GIRLS' POWER INITIATIVE
GPI NIGERIA

UNDERSTANDING AND KNOWING YOUR **BODY**

A Special Manual for Adolescent Girls

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UNDERSTANDING/KNOWING YOUR BODIES

A manual for Adolescent Girls.

INTRODUCTION:

A knowledge of the human reproductive anatomy and physiology is considered important because of the physical changes that occur at puberty and the dangers posed to adolescents' health as a result of ignorance of such changes. From early adolescence, (ages 9-11) a girl begins to assume more responsibility for the care and well-being of her body. As years go by she is faced with additional responsibilities such as making decisions about her sexual behaviour and understanding body processess like ovulation, menstruation and conception.

In order to meet her present and future responsibilities, a girl needs to have a solid and accurate knowledge of her body processes.

GIRLS' BODIES:

Girls are born with their sex organs intact but in their rudimentary stages. That period when these organs start to mature is known as Puberty; meaning age of adulthood derived from the latin word 'pubertas'. Both boys and girls pass through puberty.

The changes for girls start two years earlier than boys. The changes start as early as 9 years in girls; while others do not start till they are 16 years but the changes are often complete before a girl reaches age 20.

WHAT ARE THE REASONS FOR THE CHANGES

When your body reaches a certain stage of growth, the pituitary gland, located at the base of the brain, signals the sex glands - your ovaries - to start functioning. The ovaries then signal other body parts to start growing. These signals are carried by chemical substances called hormones, that travel in the blood stream.

The two hormones special to females and causing most of the body changes at puberty are called estrogen and progesterone. They are secreted by the ovaries.

Between ages 9 - 18, a girl experiences the following changes:

- The breast will grow a little or big depending on the body shape you have inherited from your mother or women in your father's family.

- Hairs on your legs will grow thicker and darker.
  You will grow hairs under your armpit called axillary hairs.
- Pubic hairs around your vulva (that whole area in front where your legs come together)
- Increase in height - growing to what will probably be your full height by age 18.
- Hips will get broader to support development of the pelvic region and pregnancy,
- You will start to sweat more.
- You may get pimples as your skin will get thicker and the glands under your skin starts making more oil causing the pores on the skin to get clogged (blocked) with excess oil.
- Increase in body weight. Girls between ages 11-13 are generally taller and heavier than boys of the same age range.
- Waist gets narrower.
- Voice deepens - gradually and less pronounced in girls.
- Menstruation starts. This may not be regular for a few months.
- Your uterus and vagina will grow.
- Eggs inside your ovaries will start to mature each month you will be able to get pregnant.
- Your romantic and sexual feelings may become stronger - some form of sexual activity may begin e.g. sexual experimentation or masturbation. Body exploration is also common at this time.
- Prone to mood changes - may be contributed to hormonal changes, rapid physical growth, etc.
- Anxiety - start asking yourself if what is happening is normal and if it happens to other girls. You become more self conscious and develop low self-esteem arising from social prejudices against females and from sexist socialisation.

The part of the body involved with sex and making babies is called the reproductive system.

THE OUTER REPRODUCTIVE PARTS - THE VULVA:

(See Fig. 2)

The mons, labia, clitoris, urethra and vaginal opening are all part of the vulva, you can use a hand mirror to see the parts properly. Knowledge and regular inspection of these parts will enable you diagnose abnormal occurrence easily.

Mons: Is the soft fatty part that covers the pubic bone. If you

press it you can feel your pubic bone right above where the legs begin.

Outer lips or labia majora: You will not see these two flaps of skin unless you spread your legs apart. When standing, the lips fall together, protecting the urinary and vaginal openings.

Inner lips or labia minora: Lie between the outer lips and they have no hairs. They are sexually sensitive.

The clitoris: Is located where the inner lips meet, below the fatty part, over the pubic bone. It is a small knob, shaped like a flower bud. The clitoris has many nerves and is extremely sensitive to touch. The purpose of the clitoris is for sexual arousal and sexual pleasure. Touching and stroking it and the area surrounding it helps to get a female sexually excited.

The clitoris has two parts - the head or gland and the shaft.

- The head or gland - this is the most sensitive part.
- The shaft - this part contains spongy tissue and extra blood rushes into the spongy areas making the clitoris a little bigger during sexual excitement.

The urethra - is a small tube or slit that lies below the clitoris. It is about 1½ inches long, you urinate through this opening as it leads directly to the bladder.

The vaginal opening: This is larger than the urethral opening. It is the outside end of the vagina. You can see your vagina, menstrual flow, vaginal discharges and babies come out through this opening. You may notice your **hymen** while looking at your vaginal opening, this is a thin skin or special membrane that partly covers the vaginal opening. Its purpose is to give the vaginal opening extra protection.

In many cultures and to many people, the hymen is a symbol that a young woman is still a virgin; that is, she has never had sexual intercourse with a man, but, this is not true as some girls are born with no hymen at all. Some girls even have a naturally large vaginal opening. It is possible to stretch or break the hymen

during childhood play e.g vigorous skipping, bicycle riding, using the seasaw, masturbation, etc. First intercourse is not necessarily bloody as is often exaggerated in romatic novels and in some cultures that premise virginity on blood at first intercourse.

The perineum: This is the area lying between the end of the inner lips and the anus. The muscles in this area stretch during child-birth.

The anus: Is below the perineum. Body wastes leave the body through the anus as it leads to intestine where body wastes are stored.

The Vagina: This connects the vulva to the other reproductive organs inside the body. It is lined with folds of skin that stretches allowing the vagina to change shape to fit whatever is inside-fingers, tampoons, penis or a baby.

The walls of the vagina secretes a liquid called mucus. The mucus is the vaginal natural way of cleaning itself, the mucus is also slightly acidic, which helps it in preventing infection.

The degree of moisture depends on factors such as your age, where you are in your monthly cycle, or whether you are sexually excited. The natural mucus increases when you are sexually excited, this is to protect the walls of the vagina and the skin of the penis. Your vagina does not go straight up your body, it goes towards your back, ending after a few inches at the cervic so that nothing that goes into the vagina like tampoons can get lost in the rest of the body.

THE INNER REPRODUCTIVE PARTS

Apart from the cervix (mouth of the womb) you cannot see or feel the rest of the internal reproductive organs because they are right inside the body. The organs are:

- The uterus (womb)
- Two fallopian tubes or egg tubes; and
- Two ovaries

The Uterus or womb is the size of your fist. It is about 3 inches long and has thick stretchy walls. It is inside the womb that a foetus grows during pregnancy.

Cervix - mouth of the womb is the lower part of the uterus. In the centre of the cervix is a small dimple called the **os**, it is as wide as the mouth of a straw. This is the opening to the uterus. Blood comes out of the **os** during menstruation. During child-birth it opens up wide enough to allow a baby to pass through it. No penis or finger can go through the cervix because of its size, it protects the womb, but germs and sperms can pass through, so make sure that everything that goes into your vagina is clean. Hence you need to use contraceptives if you have sexual inter-course and do not want to get pregnant.

The fallopian tubes are two tubes leading out from the ends of the uterus. They are about 4 inches long and as narrow as a fine needle in width. The outer fingerlike ends are called fimbriae.

The ovaries: The ovaries are located on the sides of the womb. They are connected to each other by tubes, the ovaries hold thousands of eggs. Females are born with all the eggs they will ever have in their life time. The eggs are stored in little pockets called follicles. During puberty, one egg matures each month and leaves the ovary, the fimbrae guides it into the fallopian tubes.

From birth to about 9 - 10 years, the ovaries are inactive but between 12 - 15 years the eggs are fully matured and one ripens each month in most cases.

The ovaries also secrete the two important female hormones estrogen and progesterone.

How the Reproductive system work:

The two ovaries release eggs without any definite pattern. They sometime alternate in releasing the eggs or one ovary will release continuously for months.

The eggs burst from the ovary and, with the help of the fimbrae, (fim-bra-ye), gets into the *fallopian tube*, moving through the tube into the uterus. When a mature egg leaves the ovary and gets into the fallopian tubes **Ovulation** is said to occur. Sometimes two eggs can be released at once.

THE MENSTRUAL CYCLE

All women menstruate unless they are pregnant, nursing a

baby, very underweight, ill or have some problems with their reproductive system. The menstrual cycle has to do with reproduction, it is nature's way to shelter and nourish a developing embryo.

There is no way of knowing when the first menstruation will occur, a lot depends on your health and when women in your mother's or father's family began theirs (that is your genetical composition). The first time menstruation occurs for a girl, is called menarche (mer-nar-key). It is usually between 12-18 years though some girls menstruate earlier. It continues for the next 35-40 years and stops between the ages of 45 - 55 years. The end of menstruation is **menopause**, when you stop menstruating, it means you can no longer bear children.

The 1st day of one period of menstruation to the first day of the next one is called a **menstrual cycle**. The length of the average menstrual cycle is 28 days, it is normal, however, for the cycle to be longer or shorter than 28 days. Many girls do not get a period every month when they begin menstruating, they may even skip several months. A normal cycle can be as short as 21 days or as long as 32 days due to such factors as: excitement, exercises, ill health, change of weather, climate, stress, anxiety, etc.

The menstrual cycle is counted from the first day of the menstruation, this is called **Day 1.** After menstruation (Day 5 averagely) the pituitary gland sends a signal to the ovary and several eggs begin to ripen, but, usually only one matures. While this is going on, the ovary sends out the hormone estrogen and signals the uterine lining to become thicker with blood and tissue. About Day 14, the ripened egg breaks out of the follicle and rises to the surface of the ovary, this is called **ovulation.** You can only get pregnant during ovulation, and it occurs 14 days to the start of the next menstruation. Many girls menstruate a few times before ovulation starts, but some ovulate before menstruation, that is why it is possible to get pregnant before they begin menstruating.

The ruptured follicle produces the hormone progresterone causing the uterine lining to continue its buildup of blood and tissue. If the egg has not been fertilized or joined by the sperm from the male, the estrogen and progesterone signals to the uterus to start getting weaker and weaker. The eggs disintegrate and the lining of the womb breaks down and leaves the uterus, the blood and tissue

pass through the os and out of the vagina. This is called menstruation, menstrual blood or period.

Predicting your menstrual cycle:

To count the days in a menstrual cycle, begin with the first day of the menstrual bleeding day 1, the last day of the cycle is the day before the bleeding starts again.

To determine approximately when ovulation occurs, subtract 14 from the total number of days in the cycle. Remember that you can not predict your cycle length until after that particular cycle.

BODY SIGNS

You may notice some body signs before your menstrual period, thus:

1. You may get a pain or cramp in your back or abdomen.
2. Often your breast feel heavier and lumpier and tender after ovulation before menstruation.
3. Headaches or backaches.
4. You may not sleep well
5. You may get pimples.
6. Feel depressed or cranky
7. At the time of ovulation, your vaginal mucus is runny and wet. Closer to your period it gets thicker and dryer.

What to use for menstrual flow:

Do not use toilet paper. It is not healthy as it may cause infections. We recommend sanitary pads. These are rectangular pads of cotton with plastic linings either between the cotton or underneath. If you have no money to buy pads, use clean cloth, wash with hot water and dry before and after each use.

Body Hygiene:

When menstrual blood is exposed to air, it develops a stale, unpleasant odour. You need to bathe at least twice a day during menstruation and change your pads or absorbent cloth regularly.

Your feaces have germs in them that can give you serious infection if they reach your vagina and urethra. It is important to wipe yourself off from front to back, after urinating or stooling, so that bacteria do not get into the vagina.

During sex play or foreplay; be careful if a finger or penis has been in or on the anus, do not put it or allow it to be put into your vagina without first cleaning with soap and water. You do not need deodorants or talcum powder in your vulva. They may irritate you and cause soreness. Remember the vagina has its own natural cleansing process.

Menstrual side effects:

If you suffer menstrual cramps or pain, certain things can make you feel better.

1. Watch what you eat: If you know when your period is due,cut down on salty foods before and during your menstral period. Salty foods make your body retain water adding to your feeling of headiness and swelling, tension and depression.

2. Also cut down on sugar, white flour, soft drinks, chocolate, coffee, junk food, cakes, pies, breads, etc. Eat lots of vegetables and fruits.

3. Keep off alcohol especially wine and beer as they tend to increase cramping and headaches.

4. Exercise throughout the month and get enough sleep. This will make you feel better and will relieve your symptoms.

5. A hot-water bottle may help.

6. A mild analgesic e.g aspirin, may bring fast relief.

Problem signs

Since the mind and body work together, when you travel, are worried, lose or gain weight, get sick, they might affect your period. You will notice that sometimes it comes later, or it might not come at all, but sometimes, however your body is telling you that something is wrong. In that case you require a check-up to find out what the problem is.

Some symptoms that are signals that something might be interferring with the normal functioning of your body and necessitates a check-up are:

- A very heavy flow lasting more than 4 - 5 days.
- A severe menstrual cramp or pain lasting more than 3 days each month.
- A sudden irregularity in your cycle that is not due to sickness, travelling, weight gain or loss.
- Bleeding in the middle of your cycle or at any time other than when your period is due.

When Pregnancy can happen

Apart from vaginal intercourse, pregnancy can happen in the following ways;

- Touching the vulva with the penis: This is because during sexual excitement, the penis leaks semen that has thousands of sperm in it, so pregnancy can happen if any sperm gets on the vulva and swims inside the vagina.
- Regardless of her position during vaginal intercourse, a woman can become pregnant, whether she is sitting, standing or lying down.
- It does not matter if the penis is withdrawn before ejaculation.
- Even if it is a girl's first time.
- Even if a girl has not started menstruating.
- During menstruation, given the shifts in menstrual cycle for each individual.

HOW CAN PREGNANCY HAPPEN?

Putting the penis inside any person's body is called sexual intercourse. It is called vaginal intercourse if the penis goes into the vagina.

After ejaculation, the sperm swims up the vagina through the uterus into the fallopian tubes. If an egg is in one of the tubes, a sperm can join it. This is called fertilization or conception. Only one sperm fertilizes an egg. The egg and sperm then form a single cell which then divides into more cells. This growing collection of cells is called pre-embryo.

It takes about six days for the fertilized egg to move from the fallopian tube to the uterus or womb, it attaches itself to the uterine lining. This is known as **implantation.** It takes about 8 weeks after fertilization for the embryo to grow into fetus. It is this fetus that becomes a baby after nine months.

A fetus does not breath or eat inside the woman's body, it gets nourishment from her umbilical cord that connects the fetus to her womb. As the fetus grows, the woman's womb stretches and her belly becomes bigger and bigger.

After nine months, the muscle of the woman's uterus begin to push the fetus out through the vagina and out of the woman's body. This is called **labour.** Once it is born, the fetus is called baby.

Sometimes labour lasts only a few hours, sometimes it lasts a day or more. Sometimes it becomes necessary to remove the baby by a surgical operation called ceasarean section.

Multiple births could occur if more than one egg had been fertilised. It is also possible for twins to have different fathers if different sperm cells fertilized the eggs. This could happen if a woman had vaginal intercourse with two men on the same day.

Sometimes fertilization and implantation can occur in the fallopian tubes. This is called **ectopic pregnancy.** This could be

caused by a sexually transmitted disease, although it is not always the only cause. It is very serious and requires immediate surgery.

Not all fertilized eggs or fetus become babies. Some do not attach to the uterus, they leave with the menstrual flow. Sometimes the fetus die in the uterus and leave through the vagina, this is called **miscarriage** or **spontaneous abortion.** A fetus can be born dead, this is called **still birth.**

SOURCES

1. Ruth Bell and other co-authors (1988). **CHANGING BODIES, CHANGING LIVES**

2. P. P. F. A. (1976). **HOW TO TALK WITH YOUR TEEN ABOUT THE FACTS OF LIVE.**

3. Fola Richie-Adwusi (1992). **THEIR TOMORROW TODAY.** pp 18-24

Fig 1

five stages of ***breast*** *development*

CULLED FROM: THE WHAT'S HAPPENING
TO MY BODY? BOOK FOR BOYS.
NEW **EDITION BY LINDA MADARAS WITH DANE SAAVEDRA.**

Fig 2

Normal Vulva Before Genital Mutilation

Female External Sex Organs

CULLED FROM: FEMALE GENITAL MUTILATION
A TRAINING COURSE IN WOMEN'S HEALTH
BY INSTITUTE FOR DEVELOPMENT TRAINING.

Fig 3

The endometrium at four stages of menstrual cycle: the end of menstruation, ovulation, about five days after ovulation and menstruation **NineReimer**

CULLED FROM: THE NEW OUR BODIES, OURSELVES
A BOOK BY AND FOR WOMEN
BY: THE BOSTON WOMEN'S HEALTH BOOK COLLECTIVE

CHART 1

21- Day Menstrual cycle

MON	TUES	WED	THUR	FRI	SAT	SUN
		* ~~1~~	~~2~~	~~3~~	~~4~~	~~5~~
6	7	8	9	~~10~~	~~11~~	12
13	14	15	16	17	18	19
20	** ~~21~~	22	23	24	25	26
27	28	29	30	31		

In a 21 day cycle the ovulation would occur between the 10th & 11th day from the 1st day of the menstrual cycle.

*** 1st day of menstruation**

**** 1st day in the next cycle of 21 day cycle**

CHART 2

28-Day Menstrual Cycle

MON	TUES	WED	THUR	FRI	SAT	SUN
		*~~1~~	~~2~~	~~3~~	~~4~~	~~5~~
6	7	8	9	10	11	12
13	~~14~~	15	16	17	18	19
20	21	22	23	24	25	26
27	**~~28~~	29	30	31		

In a 28 days menstrual cycle begining from the 1st of the month the Ovulation day would be the 14th day in the month

*** 1st day of one cycle**

**** 1st day of next cycle**

CHART 3

31 - Day Menstrual Cycle

MON	TUES	WED	THUR	FRI	SAT	SUN
		* 1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31 **		

In a 31 days cycle ovulation would occur between the 15th & 16th day from the 1st day of the menstrual cycle.

*** First day of menstruation**

**** First day of next menstruation cycle.**

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APPENDIX

BIRTH CONTROL FOR TEENAGERS

METHOD	WHAT IS IT?	MY CHANCES OF NOT GETTING PREGNANT
"NO" ABSTINENCE	* A decision not to have sexual intercourse	100% effective
CONDOMS	* Also known as "rubbers." * Fits over erect penis and catches sperm when the man "comes" or ejaculates	If you are very careful each time-98% *If you are not very careful each time-88%* If used with foam-more than 99%
DIAPHRAGM	* Small rubber cup fits inside vagina, over the opening (cervix) to the womb (uterus). Used with contraceptive cream or jelly that kills sperm. * Must be fitted by doctor or nurse	If you are very careful each time-97% *If you are not very careful each time-82%*
FERTILITY AWARENESS METHOD	* Woman looks for and charts several body signs-body temperature, vaginal mucus, periods. These show when she can get pregnant and when she can't. *Can use condom, foam, sponge or diaphragm during fertile time. *Special classes needed to learn.	If you are very careful each time-80-98% If you are not very careful each time-76%
FOAM, SUPPOSITORIES, CREAM & JELLY	* Made of chemicals that kill sperm. *Put into vagina before intercourse.	If you are very careful each time-95-97% *If you are not very careful each time-79%* If used with condoms-more than 99%

BIRTH CONTROL FOR TEENAGERS (Continued from page 21)

METHOD	WHAT IS IT?	MY CHANCES OF NOT GETTING PREGNANT
IUD (Intra-uterine device)	* Small device put inside womb by a nurse or doctor *Not sure now it works. May stop fertilized egg from implanting and growing in womb.	95-98%
NATURAL FAMILY PLANNING	* Woman looks for and charts several body signs-body temperature, vaginal mucus, periods. These show when she can get pregnant and when she can't. * No intercourse during her fertile time. * Special classes needed to learn.	If you are very careful each time-80-98% *If you are not very careful each time-75-80%.*
PILL	* Pills made of artificial hormones * Stops ovaries from releasing an egg each month. * Must be prescribed by a doctor.	If you are very careful each time-more than 99%. *If you are not very careful each time-97%.*
STERILIZATION	* Operation that makes a person unable to have a baby. * Permanent. * Both men and women can be sterilized.	Almost none (99.6%).

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