# Differences between male and female sexual functioning

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#### INTRODUCTION

John Gray attempted to reveal how men and women differ in all areas of their lives when he published his bestseller book "Men are from Mars, Women are from Venus" in 1992. In this book he states: "not only do men and women communicate differently but they think, feel, perceive, react, respond, love, need, and appreciate differently. They almost seem to be from different planets, speaking different languages and needing different nourishment."

Seen from a biopsychosocial perspective on sexuality, it is true that there are many differences between males and females; but there are also quite a number of similarities. (SA Fam Pract 2004;46(4): 12-15)

#### SEXUAL ATTRACTION

What turns females on, sexually speaking, is different from what turns males on. In the process of sexual arousal, cultural expectations have a large role to play. For instance, in one culture female breasts might be seen as highly erotic to men, and in another culture simply as a means of feeding a baby.<sup>2</sup>

Historically males were hunters and therefore needed taller and more muscular bodies, while females were child-bearers and -rearers with a broader pelvis, large breasts and a higher proportion of body fat. Females can be attracted to males of any age because men stay fertile, while males are more likely to be turned on by younger females who can potentially bear healthy children.

Females value reliability, faithfulness and status in a male. An atmosphere that reflects warmth, intimacy and absence of danger would lead to sexual responsiveness in a female. Male attentiveness, a soothing voice and loving touch create this.

The skin is the largest sexual organ

in the body, with a surface area of between 1.6 and 1.9 m<sup>2</sup>. Certain areas are more sensitive to sensual and sexual touch and are known as erogenous zones. What is exactly stimulating and where on the skin one can be stimulated in a sensual or sexual way, differs in males and females and also in each individual from time to time.

Males are, generally speaking, more genitally fixated, and females less so. This is because this is of a child- rearing practice whereby boys are applauded for touching and showing off their genitals, especially to urinate. Girls, on the other hand, are scolded for exploring their genitals and therefore they become sensually and sexually more in touch with their complete body (skin) and less with their genitals.

This reality, together with the fact that a genital arousal response like, for instance, an erection is much more visible and detectable in a boy than a girl, might explain the higher incidence and frequency of masturbation in boys than girls and later in males versus females. Females are not specifically attracted to male genitals the way males are to the sight of female breasts. The male body is valued more for what it represents – power, protection, or comfort – rather than for what it looks like. This does not deter males from experiencing major anxiety about their penis size.<sup>3</sup>

Penis size is thought to be of crucial importance because of what is depicted in pornography and mythically believed in society, that males are equipped with instruments with which they should sexually satisfy females. Many females cannot experience an orgasm through vaginal penetration alone, which immediately dispels this myth about penis size. It is the thickness or diameter of the penis, rather than the length, that would contribute to better indirect clitoral stimulation. This is achieved by labial tugging, during the vaginal penetration movement of the erect penis, which facilitates a female orgasm.

It is interesting to note that females are not stimulated by pornography in

the same way that males are. Males are usually stimulated by observing the depiction of explicit sexual acts, while females need to be able to identify with the particular female involved in the scene and imagine or project themselves into the situation, becoming involved with that particular male.

More and more neuro-physiological data on sexual arousal are becoming available, through the study of brain activation in males and females while watching sexually stimulating video clips. This is done with functional magnetic resonance imaging (fMRI) and positron emission tomography (PET). Although participants were small in number, data show reproduceable results in different individuals partaking in the same study. Similarities, but also distinct differences, in the activation patterns of males and females were shown in these studies.<sup>4</sup>

### SEXUAL RESPONSE CYCLE

Masters and Johnson found the physiological responses to sexual stimulation, that included genital vasocongestion and myotonia, to be much the same for males and females. In males, the subjective description of sexual arousal will usually correlate with the physiological response in the genital area. In females, there is often a discrepancy between subjective arousal and genital response (**Figure 1**).<sup>5</sup>

#### **Excitement phase**

This phase includes penile erection,

increased testicular volume, elevation of the testes and scrotal contraction in males. In younger males this may happen within seconds after sexual stimulation of any kind, while in older men it may take longer to get an erection and it can come and go, depending on the amount of direct stimulation of the penis by self or partner.

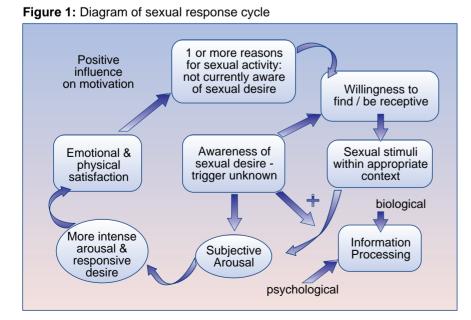
In females this phase includes clitoris and labial engorgement, expansion of the inner two-thirds of the vagina, thickening of the vaginal walls, elevation and engorgement of the uterus and breast enlargement.

Both males and females may experience nipple erections and show some increase in myotonia, heart rate and blood pressure.

#### Plateau phase

Although described as a "level" region, this is an advanced state of arousal that precedes orgasm. In males there is a slight increase in the circumference of the coronal ridge of the penis and a colour change in the glans to a purplish hue. The testes elevate even further in preparation for ejaculation. In many males there would also be a few droplets of Cowper's gland secretion present at the meatus.

In females further vasocongestion of the lower third of the vagina would form the orgasmic platform. The inner part of the vagina expands fully and the uterus becomes fully elevated. The clitoris can withdraw beneath the clitoral hood and the labia minora



change colour.

Both males and females can show a sexual flush, while myotonia increases, breathing becomes more rapid and heart rate further increases. Blood pressure also continues to rise.

In younger men the plateau phase tends to be shorter than that of a female, leading to the saying that males are destination or endpoint orientated and females are journey orientated. A metaphor further describing this difference is that of a male being like a switch that can be switched on and off very easily, while a female is like two hundred candles. It takes a very long time to get them burning, but once they are burning it is very difficult to blow them out again!

#### **Orgasmic phase**

Spastic contraction of the internal sphincter of the bladder prevents retrograde ejaculation and contributes to the feeling of eiaculatory inevitability in males when emission (contraction of the vas deferens, seminal vesicles and prostate) of semen into the bulbous urethra has taken place. The next step is propulsion of semen, through relaxation of the external bladder sphincter and contraction of the bulbo cavernous muscles. Sensations of pleasure tend to be related to the strength of the contractions that take place at 0.8-second intervals, as well as to the volume of seminal fluid.

Female orgasm involves rhythmic contractions, also at 0.8-second intervals, of the vaginal walls, anal sphincter and uterus. This is accompanied by pleasurable sensations that can subjectively be located in different areas of the genital region. Much confusion has resulted from the so-called Freudian clitoral and vaginal orgasm and the Singer and Singer vulval, uterine and blended orgasms. Masters and Johnson could only find one type of orgasm.

A further controversial topic amongst scientists working in the field of female sexuality is that of the G-spot (Grafenberg spot) and female ejaculation. Some females report intense pleasurable feelings and orgasms when a specific area of the anterior wall of the vagina, the so-called G-spot, is directly stimulated in whatever way. Some even experience a discharge of fluid, that is not urine, from the urethra during sexual stimulation, known as female ejaculation. This is thought to be secretions from Skene's glands in the urethra.<sup>6</sup>

#### **Resolution phase**

This is the post-orgasm period in which the body returns to its pre-aroused state. The male will lose his erection. The younger he is, the longer it will take, and the older he gets, the quicker it will happen. The testes and scrotum will also return to their normal size.

In females the nipples will return to normal size and the clitoris will descend to its normal position. The clitoris, vaginal walls, uterus and labia gradually shrink to their pre-aroused sizes.

Myotonia dissipates and blood pressure, heart rate and respiration also return to their pre-arousal levels.

An important gender difference during this phase, is that males enter a refractory period during which they are physiologically incapable of experiencing another orgasm or ejaculation. The refractory period of an adolescent male might last only minutes, while that of an older man might be for several minute, hours or even days.

Females do not experience a refractory period and they are therefore able to experience multiple orgasms without first returning to the prearoused state. Although they have this biological capability, not all report having multiple orgasms or wanting to have them every time or at all.

By Masters and Johnson's definition, males are not capable of experiencing multiple orgasms because of their refractory period. Some males do describe multiple orgasms, but it is thought to be another sexual response cycle rapidly following a previous one that is experienced and described. Other males report multiple orgasms of which some are "dry", meaning without any ejaculation. In male sexual practices based on Chinese Taoism, the conservation of sexual energy is emphasised and pupils are taught to experience so-called multiple orgasm. This remains a controversial area that needs more scientifically based evidence and research.

## Kaplan's stages of sexual response

Helen Singer Kaplan, a prominent author and sex therapist, proposed a three-stage model of sexual response consisting of: 1. Desire, 2. Excitement and 3. Orgasm.

This model included a primarily psychological component to sexual response, namely desire or sexual interest, which was not included in Masters and Johnson's Model.

Masters and Johnson described sexual response as composed of successive stages, while Kaplan treated her phases as relatively independent components of sexual response whose sequence can be variable. Their approach might suit a description of the male sexual response but this three-stage approach would better suit the description of how some females regard their sexual experiences. They often report that they have experienced sexual excitement (genital vasocongestion and lubrication) and even orgasm, although their sexual desire has remained low.<sup>6</sup>

These observations, and new research data that has become

available has become Committee 16 of the Second International Consensus Meeting on Sexual Dysfunction to propose an alternative model (**Figure 2**) for female sexual function.<sup>4</sup>

#### CONCLUSION

It is important that a person must be able to recognise the physical sensations of his or her own arousal, not only for personal sexual enhancement but also for partner guidance and participation. Sexual readiness can vary from one time or situation to another for an individual, and should be taken note of and be accommodated in a relationship.<sup>7</sup>

Although many of the physical responses to sexual stimulation are automatic, well known and described in models and with metaphors, other aspects of sexual function require some degree of learning. Learning to have orgasms and enhancing sexual satisfaction for oneself and a partner takes practice and a willingness to accommodate male and female differences on very many levels.

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