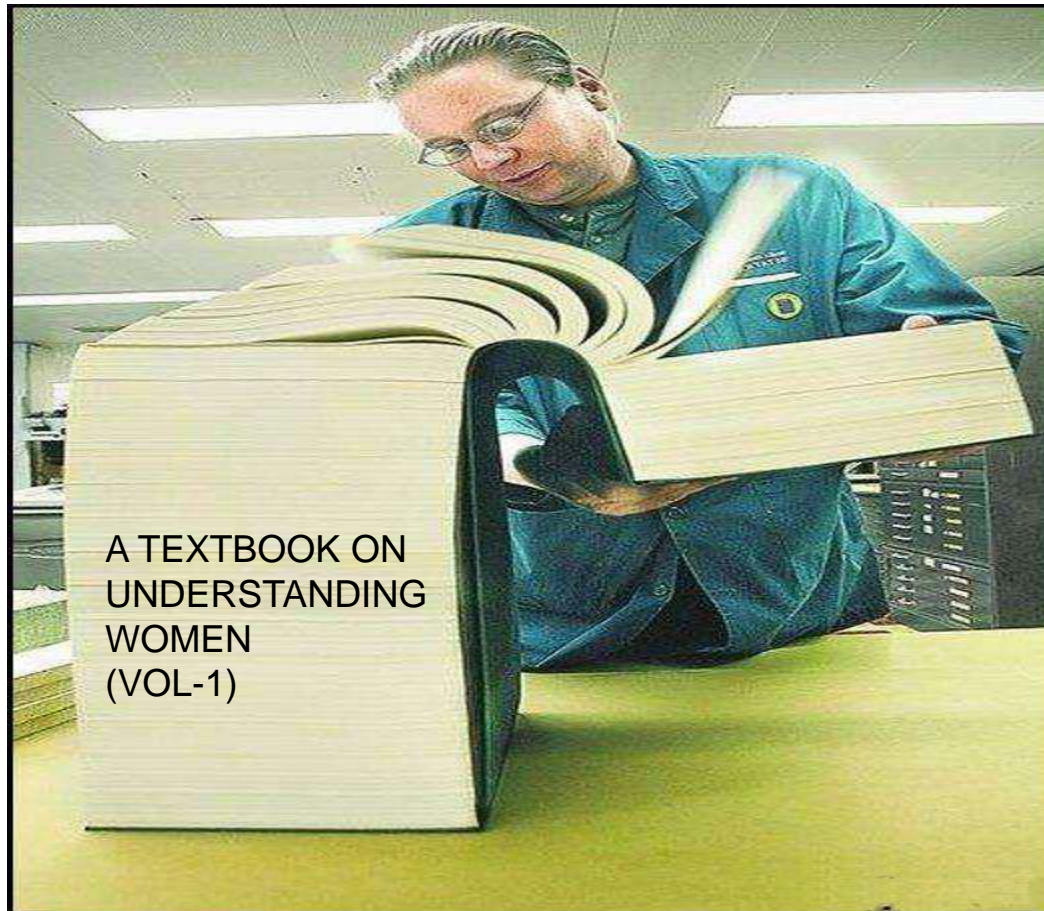
- Desire
- Excitement
- Orgasm



*Kaplan HS. Disorders of sexual desire and other new concepts and techniques in sex therapy.*  
New York: Brunner/Hazel Publications; 1979.

# Desire Phase

- Stage of sexual desire: physiologic and psychological components of sexual desire or libido
- Mediated by brain centres
- Also influenced by hormonal and psychosocial influences
- Necessary precursor to the development of adequate excitement and subsequent orgasm



A TEXTBOOK ON  
UNDERSTANDING  
WOMEN  
(VOL-1)

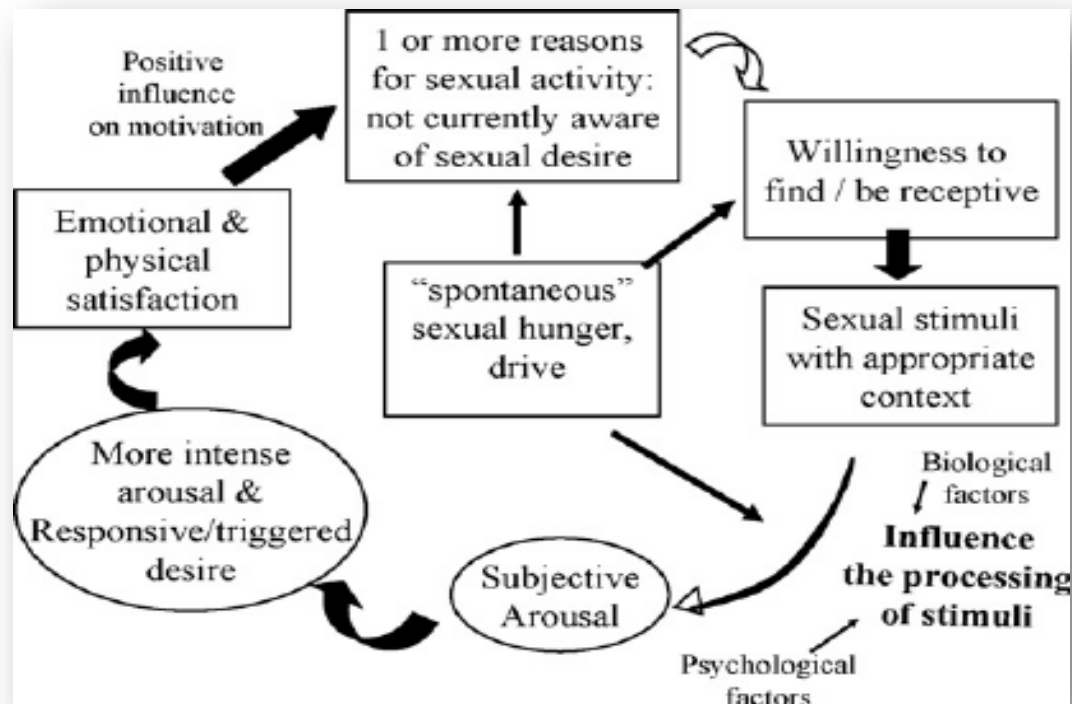
# Basson's Model of Female Sexual Responses

- Conceptualizes female sexual response as cyclic in nature
- Departs from the traditional elements
- Phases of sexual response are overlapping & non-sequential



Basson R. Women's sexual dysfunction: revised and expanded definitions.  
CMAJ 2005;172: 1327–33.

# Basson's non-linear model of FSR



Basson R. Female sexual response: the role of drugs in the management of sexual dysfunction. *Obstet Gynecol* 2001;98:350-353

# Differences in Sexual Response

Women can experience extragenital responses without the subjective perception or experience of sexual excitement or vice versa

In men, subjective excitement and increases in penile engorgement are highly correlated

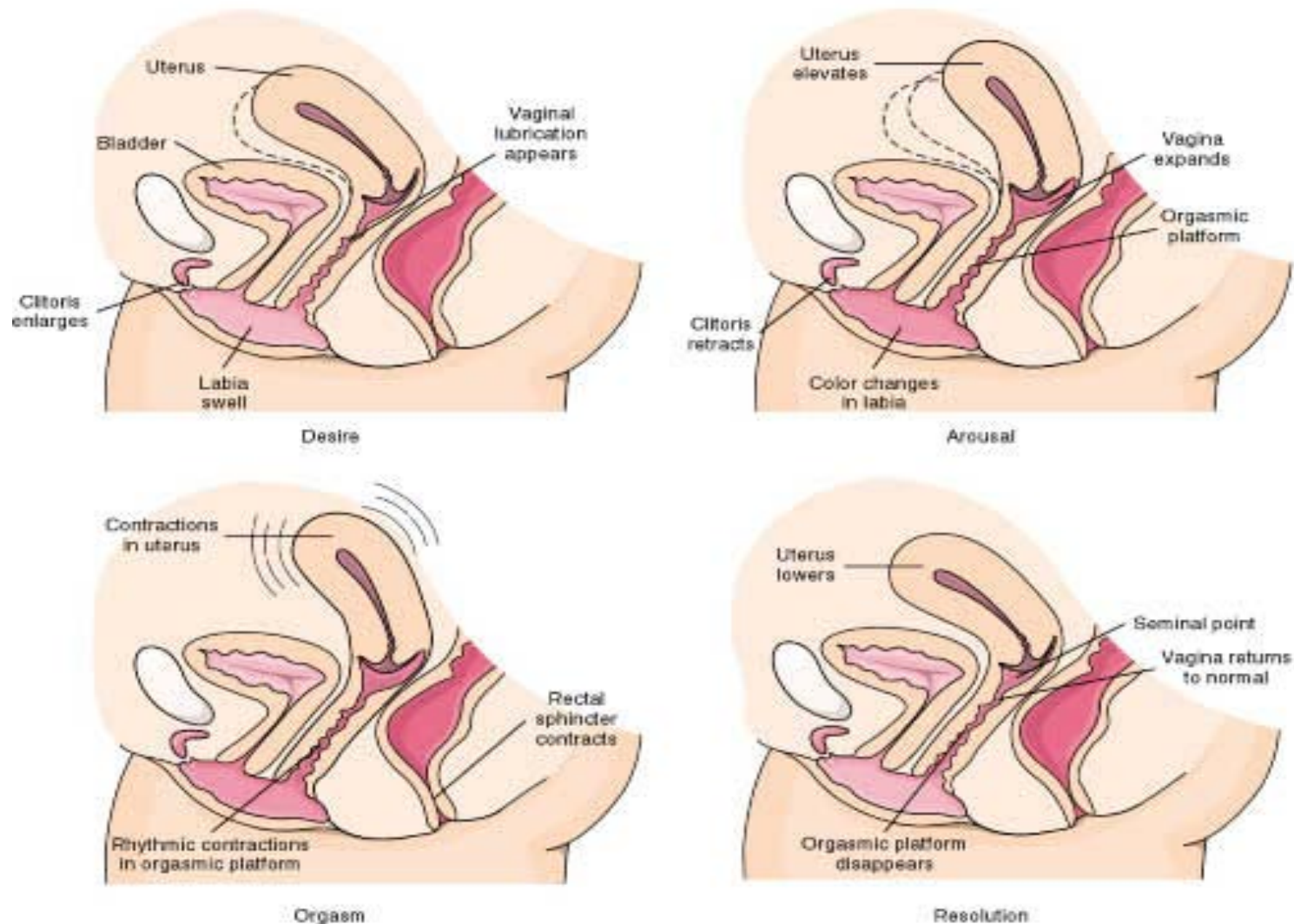
Men: physiologic arousal concordant with subjective ratings

Women: discordance between subjective and physiologic arousal

1. Laan E, Everaerd W, van der Velde J, et al. Determinants of subjective experience of sexual arousal in women: feedback from genital arousal and erotic stimulus content. *Psychophysiology* 1995;32:444–51.

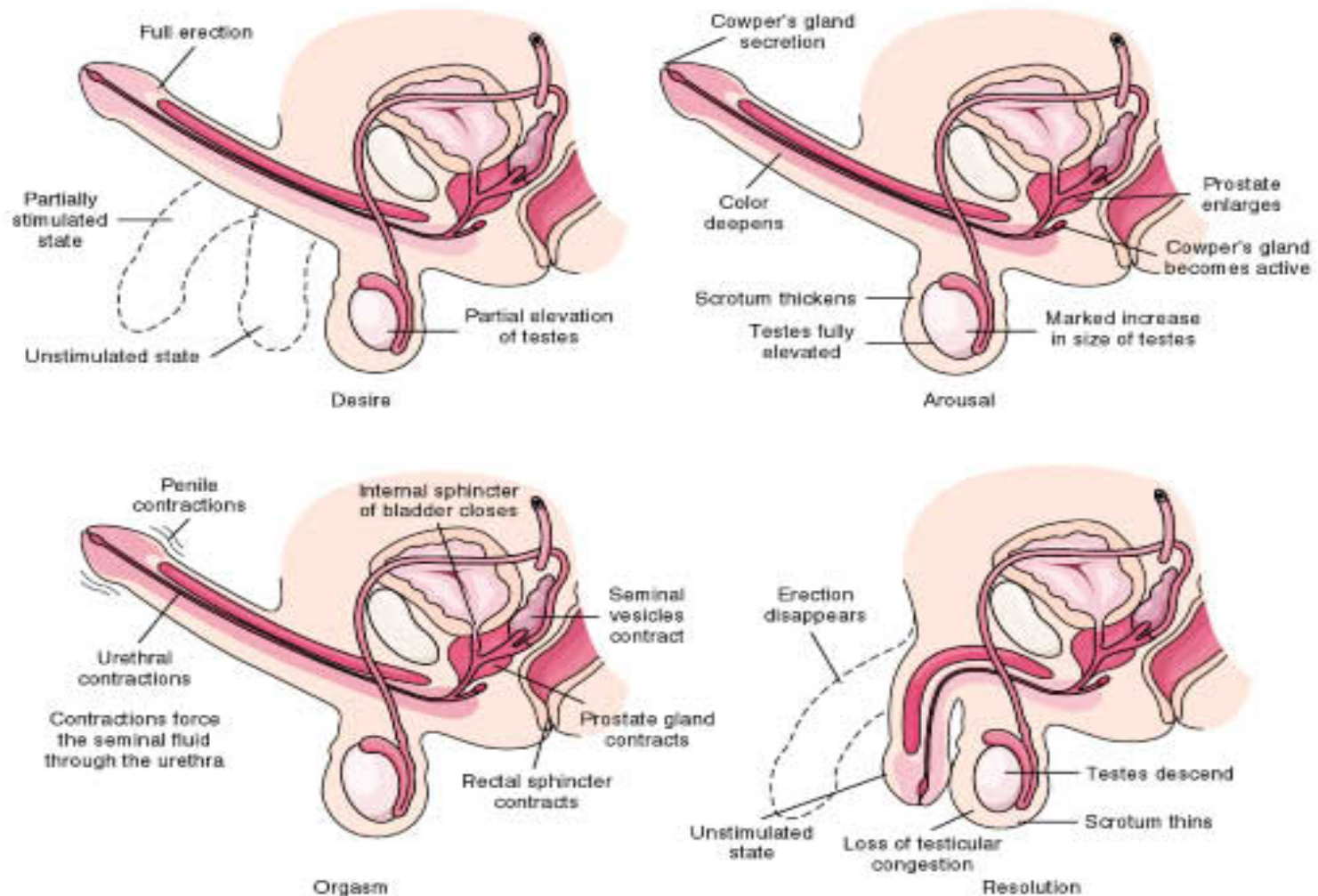
2. Chivers ML, Bailey JM. A sex difference in features that elicit genital response. *Biol Psychol* 2005;70:115–20.

# The Female Sexual Response Cycle



At each phase of the sexual response cycle in females, there are characteristic changes in physiology.

# The Male Sexual Response Cycle



**Males experience characteristic changes in physiology during each phase of their sexual response cycle.**

# Innervation of erection and ejaculation

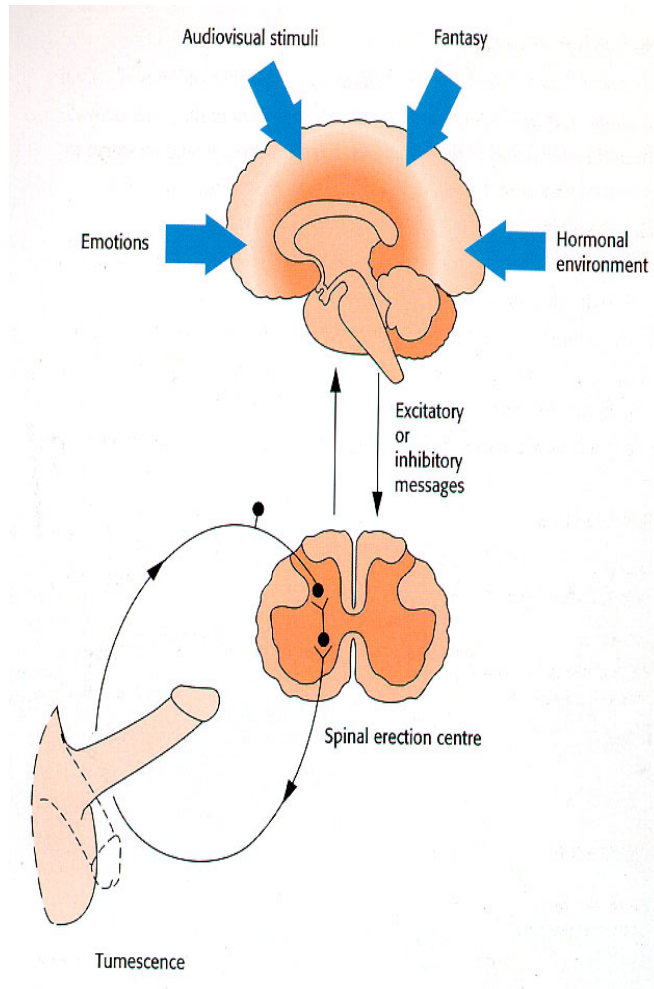
- Autonomic
  - Sympathetic nerves from T11-L2, cause ejaculation and detumescence
  - Parasympathetic from S2-4, form the pelvic plexus, cause erection
- Somatic
  - Somatosensory information travels via the pudendal nerves
- Central
  - Medial preoptic area and paraventricular nucleus (PVN) in the hypothalamus are important centres for sexual function and penile erection

# Arterial blood supply of penis

Originate from internal pudendal artery

- Bulbourethral artery
  - Supplying the bulb and corpus spongiosum
- Dorsal penile artery
  - Skin, fascia and the glans penis
- The cavernous artery
  - Supplies only the cavernosal bodies & gives off many helicine arteries which supply the trabecular erectile tissue & sinusoid. Does not anastomose with other 2 penile arteries

# Physiology of Erectile Response



Complex process  
combining

- psychological stimuli
- neurologic event
- smooth muscle relaxation
- arterial dilation
- venous compression

# Mechanism of erection

- Neuroendocrine signals from the brain, created by audiovisual or tactile stimuli
- Signals are relayed via the cavernosal nerve to the erectile tissue of the corpora cavernosa.
- This triggers increased arterial blood flow into sinusoidal spaces with relaxation of cavernosal smooth muscle, and opening of the vascular space
- Compressing the subtunica venous plexuses, decreasing venous outflow
- Both spongiosus and cavernosus are surrounded by tunica albuginea, which consist of outer longitudinal and inner circular layers. The sliding of 2 layers over each other during engorgement lead to occlusion of emissary veins
- Rising intracavernosal pressure and contraction of the ischiocavernosus muscles produces a rigid erection

# Mechanism of ejaculation

- Tactile stimulation of the glans penis causes sensory information to travel (via the pudendal nerve) to the lumbar spinal sympathetic nuclei
- Sympathetic efferent signals (travelling in the hypogastric nerve) cause contraction of smooth muscle of the epididymis, vas deferens, and secretory glands, propelling spermatozoa and glandular secretions into the prostatic urethra
- There is simultaneous closure of the internal urethral sphincter and relaxation of the extrinsic sphincter
- Rhythmic contraction of the bulbocavernosus muscle leads to the pulsatile emission of the ejaculate from the urethra

# Sexual Response and Disorders

- Female Sexual Interest/Arousal Disorder
- Male Hypoactive Sexual Desire Disorder
- Erectile disorder
- Genito-Pelvic Pain/Penetration Disorder
- Premature Ejaculation
- Delayed Ejaculation
- Female Orgasmic Disorder

# THANK YOU