Sexuality: How it is defined and determined?

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INTRODUCTION

Human sexuality can be defined as the ways in which people experience and express themselves as sexual beings. This would include their perception of themselves as male or female and their capacity for erotic experiences and responses. The lack of genital sensation through injury for instance or the fact that somebody does not engage in sexual intercourse or fantasy does not preclude him or her from being sexual.¹

Sexuality and the feelings associated with it do not start in adolescence and disappear at the age of retirement. It begins long before birth and continues up to the day a person dies.

The study of human sexuality draws on many disciplines. Biologists are interested in the physiological mechanisms of sexual arousal and response. Medical science informs us about sexually transmitted infections like HIV/AIDS and the organic bases of sexual dysfunctions. Psychologists study the effect of perception, learning, thought, motivation, emotion and personality on sexual behaviour and attitudes. Sociologists focus on the contexts of sexual behaviour pertaining to the relationships between sexual behaviour and religion, race and social class. Anthropologists concentrate on cross-cultural similarities and differences in sexual behaviour, while scientist from many disciplines look into possible parallels between the sexual behaviour of humans and other animals. (SA Fam Pract 2004;46(3): 39-42)

PERSPECTIVES ON HUMAN SEXUALITY¹

Historical perspective

History places sexual behaviour in the context of time and it shows very little evidence of universal sexual trends over the centuries. There is prehistoric evidence of worship of female idols and the penis as symbols of fertility and generative power. Jews and Christians have emphasised the role of sex as that of procreation and then within the context of family life (marriage). Ancient Greek and Roman society was male orientated and women were seen as possessions. In some Eastern

civilisations sexual outlets have been equated to a religious experience. They even compiled sexual manuals like the Kama Sutra. Repressed Victorian sexual attitudes have given way to the sexual revolution in the West in the sixties and seventies.

Biological perspective

Biological processes, including genetic, hormonal, vascular and neural factors are used to explain human sexual behaviour. William Masters and Virginian Johnson were the pioneers in studying the biology of the human sexual response cycle. Biology does not determine what is proper and improper or determine sexual

decisions. Religious tradition, cultural and personal values and learning and experience have that power.

Cross-species perspective

A variety of sexual behaviours exist among animals. Evolution and natural selection are seen as important factors to be taken into consideration when sexuality is discussed. Animal sexual behaviour cannot be directly compared to human sexual behaviour because experience and learning play more important roles in sexuality as one travels up the evolutionary ladder. Sociobiological thinking states that the role of sexual behaviour is to enhance reproductive

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success and physical traits and this is genetically transmitted.

Cross-cultural perspective

As with the historical perspective this provides insight into how cultural beliefs can influence or determine sexual behaviour and people's sense of morality. Some cultures are more sexually permissive than others, although all of them place limits on sexual freedom. This is illustrated by prohibitions on incestuous relationships.

Psychological perspectives

These perspectives focus on factors like perception, learning, motivation, emotion, and personality that would influence the sexual behaviour of an individual. Sigmund Freud with his theory of psychoanalysis proposed that the biological sex drive comes into conflict with social codes. Defence mechanisms keep threatening ideas and impulses out of the conscious mind while the individual move through stages of psychosexual development.

Learning approaches explain sexual behaviour through the role reward, punishment and modelling play as part of classical or operant conditioning.

Sociological perspectives

Differences in sexual behaviour in subgroups of a society are explained by differences in religion, race, country of origin, socio-economic status, age, educational level, and gender.

It is nowadays accepted that any discussion about human sexuality should be from a biopsychosocial perspective, acknowledging biology, psychology and sociology as equally important in human sexual behaviour.

THE STAGES OF SEXUAL DE-VELOPMENT

There are different stages (**Table I**)

by which sexuality develops from conception to adulthood. This has implications for a person's expression of his or her sexuality.

TABLE I: Stages by which sexuality develops from conception to adulthood²

- 1. Chromosomal sex
- 2. Gonadal sex
- 3. Hormonal sex
- 4. Sex of internal organs
- 5. Sex of external organs
- 6. Brain sex
- 7. Sex assigned at birth
- 8. Gender identity
- 9. Gender role
- 10. Sexual orientation identity

Chromosomal sex. Do a person's cells have the 46,XX-female or 46,XY-male chromosome pattern? Disorders of sex chromosomes can present as Klinefelter syndrome (47,XXY) or Turner's syndrome (45,X). These individuals are infertile and need either testosterone or oestrogen replacement therapy for development of secondary sexual characteristics.³

Gonadal sex. Does the person have testicles or ovaries? In true hermaphroditism an ovary can be found on one side and a testis on the other. Alternatively there can be a mixture of ovarian and testicular tissue in the gonad, which is known as an ovotestis.

Hormonal sex. Does the person have more androgens or, more oestrogen and progestins?

Sex of internal organs. Does the person have a prostate gland, for example or is there a uterus?

Sex of external organs. Is there a penis or a clitoris, a scrotum or labia?

Brain sex. Does the brain have male or female structures and levels of chemicals?

Sex assigned at birth. What was said when the doctor looked at the newborn: "It's a boy" or "It's a girl" or "I don't know"? External genitalia

can be ambiguous or of the sex opposite to that of the chromosomes. Male pseudohermaphroditism is mainly caused by androgen insensitivity and 5∞-reductase deficiency. By far the most important cause of female pseudohermaphroditism is congenital adrenal hyperplasia.⁴

Gender identity. Does the person think, "I'm a girl" or "I'm a boy". This psychological concept is permanently fixed by the age of 12-18 months. Transsexuals have a gender identity disorder. The sex they identify with, psychologically, does not match their chromosome pattern, gonads, hormone levels, internal sex organs or genitals and they are usually convinced that a sex change operation would solve the problem.

Gender role. What does the person say or do to make others think "That's a girl" or "That's a boy"? What was seen as a typical male and female role has changed. Traits commonly defined as male included ambition, self-reliance, independence and assertiveness and those regarded as feminine included affection, gentleness, sympathy and sensitivity to others' needs are now shared by both men and women. This has lead to the creation of the term androgyny or metro sexuality for males.⁵

Sexual orientation identity. Is the person attracted to and does he or she fall in love with a same-sex (homosexuality), opposite-sex (heterosexuality) partner or partners of both-sexes (bisexuality)? There is no simple answer to the question of what causes sexual orientation. It appears to be a combination of nature (biological factors) and nurture (psychosocial factors).

Infant and childhood sexuality

Early in infancy, baby boys may have erections and baby girls demonstrate genital swelling while awake or during rapid eye movement (REM) phase sleep. These are involuntary

responses. Genital touch as part of body exploration is very normal.

By the age of two children start to investigate the world around them including hugging, kissing and climbing on top of one another. They may even look at each other's genitals. At the age of 4-5 years they are even more curious and would explore their genitals (masturbation) more frequently, engage in sex play (playing doctor) with other children and be very interested in their parents' bathroom activities.

Because they now often play in sex-segregated groups it can happen that they show their genitals to one another and engage in same sex masturbatory activities, especially boys. This is not a predictor of sexual orientation in later life.

The way parents react to a child's sexual behaviour can have a major impact on his or her future sexual life. This is a time to educate and inform a child about the normality of sexuality by setting boundaries and sharing personal values, such as respect for privacy. Creating guilt feelings about sexual behaviour and to let a child suffer from ignorance and lack of factual knowledge about sexual matters is to put that child on a path of low self-esteem, negative body image and a troubled adult sexual life.

Gaining the ability to give and receive affection in childhood may later in adult life determine whether a person can bond with another person in a loving relationship.

Puberty

Because of better general standards of health and nutrition, at present, the age of onset of puberty has lowered to 8-13 years for girls and 9-14 years for boys. Optimal socioeconomic, environmental factors and good health lead to onset of puberty

at an age determined largely by genetic factors. Negative environmental influences delay the age of onset of puberty over its genetic tendency, while certain disease states can advance (central nervous system tumours/disorders and gonadotropin secreting tumours or increased androgen secretion by the adrenals or testis) or delay (hypogonadotropic hypogonadism and hypergonadotropic hypogonadism) the onset of puberty.

Early onset puberty or delayed puberty can lead to ridicule from peers and psychological trauma. Feelings of not being normal have a negative impact on a person's experience of his or her own sexuality. A child with such a problem should be investigated and treated medically and/or psychologically.

CONCLUSION

Human sexuality is defined, deter-

mined and influenced by many factors. Multiple perspectives on human sexuality are necessary to understand it because of the complexity and range of human sexual behaviour.

The different stages of sexual development should also be recognised in order to understand the variety in sexual function and dysfunction in humans. \(\Psi\)

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