Chapter Eleven

ELEMENTS OF SEX EDUCATION

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Introduction

There is both the biological and psychological variables that contribute to the complex expression of our sexuality. As people living together, we are now inclined to view human behaviour in terms of a difficult script written on the basis of both biology and physical conditioning. Using this to help understand life situation in both sexes, this chapter explores human sexuality as it relates to the dynamic interplay of human relationship. Specifically, this chapter discusses the following.

a. Meaning and goals of sex education
b. Teaching of sex education
c. Reproductive anatomy and physiology
d. Physiological obstacles and aids to fertilization
e. Phenomena of puberty and conception.

A. Meaning and goals of sex education:
There has always been a question to what we mean when we speak of sex education? Some critics perceive it solely as education in the mechanics of sex act or that it is a sinister campaign to create an unceasing and dangerous obsession with sex in the minds of children. To the uninformed, sex education sounds as if it was education for sex, and sex to many is a dirty word at worst and synonymous with coitus at best. Sex education in the real sense of it, is education for creative living with understanding of human sexuality as an integral inseparable part of it.

It may therefore be better and safer to state clearly what sex education encompasses and what it really seeks to accomplish as such a description would
not only improve public relation but would also help to clarify the goals of sex education for those charged with its teaching. (Kauth, 2000)

The goals here will be briefly stated in the 3 domains namely; cognitive, affective, and psychomotor.

1. **Knowledge Domain (Cognitive)**
   - Nature of personality
   - Basic needs of youth
   - Nature of common development
   - Physiological nature of youths
   - Emotional make up of youths
   - Sexuality of adolescent boy
   - Sexuality of adolescence girls
   - The nature of human relationships
   - Emotional maturation
   - Sexual morality in our country
   - Nature of life
   - Courtship/engagement.
   - Marriage adjustment
   - Nature of sex and reproduction
   - Male and female reproductive systems
   - Fertility
   - Sub-fertility
   - Infertility and sterility
   - Nature of homosexuality
   - Infections of the genital organs.

2. **Affective Domain (Attitudes)**
   - To promote a healthy normal approach to boy/girl relationship.
   - To become aware of normal needs and desires of adolescence
   - To become aware of false standards of behaviour.
   - To become aware of possible results of sex drives and emotions.
   - To develop wholesome understanding of physical attraction and love
• To help teenagers develop an appreciation of wholesome family relationship.

3. **PSYCHOMOTOR OR PRACTICE**
   - To develop sense of responsibility, to self and to others
   - To learn to evaluate and to control our emotions and tensions and those of others.
   - To develop one's own moral standards and to uphold them
   - To develop poise and skill in social adjustment

B. **Teaching of Sex Education**

   Sex is not a separate phase of life but it is part of the total personality thus it is foolish to teach the child the facts of life and expect the problem to be solved. The child cannot learn all about sex at once. He is not mature enough to grasp it all. The child shows a normal curiosity about sex matters so we should not underestimate his intelligence. A simple answer to his question given in forthright manner and with no embarrassment is the best approach. Do not wait until the child is old enough because a child who is old enough to frame questions is old enough to receive answers that suit his level.

   Sex education can and should be taught very effectively in the home as well as in the school. Most of the attitudes of youths towards sex are acquired in the home. The child may ask about his sex organs, about babies and why he is different from the opposite sex. As children ask questions, tell them for if you can’t somebody else will probably misinform him in doing so. The following suggestions may be helpful in teaching your children about sex.

   1. Call the sex organs by their correct names.
   2. Be candid. Tell the child as much as you think he can understand at any given age. It is better to tell him more than not enough.
   3. Do not be annoyed when he asks you about sex matters and do not seem impatient to get rid of him. Show that you are interested in his question.
   4. When you do not know specific answers, sit down and help him find the desired information. This will increase his confidence in you.

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5. if he wants to know where he comes from, tell him as much as he can understand about pregnancy. The reproductive process of pets can often be co-related with his own. More explicit information can be given him as he matures, and as his sex knowledge broadens.

6. A child is very anxious. If he plays with his genitals, do not scold him, telling him that it is 'nasty' divert his attention to socially acceptable plays instead. Some sex educators believe that both sexes should see each other in the nude (i.e. nakedness); certainly they should see pictures of nude figures. The child should be taught that nothing about the body is shameful, that all organs have normal physiological functions to perform.

7. Girls should be taught about menstruation and its problems before they experience it. Otherwise, it can be a frightening experience.

C. **Reproductive Anatomy and Physiology**

The human species is dimorphic because it has two unique reproductive forms, a male and a female which together from the human reproductive system. In the species, each genetic parent (male and female) contributes his/her genes to their offspring which combine and form a signal cell, called zygote. The Zygote then develops into a new adult member of the human race. This creation of a zygote is called fertilization.

**The primary Reproduction organs**

The primary human reproductive organs are: the testes in males and ovaries in females. The testes and ovaries have several important functions.

1. Testes produce sperm while the ovaries produce ova/eggs each of which carries genetic information. Each sperm carries either an X and Y sex chromosome. Each egg carries an X chromosome. If a zygote is formed by an X carrying sperm the offspring will be female, because the new pair of sex chromosomes will both be X chromosomes. If the zygote is formed by a Y carrying sperm the offspring will be male because the new pair of sex chromosomes will be one X and one Y.

2. Testes and Ovaries also produce the hormones (estrogen and testosterone) that cause secondary sex characteristics, the physical changes that lead to sexual maturity.
3. Testes and ovaries also produce the hormones that maintain the viability of the reproductive organs and associated sexual structures. Chapkis (1997)

HORMONAL CONTROL OF THE HUMAN REPRODUCTIVE SYSTEM

Gonadotropins

The brain is responsible for the regulation of the human reproductive system. The part of the brain that monitors and regulates the reproductive system is the hypothalamus which communicates its direction with hormones, chemicals that stimulate organs of the body into performing certain tasks. The hormone used by the hypothalamus to stimulate the testes and ovaries is called the gonadotropin-releasing hormone or GNRH. The purpose of GNRH is to set off a chain of chemical events which will cause the testes to produce sperm and the ovaries to produce eggs, as well as producing additional hormones to maintain the reproductive organs.

When GNRH is secreted by the hypothalamus it causes the pituitary to secrete luteinizing hormones (LH) and the gonadotropin follicle-stimulating hormone (FSH) into the bloodstream. In males, LH stimulates the testes into producing testosterone, the primary male sex hormone which prevents atrophy (wasting away) of the male reproductive organs;

- partially responsible for males' socially and sexually aggressive blur,
- causes the adolescent male to develop the adult male physique—bread shoulders, public hair, enlargement of the penis and scrotum, enlargement of the larynx and vocal chords, and thickening of the skin.

In the female, oestradiol stimulates the ovaries to produce the primary female hormone estrogen which;

- in preadolescent females cause the development of the breast;
- causes the female to develop feminine physique—addition of fat deposits in the abdomen, buttocks and hips;
- responsible for the enlargement of reproductive organs;
- in postpubertal females, it stimulates and uterus for pregnancy.

In females, FSH stimulates the ovaries to produce eggs and in males it stimulates the testes to produce sperm.

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HYPOTHALAMUS
   |  
   GNR
   |  
PITUITARY
   |  
   LH  FSH
   |  
MALE FEMALE  MALE FEMALE
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Testosterone Estrogen sperm Egg
Male Reproductive system: under this the following need to be known-the scrotum, testes, epididymis, Vas deferens, semen, seminal vesicles, prostate gland, urethra, bulboeucrhal gland, penis, sperm, ejaculation, sperm count, and fertilization.

**Scrotum:** is a skin sac which house the two testes and is suspended in the groin area the base of the penis. The scrotum is suspended from the body in order to maintain the temperature of the testes at approximately 3.6°F cooler than normal body temperature. This lower temperature is necessary for the production of sperm. Muscle fibers in the scrotum contract and relax in response to external temperature. During cold weather, the male fibers contract pulling the scrotum and testes closer to the body for warmth, whereas in warm weather the muscles relax and move them further away from the body.

**Testes:** Two of them located in scrotum produce sperm and testosterone. They contain numerous highly coiled tubes known as the seminiferous tubules in which
sperm are produced. In the spaces between the seminiferous tubules lie the Leydig cells which produce testosterone.

**Epididymis:** As sperm mature, they empty from the seminiferous tubules into the epididymis which literally means “over the testes” describing their location. The epididymis provides a fluid for storing sperm and removes from defective sperm.

It takes approximately 74 days to manufacture sperm. The male manufactures approximately 2000 million sperm per day. Viable sperm remain stored in the epididymis for approximately 204 weeks. After this time they are reabsorbed by the body.

**Vas deferens:** Each epididymis empties into a vas deferens approximately 45cm long and are partially housed inside the scrotums. The vas deferens circle the bladder and ultimately join with the urethra. The walls of the vas deferens, coupled with the action of the cilia, combine to transport sperm through the vas deferens.

**Semen:** When exiting the body, sperm reside in a fluid called semen. **Semen** is produced by the epididymis and the accessory male reproductive organs which include the seminal vesicles, prostate gland, and bulbourethral glands.

**Seminal Vesicles:** are two small glands found at the end of each vas deferens, just at the vas deferens enter the prostate gland. The seminal vesicles produce a fluid containing a simple sugar which provides nutrition for sperm. About 60 percent of the total value of semen is made up of the fluid produced by the seminal vesicles. They also secrete prostaglandins which stimulate the sperm into undulating their tails for locomotion. Prostaglandins also stimulate the female reproductive tract into contractions. These combined actions help to transport sperm through the female reproductive tract.

**Prostate gland:** Is a small walnut-shaped gland located at the base of the bladder. The ejaculatory duct and the urethra pass through the prostate gland. The prostate secretion which makes up about 15-30 percent of the semen, is
alkaline, opalescent in colour, and possess the characteristic seminal odour. The prostate secretions neutralise:

1. The waste production of sperm
2. The acid found in the male urethra, and
3. The acidic environment of the female reproductive tract without the neutralizing action of the prostatic fluid many sperm would die, making fertilization of the egg impossible. (Califa, 1997)

**Urethra:** has a function the tract that urine passes through from the bladder to the penis and the tract that semen passes through.

**Bulbourethral glands or Cowper's gland:** Two of these glands, the shape and size of peas, are connected to the urethra as it enters the penis. These glands create an alkaline secretion that sometimes appears as a droplet prior to ejaculation. Occasionally, this droplet may contain viable sperm. The exact purpose the bulbourethral glands; secretion is not known. One popular theory is that their fluid lubricates the end of the penis. Its major functions, however, is more likely than that of neutralizing any urine in the urethra prior to ejaculation.

**Penis:** The reproductive function of the penis is to deposit semen in the female reproductive tract. The adult male penis when fixed is between 6 cm and 11 cm long and increases to approximately 15 cm when erect.

The head of the penis, called the glans, is an especially sensitive area of the penis, containing many nerve endings. The glans is covered by loosely fitting skin called the prepuce or foreskin. In some parts of Nigeria, the foreskin is removed at birth or soon after through an operation called circumcision.

Internally, there are 3 fingerlike chambers which run the length of the penis. When the male is sexually stimulated these chambers fill with blood and the penis becomes erect.

**Sperm:** The sperm cell is truly unique which has 3 basic parts, the head, middle piece or body of the sperm, and the tail. At the top of the head is the acrosome, a structure that contains an enzyme which breaks down the coating of cells that surround the egg, enabling sperm to penetrate it. The body of the perms is partially responsible for creating energy. The tail is responsible for the sperm's
mobility.

Sperm can swim about 21 cm and hour. However, sperm, on the average, reach the fallopian tubes 60-90 minutes after being deposited into the female reproductive tract. The female tract is much longer than 5 cm suggesting that the sperm's journey is aided by the contractions of the female reproductive tract.

**Ejaculation:** sperm leave the body via ejaculation. Ejaculation is the expulsion of semen from the urethra, and is usually associated with orgasm. Ejaculation and orgasm, however, can occur independently, semen and perm leave the urethra in the following order; 1" the fluid from the bulbourethra glands is expelled, then the prostatic fluid, followed by sperm. Finally, the seminal fluid is released.

**Sperm count:** The average ejaculation contains 3 milliliters of semen with anywhere from 10-1000 million sperm per milliliters. Some males, father children with only 2-4 million sperm in their entire ejaculation. As a benchmark, however, it seems that when the male's sperm drops below 10 million per milliliters, fertilization of the egg becomes difficult.

Several factors reduce male's sperm and or the number of sperm found in ones ejaculation. These factors are:

1. Fever
2. Tight underwears
3. Attitude: either living in elevations well above sea level or traveling frequently in airplanes.
4. Stress caused by battle field or emotional distress
5. Several diseases, such as mumps, diabetes, mellitus and gonorrhoea.

**Fertilization:** When the egg is penetrated by a sperm, their genes unite and form the very 1" cell of a new individual called zygote. This is fertilization, only one sperm is required for fertilization. From the million or so sperm deposited into the female reproductive tract only about 3000,000 will reach the female's fallopian tubes. Half of these will enter the fallopian tubes without the egg, while 2,000 sperm will actually reach the egg. (Skeen, 1999)

The egg is covered with a clear membrane. When a sperm penetrates the membrane it is drawn into the nucleus of them egg. This causes the secretion of
polysaccharides which makes the member impermeable to the remaining sperm. A zygote is formed.

**Female reproductive system:** Under this the following need to be known ovaries, ovulation, menstruation, fallopian tubes, uterus, vagina, vulva, breasts.

**Ovaries:** These are the primary female reproductive organs and have 2 functions to produce egg and produce estrogen and progesterone. Females have 2 ovaries that weigh about 6gms each and measure a little over 25cm across.

The female is born with all the potential eggs she will use throughout her reproductive life about one million in each ovary. Each premature egg is surrounded by a thin tissue called a follicle. Each month several follicles being to mature, however, only one of these follicles stop maturing and are dissolved in the ovary. The one follicle which completely matures is known as the Graafian follicle.

**Ovulation:** when fully matured, the wall of the Graafian follicle becomes thin. Soon after this, the graafian follicle ruptures, releasing the egg from the ovary into the fallopian tube. This pressure, and pain around the time of ovulation. This phenomenon is called mittleschmerz, moving middle pain. This pain may occur on either side of the abdomen depending on which ovary is ovulating.

Cells from the ruptured Graafian follicle that remain in the ovary are transformed by action of LH into the corpus luteum, a temporary endocrine gland, which secretes hormones. If fertilization occurs and zygote is formed, the corpus lutenum hormones for several months into the pregnancy. The continued secretion of hormones into the blood stream informs the hypothalamus of the female if pregnant. If fertilization does not occur, the corpus luteum becomes menstruation. By the 24th day of the female’s cycle the corpus luteum begins to degenerate. The absence of hormones in the blood stream informs the hypothalamus that the female is not pregnant. This event results in menstruation, and a new reproductive cycle will soon follow.

**Menstruation:** Is the cyclical bleeding that signifies the beginning of the next reproductive cycle. The female reproduction cycle is plotted from the 1st day of menses to the day of the onset of the next menses. The average female
reproductive cycles range from 20-42 days. The part of the female reproduction cycle which causes the greatest time variation is the follicle phase, which is the time for menstruation up until ovulation. However, for most females, the time from ovulation to menses is about the same, approximately 14 days.

The 1 st menstruation for a female is called menarche while the cessation of menstruation is called menopause. There are certain factors which may alter a female's reproductive cycle which are as follows:
- Pregnancy
- Diet
- Stress.

Seemingly unrelated factors may affect the healthy functioning of the female reproductive organs. Many of such factors have been suggested including:
- Light fitting clothing
- Fabric softeners
- Brands of toilet paper
- Laundry detergent
- Bubble bath
- Deodorant tampons

The indicators of potential health problems are:
- Discomfort
- Pain
- Unusual bleeding
- Foul odour
- Foul discharge

When menstruation is painful it is called dysmenorrhea. The majority of women one time or another, experience dysmenorrhea. It can be caused by high levels of prostaglandins in the blood stream which cause the uterus to contract.

Premenstrual syndrome (PMS) is a chronic disorder which encompasses emotional behaviour, and physical symptoms. Emotional symptoms anxiety, confusion, depression, hostility, irritability and mood swings, behavioural symptoms increased alcohol intake, crying spells and violence towards self or other physical symptoms abdominal bloating, breast headache. These symptoms usually occur a week prior to the onset of menstruation and end of the onset of menstruation. PHS can occur more often in women over the age of 30.
**Fallopian tubes:** Once the egg is released by the ovary, it enters the fallopian tube. Each fallopian tube is approximately 10cm long and is connected at one end to the uterus. The other end of the fallopian tube consists of fingerlike projections called fimbrise if lie very close to the ovary. Through the fallopian tube contractions, and the action of its cilia, the egg is pushed to approximately halfway point in the fallopian tube where it remains and awaits fertilization. The egg travels at the rate of about 2 ½cm per hour. With rare exceptions, fertilization will take place in the fallopian tubes. (Prosser, 1998)

**Uterus:** Is a hollow, muscular, pear shaped organ that is approximately 7 ½ cm in its non-pregnant state. During pregnancy, the uterus will increase in size by 200 times. The opening of the uterus into the vagina is called the cervix.

**Functions include:**
- Preferred site for implantation
- Assists in transporting sperm up to the fallopian tubes
- Assist in moving the foetus through the reproductive tract during childbirth, and
- Provides the necessary muscle contraction for menstruation.

The uterus has 3 layers: the perimetrium (the outermost layer), the myometrium (the muscular layer essential for birthing and menstruation), and the endometrium (the innermost layer responsible for secreting fluids and nutrient for the developing foetus). The endometrium is where the fertilized egg will usually implant.

The uterus undergoes series of changes on preparation for a zygote. In the beginning of the reproductive cycle, estrogen cause the endometrium to thicken. This layer of tissue and fluids is necessary for the preservation and development of an embryo. Estrogens cause the mucus around the cervix to change in its consistency and become less acidic. The mucus becomes clear and elastic. This change is in cervical mucus enhances the probability of sperm tube. The cervical mucus also prevents defective sperm from passing on through the fallopian tubes.

If the egg is not fertilized, the corpus luteum of menstruation disintegrates causing a marked decrease of hormones in the bloodstream. About 24 hours after this decrease in hormonal blood levels menstruation commences.
The myometrium begins to contract and the layer of blood, mucus, and membranes attached to the endometrium is sloughed off through the cervix and vagina. The menstrual phase usually takes from 2-5 days. During menstruation the hypothalamus will detect the reduce levels of hormones in the blood stream and release GnRH to start the next reproductive cycle.

**Vagina:** In its unstimulated state, the vagina is approximately (7½cm 12½cm long) and connects the cervix to the external genitals. The cervix actually protrudes into the vagina.

The vagina;
- transport sperm to the uterus
- transport the products of menstruation to the external genitals;
- it is also the passage way for child birth; and
- the vagina walls have the ability to expand markedly in order to accept the penis during intercourse or to pass the foetus during labour.

**Vulva:** The external female genitals are all referred to as the vulva. The labia majora (Latin for “major lips”) are paired folds that surround the clitoris, urethral opening, and vaginal opening. The labia minora (Latin for “small lips”) paired fold which extend along the vestibule. The labia minora and labia majora merge to form a clitorial hood. The clitoris is similar to the penis in structure and function. It is composed of erectile tissue that swells with blood and becomes erect when stimulated. The shaft of the clitoris is referred to as the glands. All of the external female genitals are sensitive to touch, especially the clitoris.

The vestibule is the area enclosed by the labia minora. The introitus is the opening of the vagina. An imaginary line from the introitus to the anus is the area called perineum. This area is sometimes surgically cut during child birth in an operation called an episiotomy. The episiotomy is done to prevent tearing of the perineum during child birth.

The hymen partially covers the introitus. The hymen of tentimes remains intact until the female’s 1” experience of sexual intercourse. Although the inact hymen has been used as proof of virginity over the centuries, there are several problems with such an assumption. Some females are born with partially torn hymens while other may tear their hymen prior to fist intercourse.

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The Barthelin's glands lie inside the labia minora, one on each horizontal side of the introitus. They secret a mucus which appears prior to female orgasm. (Abbot, 2001)

BREASTS

Although the breasts are not directly responsible for reproduction, they are responsible for nurturing the product of reproduction, the infant. Each breast contain 15-20 milk ducts all which open to the external nipple. The nipple is highly sensitive to stimulation. The action of hormones (prolactin, progesterones, and estrogens) cause the female to produce milk after child birth. Breast size has no relation to the quantity of milk produced by lactating females. The over-whelming majority are capable of breast feeding following child birth. (Flower, 1998)

2 Physiological obstacles and aids to fertilization

There are obstacles that may reduce a couple's chance of pregnancy and they are;

1. The sperm's travel is relatively "upstream". The anatomical positioning of the female reproductive structure necessitate an "uphill" movement by the sperm.

2. The acidic level of the vagina is destructive to sperm. The low pH of the vagina will kill sperm that fail to enter the uterus quickly.

3. The cervical mucus is thick during most of the menstrual cycle. Sperm penetration is more difficult, except during the few days surrounding ovulation.

4. The contoured folds of the tubal walls trap many sperm. These folds make it difficult for sperm to locate the egg. Many sperm are trapped in this maze.

5. The sperm must locate the cervical opening. The cervical opening is small in comparison to the rest of the surface area where sperm is deposited.

6. The distance sperm must travel is relatively long compared to tiny size of the sperm cells. Microscopic sperm must travel about 18-20cm once they are inside the female.

7. Half of the sperm travel through the wrong fallopian tube. Most
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commonly, only one ovum is released “take turns” each month. The sperm have no way of knowing which tube they should enter. Thus it is probable that half will travel through the wrong tube.

There are also a variety of aids that tend to help sperm and egg cells to join and some of these are listed below.

1. An astounding number of sperm are deposited during ejaculation. Each ejaculation contains about a teaspoon of semen. Within this quantity are between 200-500 million sperm cells. Even with large numbers of sperm killed in the vagina, millions are able to move to the deeper structures.

2. Sperm are deposited near the cervical opening. Penetration into the vagina by the penis allows for the sperm to be placed near the cervical OS.

3. The male accessory glands helps to make the semen non-acidic. This environment helps the sperm to better protected in the vagina until they can manage to move in the deeper, more alkaline uterus and fallopian tubes.

4. Uterine contraction aid sperm movement. The rhythmic muscular contractions of the uterus tend to cause the sperm to move in the direction of the fallopian tubes.

5. Sperm cells move rather quickly. Despite their microscopic size, sperm cells can move relatively quickly just under 2½ cm an hour. Powered by sugar pollutions from the male accessory glands and the whiplike movement of their tails, sperm can reach the distant 3½ of the fallopian tubes in less than 8 hours.

6. Once inside the fallopian tubes, sperm can live for days.

7. The cervical mucus is thin and watery at the time of ovulation. This mucus allows for better passage of sperm through the cervical opening when the ovum is released from the ovary.

8. The cervical mucus is thin and watery at the time of ovulation. This mucus allows for better passage of sperm through the cervical opening when ovum is most capable of being fertilized.

9. Estrogen levels are at their highest point just before ovulation and so may increase sex drive in the female at this point.

2(e) **Phenomena of Puberty and Conception.**

Entry into pubescence is a gradual process for young females and males.
In the young female, the typical transition into biological adulthood begins near the age of 11 with the budding of her breast and the development of pubic hair. A spurt in skeletal growth is generally in synchrony with their initial indications of sexual maturation. The onset of menses, the menarche, generally follows these changes by approximately one year. Thus menses is usually established by the age of 13 particularly girl's development in comparison to the group's average.

In recent times, the age of menarche is coming down, a phenomenon which could be attributed to:
- Improved nutrition and health care. It is not unusual for the 1st several menstrual cycle to be anovulatory. This may be interpreted to mean that the young woman produces sufficient estrogen to stimulate uterine wall development, but not sufficient luteinizing hormone to the ova development o the point of ovulation. If menarche is followed by ovulation conception may take place.
- The onset of biological maturation in the male follows a similar course.
  In the male, however, the process begins approximately 2 years later that it does in female. The 1st indication that the young male's reproductive system is moving towards maturity is noted near the age of 12, when the testis and the scrotum begin to display rapid growth. Auxiliary (under arm) hair development may also be noted at this time. A growth spurt generally follows within 1 years, as does penile enlargement and the development of public hair. Growth of the larynx, with concomitant lowering of the voice, also occurs. The male's 1st ejaculation has generally been experienced by the age of 14, most commonly through nocturnal mission or masturbation. Mustache and beard growth, at least to the point of shaving is deemed reasonable, is generally seen between the ages of 15 and 18.

**HUMAN SEXUAL RESPONSE AND BEHAVIOUR**

(a) sexual response pattern
(b) patterns of sexual behaviour
(c) sexual performance difficulties and therapies.

3(a) Sexual response pattern

Until 1966 relatively little was known about the physiological events involved
in human sexual arousal. William Masters and Virginia Johnson opened the door when they described 2 major physiological events that occur during sexual response: Vascongestion and myotonia. Vascongestion occurs when blood fills the sexual organs such as the penis or vulva. Myotonia refers to the muscles becoming tight and rigid. Masters and Johnson also separated the human sexual response cycle into four consecutive phases: Excitement, plateau, orgasm and resolution.

**Excitement:-** This phase begins with sexual stimulation of some sort, whether physical, psychological (thoughts), or both. The excitement phase begins with the penis becoming erect due to vascongestion. The secretal skin becomes smooth and the testes are drawn closer to the body.

During this phase the female begins to secrete vaginal fluids which make the vagina more supple and less sensitive to friction. The vagina, cervix, and vulva expand due to vascongestion, and the nipples become erect.

**Plateau Phase:-** Here the head of the penis and the testes increase in size. A skin colour change around he penis may be experienced and a small amount of seminal fluid, which may or may not contain viable sperm, may drop from the penis, and that is, emission of pre-ejaculatory fluid.

In the female the vagina continues to swell until it reaches the "orgasmic platform" which causes the opening of the vagina to narrow by 30 percent or more additionally the clitoris withdraws into its hood. There may be an increase in breast size.

**Orgasmic phase:-** Orgasmic for human is the sudden release of sexual tension resulting in pleasurable feelings. Organism is a feeling of physical satisfaction unlike any other moment of the sexual response cycle.

This phase consists of an involuntary muscular contraction concentrated in the penis, prostate, and seminal seminal vesicle in the male. It is in this phase that the male ejaculates. The release of sperm (ejaculation) does not necessarily occur simultaneously without orgasm. Male can release semen without experiencing an orgasm, or experience the pleasurable sensations of orgasm without releasing average quantities of semen. In the female the contraction concentrates on the clitoris, vagina and uterus. This involves 3-15 quick rhythmic muscular contractions of the uterus and vagina. Other muscle groups of the female’s body may contract during orgasm as well.

**Resolution phase:-** This is the final phase of sexual response during this phase
both male and female return to their pre-excited state after sexual tension has been dissipated. Blood is pumped away from the sexual organs and muscles begin to relax. Heart beat, respiration, and brain wave patterns also return to their pre-existing state. In males, a recovery period, often referred to as refractory period, must take place before a 2nd orgasm can be experienced. The length of time needed for recovery varies with different men. Although the female can return to the organism phase if sexually stimulated during resolution, the male enters a refractory period during which sexual stimulation cannot produce another full erection. In other words, females are capable of multiple orgasms close in time to one another whereas males are mostly not. (Flower, 1998)

**Similarities in male and female response**

1. Nipple become erect in both sexes and also increase in diameter.
2. Both sexes experience sex flush, that is, a darkening of the skin which occurs on the neck, face and forehead of both sexes as well as on chest.
3. At the plateau phase muscle tension (medically termed myotonis) involving the legs, arms, abdomen, neck and face development. In addition, both sexes contract the gluteals (buttocks) muscles prior to orgasm. During orgasm both sexes contact the muscles of the abdomen, chest and face. Finally, muscle tension is released by both sexes during the resolution phase and there has not been any difference in the rapidity of muscle tension release in both sexes.
4. Deep and rapid breathing; hyperventilation occurs in both sexes.
5. Increased heart rate tachycardia which increases up to 180+ beats per minute during the orgasmic phase.
6. Blood pressure is elevated significantly in both males and females during sexual excitement.
7. Perspiration- Approximately 33% of both sexes will develop involuntary sweating immediately following orgasm.
8. Increased blood flow to the pelvic area occur in both sexes vascongestion causing penis erection in the male and vaginal
lubrication in the female. In addition, vasocongestion results in elevation of the male scrotal sac, and elevation of the labia major in females who have never given birth and a thickening and separation of the labia in females who have born children.

(Moser and Madeson, 1996)

3(b) patterns of sexual behaviour.

This involves the blending of your genital organ sexuality and your expressionistic sexuality, and some of these behaviour include: celibacy, masturbation, fantasy and erotic dreams, shared touching, genital contact, oral-genital stimulation, and coitus.

Celibacy may be generally defined as self-selected abstinence from sexual intimacy. Masturbation refers to erotic self-stimulation. Usually to the point of orgasm. Fantasy and erotic dreams fantasises with sexual themes, sexual day dreams or imaginary events erotic dreams are dreams whose content elicits a sexual response. Both males and females fantasies during preplay (activities, often involving touching and caressing, that prepare individuals for sexual intercourse) and coitus. Menstruation and fantasising are inseparable activities. Erotic dreams during sleep in both men and women. The association between these dreams and ejaculation resulting in a nocturnal emission (wet dream) is readily recognized in males. In females, erotic dreams can lead not only to vaginal lubrication, but to orgasm as well.

Shared touching virtually the entire body can be on erogenous zone when sensual contact between partners is involved. A soft, light touch, a slight application of pressure, the brushing back of a partner's hair, and gentle massage are all forms of communication that heighten sexual arousal.

Genital contact the act of stimulating a partner's genitals. Rubbing of the calve, including indirect contact with the clitoris, and insertion of one or more finger into the vagina are commonly employed techniques for stimulating the female. For males, rubbing, pulling and caressing the penis and scrotum are effective forms of genital contact.

Oral genital stimulation has a three basic forms among both heterosexual and homosexual couples. Fellation, cunnilingus and mutual oral genital stimulation. Fellation is one in which the penis is sucked, licked or kissed by the partner which is the most common of the 3 cunnilingus (oral stimulation of the vulva or clitoris) is that in which the vulva of the female is kissed, licked and
penetrated by the partner’s tongue. The third combines both fellatio and cunnilingus. When practiced buy by a heterosexual couple, the female partner performs fellation on her partner, while her male partner perform cunnilingus on hers.

Although various words and phrases are used to describe the act of penile-vaginal intercourse, technically the term coitus is preferred. Of all the groups of sexual behaviours described thus far, coitus (or coition) is the only practice that is limited to heterosexual couples. The penile-anal intercourse (sodomy) practiced by some heterosexual and male homosexual couples is not encompassed by the term coitus. Furthermore, no other sexual practice is as directly associated with procreation as is coitus. For many, coitus is considered the only natural and appropriate form of sexual intimacy.

A mature approach to coitus requires concern for yourself and your partner as well as commitment to communicate. Particularly for coitus, the “hit-and-run-them-into” attitude that has traditionally been the male mindset is rapidly becoming a thing of the past. Couples need to share their expectations concerning coital techniques and the desired frequency of intercourse. Even the ‘performance’ factors, such as depth of penetration, nature of body movements, tempo of activity, and timing of orgasm are of increasing importance to many couples. These factors also need to be revealed through open communication. Four basic position for coitus make above, side by side, rear entry also need to be included in the communication. Personal preferences based on such criteria as body size, physical limitations, frequency, and the need for variation and heightened eroticism will dictate the coital techniques you and your partner use.

3(c) Sexual performance difficulties and terrapins

For all the predictability of the human sexual response pattern, many people find that at some point in their lives, they are no longer capable of responding sexually. The inability of a person to perform adequately is identified as sexual difficulty or dysfunction. Sexual difficulties can be corrosive influence on a person’s sense of sexual satisfaction and on a partner’s satisfaction. Fortunately, most difficulties can be resolved through strategies of use individual, couple or group counseling resource. Most sexual performance difficulties stem from psychogenic factors. The difficulties orgasmic
difficulties, woman vaginility dyspareunia; men-impoter rapid ejaculation and dyspareunia.

Orgasmic difficulties, that is, inability to experience orgasm. Its possible causes are: anxiety, fear, guilt, anger, poor self-concept; lack of knowledge about female responsiveness; inadequate sexual arousal and interpersonal problem with partner. The therapy is counseling to improve a couple's communication; educating a woman and her partner about female responsiveness; teaching a woman how to experience orgasm through masturbation.

Vaginasmus is painful, involuntary contractions of the vaginal muscles caused by previous traumatic experiences with intercourse (rape, incest, uncaring partners); fear of pregnancy; religious prohibitions; anxiety about vaginal penetration of any kind. Counseling to alleviate psychogenic causes; gradual dilation of the vagina with woman's fingers (or dilatora), systematic desensitization exercises; relaxation training.

Dyspareunia painful intercourse is cause by insufficient sexual arousal, communication problems with partners, infections, inflammations, structural abnormalities, insufficient lubrication. Individual and couple counseling with a focus on relaxation and commutation; medical strategies to reduce infections and structural abnormalities.

Importance inability to achieve an erection, caused by chronic disease (including diabetes, vascular problems and chemical dependencies); trams; numerous psychogenic factor (including anxiety, guilt, fear, poor self-concept), medical intervention (including possible vascular surgery or the use of penis implants) and couple counseling.

Rapid ejaculation ejaculation too quickly after penile penetration premature ejaculation, cause by predominantly psychogenic in origin; a male's need that prove his sexual experiences. Counseling to free the man from the anxiety associated with rapid ejaculation, altering coital position, masturbation prior to intimacy; use of the squeeze technique as orgasm approaches.

Dyspareunia painful intercourse. Cause is primarily physical in origin; inability of the penile foreskin to retract in origin; inability of the penile foreskin to retract fully; urogenital tract infections, semen tissue in seminal passageways; insufficient lubrication. Medical care to reduce infection or repair damaged or abnormal tissue; additional lubrication.

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MARRIAGE

(a) meaning of marriage
(b) common misconception in marriage
(c) forms of marriage and alternative to marriage
(d) preparation for marriage
(e) essentials for a happy marriage

(a) Meaning of marriage: Marriage is the personal commitment of two people to share throughout their earthly existence, their feelings, thoughts, failings, and triumphs. The marriage bond is either a legal bond or a spiritual bond or both. The marriage ceremony is the formal act of two people announcing to parents, families, friends and/or the state, and possibly their God that they have joined their lives throughout life.

In the traditional view, marriage creates a foundation for the family that serves as the workshop or human emotions spiritual, physical, intellectual and social development. The husband and wife form a human bond of purpose, which unites them to their ancestors. Each spouse becomes responsible for the other for any children they might bear. Man or woman become one, each responsive to the other's needs dedicated to their chosen union.

(b) Common Misconceptions in marriage: Too often, expectations of marriage are influenced by idealized childhood memories, television programmes and romantic novels and films. The tendency in idealize love is growing stronger in the present generation and it may be necessary to bring out some misconceptions that may be associated with today's marriage.

(i) Marriage is a perpetual romance: Marriage is not an endless dreamlike romance. A life of constant physical proximity and intimacy exposes all the unromantic traits of both partners, traits that may not be apparent during courtship when couples generally share only pleasant or happy experiences. In a partnership sustained on a daily basis, one must be free and encouraged to reveal one's complete self, and not merely one's best self. Ideally, as partners grow in awareness of each other's needs and limitations, mutual
understanding and love will deepen. A failure to match expectations which readily invariably causes dissatisfaction and a sense of defeat. 

(ii) Marriage will end all loneliness: It is quite possible for two people to live in the same house and sleep on the same bed, yet be very lonely. The root source of loneliness is difficult to unearth. It may lie within the person, in a sense of inadequacy, for instance, which forces a person into self-imposed exile.

(iii) Problem or arguments will not occur: during courtship, couples tend to avoid situations likely to cause arguments. In the daily workings of married life, pressures on individuals build up. Evenings may bring out the tensions and troubles of the day’s routine. Furthermore, when individuals accept to live together, they do not discard their individuality. Conflicts are therefore to arise between individuals who have their own opinions, attitudes, likes and dislikes. To survive problems and arguments requires a mature, long-range view of the marriage relationship, a willingness to concede in nonessentials, and a readiness for calm discussion.

(iv) Togetherness is always necessary:- individuals do not forget their individualities when they marry. In fact, the most successful marriage are those in which he individual is protected and allowed to thrive. When partners seek to manage the separate identities by an all-encompassing 'togetherness' they are in danger of canceling out themselves.

4(c) Forms of marriage and alternatives to marriage
- Conflict habituated marriage
- Devitalized marriage
- Passive congenial marriage
- Total marriage
- Vital marriage

Conflict habituated marriage:- This starts with a fight even at the honeymoon. It is characterized by confrontation, disagreement and perhaps physical abuse. The central theme of this type of marriage relationship is conflict, and its continuous presence suggests that no attempt at resolution is sought. Couples
subordinated for the good of the partner or the paired relationship. Yet both the woman and the man (and the children) know that when it is possible and desirable, those subordinate goals will assume priority. Equality of opportunity exists.

**Alternatives**

Some alternatives to marriage are: divorce, singlehood, cohabitation, and single parenthood.

**Divorce** This simply means the termination of marriage. Unfortunately, marriage experts cannot provide one clear answer to the question of divorce and its increasing rate. They have rather suggested that divorce is a reflection of unfulfilled expectations for marriage on the part of one or both partners, including:

1. The belief that marriage will ease your need to deal with your own faults and that your failures can be transferred to the shoulders of one partner.

2. The belief that marriage will change faults that you know exist in your partner.

3. The belief that the high romance you had during your courtship period will be continued through marriage.

4. The belief that marriage can provide you with an arena for the development of your personal power, and that once married you will not need to compromise with your partner.

5. The belief that your marital partner will be successful in meeting all of your needs.

If these expectations seem to approximate what you anticipate through marriage, then you may find that disappointment will abound. To varying degrees, marriage is a partnership that requires postponement and subordination of personal expectations. Marriage can be complicated preposition.
Singlehood - This is alternative to marriage for adults. For some people now, being single is a lifestyle that affords the potentials for pursuing intimacy, if desired, and provided an uncluttered path for independence and self-directedness. Other persons, however, are single because of divorce, separation, death, or the absence of an opportunity to establish partnership.

Many different life arrangements are seen among singles.

- maintain separate residences and choose not to share a household with any other persons.
- Cohabitation
- Periodic cohabitation
- Platonic sharing of a household with others, that is, close associations between two people that do not include a sexual relationship.

Cohabitation - this is the sharing of a residence by two unrelated unmarried people; living together.

Single parenthood - The situation in which an unmarried young woman becomes pregnant and becomes a single parent is an emerging reality in Nigeria. It has two forms; the teenage girl becomes a single parent through an unplanned pregnancy, and a mature lady who desires single parenting plans carefully for the experience. She has explored several important concerns, including questions regarding how she will become pregnancy (with or without the knowledge of a male partner or through artificial insemination), the need for a father figure for the child, the effect of single parenting on her social life, and, of course, its effect on her career development.

4(d) Preparation for marriage

(i) Marry or not marry

This decision is a very important one, and it should be borne in mind that marriage is not for everyone, even though marriage is expected and seen as a good venture in our society. It is possible that you may not be interested in marriage because you feel that the ideal standard of congenial companionship,
maturity and communication is not attainable. Such a person is a confirmed bachelor or spinster. Others never have the opportunity to become reconciled to the single state. In preparing for marriage make up your mind which way.

(ii) **Best time to marry**

The best time to marry is between 20 and 30 years of age even though Nigerians enjoy the freedom of choosing when to get married provided it is not below the age of 16 for the girl and 18 for the boy. In most successful marriages the husband is usually a few years older than the wife, even though there exists happy marriages when the wife is older. Age is not as important as compatibility and emotional maturity.

- Let your time not be determined by your friends leaving you behind or because your mother wants you to get marriage.
- Not when education has been completed
- Not the time you are out in the family way.
- Time you possess some personal effects like clothes and some household utensils.

(iii) **Choosing a marriage partner**

It is important to emphasize her that the choice of the right partner in life will determine to what extent their children will be strong in health or weak as invalids, so you may consider the following:

- State of health and heredity diseases
- Family health (no disorder)
- Intelligence quotient (IQ) or Intellectual compatibility
- Love
- Personal health
- Parental origin/background and family
- Faith/religious background
- Respect for law and order
- Do you share common interest
- Does he/she actually desires marriage
- Is he/she capable of praising and encouraging you
- Overbearing or authoritative
- Selfishness/agreement on major issues
- Beauty/physical attraction and sexual compatibility
- Personality attributes/traits
- Age difference
- Financial resources
- Value, attitudes and philosophy of life
- Home background
- Ethnic background

(iv) Courtship

Is a period of time falling in love and getting married as a consequence. It is one of the most important, as well as the most delicate aspect in your preparation for marriage. It provides a chance for both partners to appraise each other, it may lead to mutual understanding on many matters. Yet it has many shortcomings, for during courtship individuals are usually on their best behaviour. Each tries to impress the other with his good behaviour. Each tries to impress the other with his good qualities, and the true personality of each is often masked.

Courtship should give each partner a chance to see the other in varied and sometimes different situations. It should be a time when plans for marriage can be discussed. A woman should look for at least two important qualities in her future husband. Does he have a driving ambition to succeed in his chosen field? Does he have a deep respect for women in general? A man should expect his future wife to have an earnest desire to be a true helpmate, and to know how to run a home in a manner mutually satisfactory to both partners. None should however expect to reform his/her partner after marriage. How long should courtship be? Not too long if they will not lead to emotional frustrations and unfulfilled desires. Not brief to avoid rush that destroys marriage (Namatse, 2000)

4(e) Essentials for a Happy Marriage

(i) Identifying your wreckers

Be aware of the presence of psychological factors in marital happiness; wives - nagging, not being affectionate/persistent, pretence, being selfish and inconsiderate, complaining too much, and interfering with hobbies.
Husband selfishness, untruthfulness, being inaffectionate, uncommunicative,
harsh with children, lonely, not being interested in children or the home. Other
wreckers include
- jealousy
- gossip
- financial difficulties and management
- religious bonds
- sexual adjustment/explosive
- alcohol/drugs and other habits
- Misunderstanding of in-law situation
- Discipline problem in the home.

(ii) Managing marital conflict
In all human relationships of any substance, conflict will arise from time
to time. Marriage is not an exception. Conflicts is inevitable in marriage, but the
partners can learn to manage conflict positively. The following suggestions
apply to managing conflict of all types, including marital conflict.

(a) Express emotions but don't act out negative behaviour.

(b) The couples must have good communication and conflict resolution
skills.

(c) They need to be able to communicate their needs and wants clearly,
    listen to each other, negotiate, and compromise.

All must have the ability to ask for and give support. They should
understand that they can count on each other during difficult times.

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