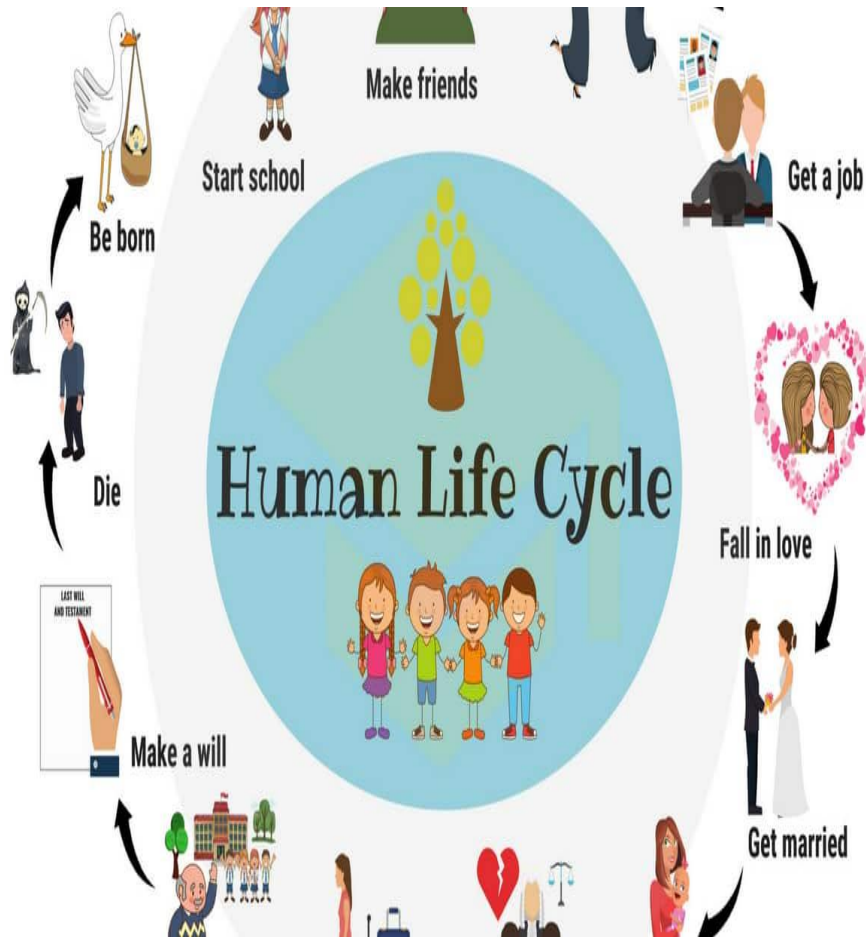


LIFE SPAN DEVELOPMENT



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LESSON-1

ISSUES AND SCIENTIFIC CONCEPT ASSOCIATED WITH CONCEPTION

New life begins with the union of a male sex cell and a female sex cell. These sex cells are developed in the reproductive organs, the gonads. The male sex cells, the spermatozoa (single is spermatozoon), are produced in the male gonads, the testes, while the female sex cells, the ova (singular-ovum), are produced in the female gonads, the ovaries.

Male and female sex cells similar are in that they contain chromosomes. There are twenty-three (23) chromosomes in each mature sex cell, and each chromosome contains genes, the true carrier of heredity. A gene is a minute particle which is found in combination with other genes in a string like formation within the chromosome. It has been estimated that there are approximately 3000 genes in each chromosome. These are passed on from parent to offspring.

Male and female sex cells also differ in two important ways. First, in the mature ovum there are 23 matched chromosomes while in the mature spermatozoon there are twenty-two matched chromosomes and one unmatched chromosome which may be either X or Y chromosome.

The second way in which male and female sex cells differ is in the number of preparatory stages of development they pass through before they are ready to produce a new human being. While all sex cells, male or female, must go through two preliminary stages – maturation and fertilization – while female cells go through three preliminary stages – maturation, ovulation and fertilization.

Maturation:- Maturation is the process of chromosome reduction through cells division (meiosis) One chromosome from each pair goes to a subdivided cell, which in turn splits lengthwise and forms two new cells. The mature cell, which contains 23 chromosomes, is known as a haploid cell. Maturation of sex cells does not occur until sex maturity has been attained, following the onset of puberty in both boys and girls.

In the case of spermatozoon, there are 4 new cells, the spermatids each of which is capable of fertilizing an ovum. In the division of the ovum, one chromosome from each pair is pushed outside the cell wall. This new cell is known as a polar body. Three (3) polar bodies are formed in the process of division. Unlike the spermatids, the polar bodies cannot be fertilized, while the fourth cell, the ovum can. If, however the ovum is not fertilized, it disintegrates and passes from the body with the menstruation flow.

Division of the chromosomes during the maturational process is a matter of chance. Any possible combination of chromosomes from the male and female may be found in a new cell after division. It has been estimated that there are 16,777,216 possible combinations of the 23 chromosomes from the male and the twenty-three from the female sex cells.

Ovulation:-

Ovulation is a preliminary stage of development limited to the female sex cells. It is the process of escape of one mature ovum during the menstrual cycle. It is believed that the two ovaries alternate in producing a ripe ovum during each menstrual cycle which is the largest cell in human body about 1/175, inch in diameter.

In non-identical multiple births, two or more mature ova are released from the ovaries. Whether they are released from the same or from both ovaries is still not

known nor it is known why more than one mature ovum is released during each menstrual cycle, which is the usual pattern.

After being released from one of the follicles of the ovary, the ovum finds its way to the open end of the fallopian tube nearest the ovary from which it was released. Once it enters the tube, it is propelled along by a combination of factors; cilia, or hair like cells which line the tube; fluids composed of estrogen from the ovarian follicle and a mucus from the lining of the tube; and rhythmic, progressive contraction of the walls of the tube; when the length of the menstrual cycle is normal, approximately 28 days, ovulation occurs between the fifth and the twenty third days of the cycle, with the average on eleventh day.

Fertilization:-

Fertilization, which occurs at the time of conception, is the 3rd stage of development preliminary to the beginning of a new life. It normally occurs while the ovum is in the fallopian tube. More specifically, it is generally believed that fertilization takes place within 12 to 36 hours and usually, within the first 24 hours after the ovum has entered the tube. Sperm cell is tadpole shaped having a oval head and tail, tail gives energy for swinging movement to reach ovum. During coitus, or sexual intercourse, spermatozoa are deposited at the mouth of the uterus. Through strong harmonic attraction, they are drawn into the tubes, where they are aided in making their way up by rhythmic muscular contractions.

After a spermatozoon has penetrated the ovum, the surface of the ovum changes in such a way that no other spermatozoon can enter. After the sperm cell penetrates the wall of the ovum, the nuclei from the two cells approach each other. There is a breakdown in the membrane surrounding each nucleus and this allows the two nuclei to merge. Thus the species number of chromosomes, forty-six (46), is restored, with one half coming from the female cell and the other half coming from the male cell.

LESSON-2

PREGNANCY, PRENATAL DEVELOPMENT

The time from conception to birth i.e. prenatal period is usually divided into 3 phases.

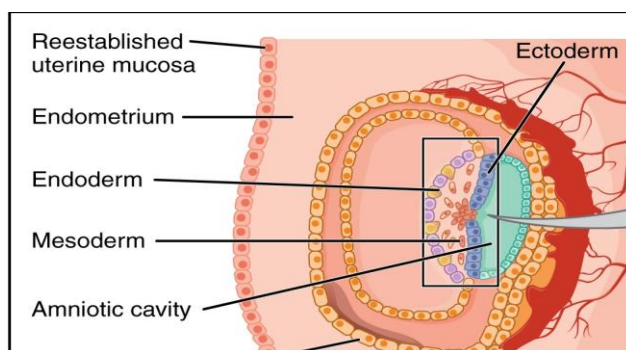
The 1st phase, called the period of the ovum, lasts from fertilization until implantation, the time when the zygote or blastocyst, becomes firmly attached to the wall of the uterus. This period is about 10 to 14 days long.

The 2nd phase, from 2 to 8 weeks is called the period of the embryo. This period is characterized by the cell differentiation as all the major organs begin to develop.

The last phase, from 8 weeks until delivery (at around 40 weeks), is called, the period of the fetus and is characterized mainly by growth rather than by the formation of new organs.

(1) Period of ovum:- This period lasts from 0 to 14 days. It starts from fertilization and formation of zygote. Zygote takes probably 3 to 5 days to move down the fallopian tube into the uterus.

It is firmly attached to the wall of the uterus. Zygote is formed of outer layer and inner mass. Outer layer is called Trophoblast and inner mass called Trophoblast & inner mass called Embryo. In course of time the trophoblast develops into accessory tissues which will nourish and protect the embryo. This embryo develops into baby. During the first few days after conception, the embryo gets its food from the material in the middle layer of the original female cell. The food is exhausted gradually as the embryo moves down the fallopian tube into uterus.



Schematic representation of an ovum at an early stage of implantation in the uterine wall.

Placenta:

The attachment to the uterus which will be joined to the baby by the umbilical cord.

While these development taking place, small burrlike (finger like) tendrils (structure) develop around the outside of trophoblast. These tendrils, or little finger like structures are the beginning of placenta. Within a few days these tendrils will attach the embryo into the inner lining of the uterine wall or mother's womb by which blood and other nutrients come to embryo (they fasten the embryo to the inner lining of the uterus). Therefore, this period is also called Germinal Period. In the mean time, the uterus itself has began to undergo changes in preparation for receiving the fertilized ovum. At the time of implantation, extensions of the tendrill from the trophoblast reach into blood spaces that have formed within the maternal tissue. At this time, the period of ovum comes to an end. During this period the fertilized egg develops by cell division and about $1/5^{\text{th}}$ of an inch in diameter.

2. Period of Embryo :-

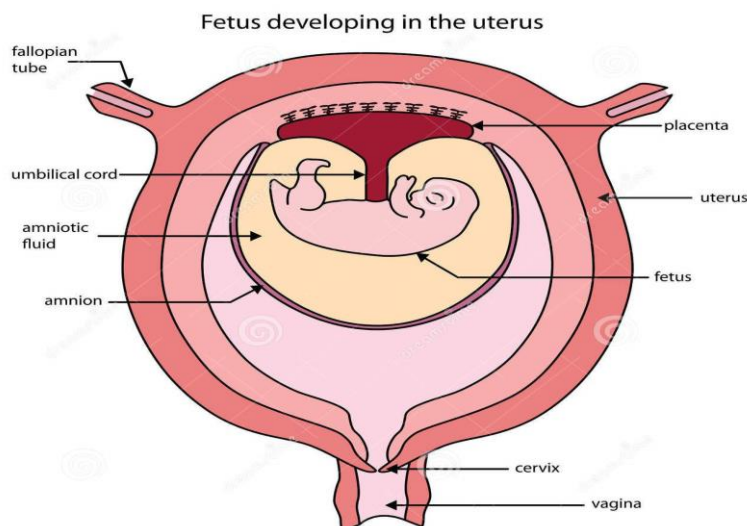


Diagram representing the relationship between the uterus, the membrane, and the embryo during embryonic period.

Now the first primitive structures of the individual slowly begin to form. During this period development is very rapid. The size of embryo is about ¼” to 2 inch.

During this period the embryo is divided into 3 layers.

- (i) Ectoderm or epidermis which develop outer layer of skin, hair, nail, teeth, skin, gland, sensitive cells and nervous system.
- (ii) Mesoderm develops to muscles, circulatory system, excretory system and skeleton.
- (iii) Endoderm develops to lining of entire gastro-intestinal tract i.e. trachea, bronchi, lungs, salivary glands, thyroid glands etc.

While the inner cell mass is differentiated into embryo; the outer layers give rise to two fetal membranes called chorion and amnion. Chorion is the outer and amnion is the inner membrane. These together with a third membrane derived from the uterine wall of the mother form a sac filled with watery fluid known as amniotic fluid which acts as buffer to protect the embryo from shocks, temperature, adhesion (between embryo and mother), from the membrane etc. (in which baby floats).

Simultaneously, other fetal sacs are formed, the most important one is called umbilical cord. It extends from embryo to the section of the uterine wall where uterus and chorion are joined. This area is called placenta.

The umbilical cord is the life line of the embryo. Two arteries carry blood from the embryo to the placenta and a vein carries blood to the fetus or embryo from the placenta. These two blood streams (mother and baby) are separated by cell wall of the placenta, a semipermeable membrane. It permits gases, salts, nutrients like sugar, fat, protein, waste products of the baby to go out but blood cells do not pass through it. There is no direct connection between nervous system of mother and embryonic nervous system. Hence health of mother can directly affect the health of the fetus.

(2) Period of fetus :- (8th week to 30 weeks).

The third phase extends from end of the 8 weeks till birth. During this time, the various body systems which have been laid down in rudimentary forms earlier, become quite well developed and begin to function. By end of 8½ weeks, the fetus floats in the amniotic fluid. (it becomes capable of responding to touch stimulation). The head extends and body enlarges and motor functioning become more and complete. The reproductive system begins to develop. The gonads (Ovaries and testes) initially appear as a pair of tissues in both sexes.

Time table of pregnancy (Development of Embryo and Fetus in 280 days or 40 weeks period.).

(1) 1st Months (Weight – 1gm, length 9mm) 4 weeks. Conception occurs and there is no way of knowing on the first day that it has actually occurred. The fertilized egg is curved like a bean and implants itself in the lining of the uterus.

(2) 2nd month (weight – 4gm, Length - 3cm) (8 weeks)

Embryo is 1 inch long. It is most sensitive period in the integrity of nervous system. Face, mouth, eyes and ears are clearly developed. Development of muscles, cartilages and sex organs. Morning sickness may development. Easy fatigue, extreme sleepiness, sensitive breasts, frequent urination are some of the symptoms marked with women.

(3) 3rd month (12 weeks)

By the end of 12 weeks the fetus is about 3 inch long and weighs about 60 gms. Placenta is well developed. The fetus resembles a human being but the head is disproportionately large, Spontaneous nervous movements of arms / legs start as muscles are well developed. Eyelids and nails have began to form and sex can be distinguished. The breast begins to enlarge a ring around nipple may darken.

(4) 4th month (16 weeks).

The embryo (fetus) begins to move in the bag of water. It is 3" to 4" long and weighs about 200-300 gms. The sex is evident Nasal septum and palate fuse. Hair appears on the head and body. The hands become capable of gripping in addition to closing. The mother can feel fetal movement. Heart beat of fetus is stronger. Pregnancy shown on the stomach and gain in weight at the rate of ½ to 1 kg per month of mother.

(5) 5th month of pregnancy (20 weeks)

Sometimes between the 18th to 20th weeks of the foetus life, the doctor begins to hear its heartbeat when he listens through his stethoscope; about the same time the expectant women also begin to feel the fluttering movement as the fetus stretches his arms and legs. At 20 weeks, the foetus is about 20cm long and weighs about 298 gm. The abdomen of the pregnant woman is getting large enough to become noticeable.

(6) Sixth to Ninth months of pregnancy

From the 6th month, the foetus grows very fast in length. Until the eighth month, the skin of the fetus is wrinkled and red. He looks somewhat like a little old man. During the last two months his body fat is formed and he becomes more rounded and filled out. From the 6th month until shortly after birth, his skin is covered with soft fuzz. A soft white creamy secretion called vernix begins to collect on his body. His movements become real thumps by the sixth month. The foetus may change his position many times. Sometimes he lies on one side, sometimes on the other, sometimes with head up. From 24th week, it is possible to distinguish different parts of the foetus.

(7) 7th Month – (28 weeks) : (Viability capable of developing and surviving without outside help). Development is most rapid. It demarcates the zone between viability and nonviability. Child's nervous, circulatory and other systems have become sufficiently matured for functioning. Length is 35.4 cm and weight is 1200gm. If born may survive but requires expert care.,

During this time the fetus will take one position either with his head up or down, and will probably stick to this position until he is born. There may be time when the expectant woman does not feel any movement. Some doctors think that the foetus has periods of walking and sleeping, just as he will have them after birth.

(8) 8th month – (32 weeks)

Weighs about 1600gms and 40.6cm length. If born, 50% chance of survival is there.

(9) 9th month – (36 weeks)

The infant gets much more weight and strength, its skin colour improves. The foetus moves about the uterus. In 95% of cases it grows head down. It is now getting ready for passage through the birth canal and expulsion through the mother's body.

(10) 10th month (40 weeks) – 280 days

Body is fully developed and born. Normally a body is born in 280 days or 40 weeks or 9 months from conception.

A common method of predicting date of birth:

Take the date in the subsequent years of the first day of the last menstrual period, subtract 3 months from it and add one week. For example – If the last period had ended on 1st July, the baby can be expected around 8th April. But one should be prepared for the arrival of baby at least 2 weeks in advance.

Placenta : It is a semipermeable membrane. It permits gases, salt, and other substances of small molecular structure. It does not permit blood cells to pass. It permits nutrients like sugar, fat, protein elements etc. It also permits waste products from embryo like Co₂ and other metabolites. It also permits vitamins and drugs like nicotine, alcohol etc. It also permits vaccines and germs of the disease (Rubella, Diphtheria, Typhoid, Syphilis etc.)

Lesson-3

SYMPTOMS OF BPREGNANCY, WARNING SIGNALS OF PREGNANCY

On an average, the pregnancy tests for 266 days i.e. 280 days from the beginning of the last menstrual period. Less than half of the babies are born within a week of expected time. A week or two earlier or later is common.

Signs and symptoms of pregnancy:

The signs and symptoms usually are divided into three categories. It should be remembered that the dates given for the appearance of various symptoms and sign cannot be exact.

- A. Presumptive signs of symptoms.
- B. Probable signs and symptoms (that can be proved)
- C. Positive signs (to take as true without examination or proof).

A. Presumptive signs and symptoms:-

- i) **Amenorrhoea:-** Discontinuation & monthly periods is generally the first indication to a woman that she is pregnant.
- ii) **Breast Changes:-** Fullness and tenderness of the breasts are noticed at the 6th week and they gradually become harder.
- iii) **Morning sickness:-** This is more often a nausea than actual vomiting. It actually happens in early mornings. It becomes severe between 6 to 10 weeks and passes off by the end of the 3rd month of pregnancy.
- iv) **Quickening:-** It is the term given to mother's sensations when she feels the child's movement. This sign is of much greater value in a multipara than in a primigravida (a woman pregnant for the 1st time)
- v) **Bladder irrigation:-** This is due to congestion and appears about the 8th week of pregnancy.

B. Probable signs of symptoms

- i) **Enlargement of the abdomen:-** The abdomen begins to show enlargement at the 16th week of pregnancy, when the uterus first comes into contact with abdominal wall.
- ii) **Enlargement of the uterus:-** The uterus during the pregnancy is prominently enlarged owing to the great increase in the length of its muscle fibres, the growth of certain number of new fibres and increase in the connective tissues and blood vessels.
- iii) **Softening of the cervix:-** Softening of the cervix is experienced first on 8th week of pregnancy. It is not so well marked in a multipara because the fibrous tissues are present in the cervix due to a previous laceration. Due to increased vascularity, the cervical glands become more active and check the mucus and operculum is formed in the cervical canal. As pregnancy advances, the cervix becomes Jelly-like in consistence.
- iv) **Intermittent uterine contractions:-** These uterine contractions are painless and can be felt from 16th week of pregnancy by placing the palm of the hand on mother's abdomen. In the earlier months, the contractions occur about every 20 minutes and therefore escape notice unless the hand is put on the abdomen.
- v) **Uterine souffee:-** This sound has a blowing character . It is due to the blood rushing through the enlarged uterine arteries. It is best heard with aid of a stethoscope placed a little above the pubes to the left of the middle line. It coincides with mother's pelvis.

C. Positive signs:-

- i) **Foetal heart sounds:-** The foetal heart sounds can be heard after 6th month. The rate varies from 120 to 140/minute. They are usually best heard in the middle and after 28th week. The location may change because of the position of foetus.
- ii) **Foetal movement:-** Foetal movements can be felt from the 24th week by placing the hand on mother's abdomen.
- iii) **Foetal parts:-** From 24th week, it is possible to distinguish different parts of the child-head, back and limbs.
- iv) **X-ray evidence:-** The first positive physical sign is the detection of foetal bones about 16th week. Later the presentation of foetus can be

determined and its death is shown by overlapping of the bones of the vault of the skull. There is evidence that repeated doses of x-rays have an adverse effects on the foetus, leading among other things to malformations. So, x-rays should not be used until the later months of pregnancy.

Duration of pregnancy:- On an average, labor begins 280 days or 40 weeks, from the first day of the last period.

Lesson-4

PRENATAL ENVIRONMENTAL INFLUENCES, AMNIOCENTESIS

The “normal” pattern of prenatal development can occur only when the organism and its environment fall within that might be thought of as normal limits. There are many variations in prenatal environment and the pressures to which one fetus is subjected may differ greatly from those exerted on another. Some of the important prenatal environmental factors are as follows:-

1. **Age of mother:-** The favourable period of child bearing is 20 to 35 years. If age is too young to bear the child, it develops anaemia, toxemia (protein in urine) and baby will suffer from or will have low birth weights which is a major cause of infant mortality as well as neurological defects and childhood illness.

Women over 35 years have a lower fertility rate than those in their twenties leading to experience illness during pregnancy and longer and more difficult labor, miscarriage, under weight or still born babies.

If the age of mother is above 40 years, there is a greater risk of having a child with a chromosomal defect which can be detected by a Amniocentesis.

2. **Maternal nutrition:-** The expectant mother should have an adequate diet (balanced) which can be sufficient for her own good health and for her baby (to deliver a healthy infant). Because, we know that the growing fetus's food supply comes ultimately from the mother's blood stream, via the semi permeable membranes of the placenta and the umbilical cord.

If the diet is not balanced or sufficient one, mother suffers from anaemia, toxemia, miscarriage, premature birth, prolonged labor and still births.

Babies born to mother with nutritionally deficient diets are likely to have low birth weights, to suffer from impaired brain development, to be less

resistant to illness (such as pneumonia and bronchitis) and to have higher mortality rate in the 1st year of life. Severe maternal malnutrition may impair the child's intellectual development in addition to having adverse effects on physical development.

3. **Drugs:-** Intake of drugs by the expectant mother has an adverse effect on the development of fetus.

For example- mother's intake of "thalidomide" drug cause the gross anatomical defects of the limbs of certain group of babies.

Many other drugs are now suspected of producing birth defects when taken during pregnancy like some antibodies, hormones, steroids, anticoagulants, high dose of aspirin, stilbestrol, dose of sodium during labor etc.

Recently it is found that the intake of drug stilbestrol during pregnancy to prevent miscarriages, may affect female child to suffer from cancer in vagina during adolescence.

Barbiturate drugs:- Cause respiratory problems in children during labor period etc.

4. **Fetal alcohol syndrome:-** Heavy drinking by a pregnant woman can produce what is known as fetal alcohol syndrome (i.e. 3 ounces of absolute alcohol per day i.e. about 4 or 5 drinks). The symptoms include or it will cause:- retarded prenatal and post natal growth, premature birth, mental retardation, physical malformation, sleep disturbances and congenital heart disease.

1 to 3 drinking per day during early pregnancy will have harmful effects on baby.

A drink of one ounce per day will cause low birth weight, physical difficulties, developmental delays and spontaneous abortion.

5. **Nicotine and caffeine:-** Smoking by pregnant women retards physical growth and lowers the new born's birth weight and resistance to illness.

It also increases the chances of spontaneous abortion, premature birth and may possibly affect long term physical and intellectual development and flow of mother's blood to transport oxygen to fetus becomes low.

[From nicotine, cigarette is prepared and from caffeine, tea and coffee are prepared]

Excessive intake of tea, coffee and cola during pregnancy may increase the chances of miscarriage.

Other drugs:- The rise in drug addiction among some groups of young people has led to an increased number of addicted fetuses and newborns. Babies born to chronic users of heroin and methadone characteristically weigh less, have higher rates of illness and often show symptoms of drug withdrawal such as restlessness, irritability, tremors, high pitched excessive crying, respiratory distress, fever and in some cases convulsions.

Narcotic addicted mothers are likely to suffer from malnutrition, anaemia and infectious diseases. So every effort should be made to discourage the use of narcotics during pregnancy.

6. **Radiation:-** Another potential source of birth defects is radiation (x-ray) of the mother during pregnancy, whether for treatment of pelvic cancer, for diagnostic, or from atomic energy sources, occupational hazards etc.

It is clear that radiation can cause a full range of damage to unborn children, including death, malformation, brain damage, increased susceptibility to certain forms of cancer, shortened life span and mutations in genes whose effects may not be felt for generations. Radiation between fertilization and the time of ovum implants in the uterus is thought to destroy

the fertilized ovum. The greatest danger of malformations comes between the second and sixth week after conception. The effects of x-ray may be less dramatic later in pregnancy, there are still risks of damage, particularly to brain and other body systems.

- 7. Maternal diseases and disorders during pregnancy:-** In early pregnancy, the placenta acts as a barrier against some harmful agents (exa-larger organisms, such as syphilitic spirochetes and some bacteria). But it allows many substances to reach the unborn child. Some of these substances are positive in their effects. Antibodies produced by the mother to combat infectious diseases are transmitted to the fetus, producing immunity at birth and some months thereafter. Other substances including viruses, micro-organisms and various chemicals may be extremely negative.

Viral diseases in the mother such as; cytomegalovirus disease, rubella, chicken pox, hepatitis are dangerous during embryonic and early fetal periods. One of the most serious viral diseases during the 1st 3 months of pregnancy is rubella, which may produce heart malformations, deafness, blindness or mental retardation.

Currently, the rapid spread of the genital herpes virus among young adults poses another danger. Infection of the fetus with this virus usually occurs late in pregnancy-probably most often during delivery and can result in severe neurological damage; when infection occurs several weeks prior to birth, a variety of congenital anomalies can result.

Infection of the fetus with spirochetes from a syphilitic mother is not infrequent, though, fortunately, the placenta barrier does not permit passage of the spirochetes until after the fourth or fifth month of pregnancy. Transmission of the spirochetes may be prevented if treatment of a syphilitic mother begins early in pregnancy. Otherwise, these spirochetes may produce

miscarriage or a weak, deformed or mentally deficient newborns. In some cases, the child may not manifest syphilitic symptom until several years later.

Another disorder during pregnancy is 'toxemia' characterized by high blood pressure, rapid and excessive weight gain and retention of fluid in the tissues. Prompt treatment usually ends the danger. If the disorder continues to progress, it can lead to convulsions and coma, resulting in death in about 13% of mothers and about 50% of their unborn infants. Children whose mothers had significant toxemia during pregnancy run an increased risk of lowered intelligence.

- 8. The Rh. factor:-** The term Rh factor stands for a chemical factor present in the blood of approximately 85% of people. The presence or absence of this chemical factor makes no difference in a person's health. But when an Rh-positive man is married to an Rh-negative woman (about 1 chance in 9), there can sometimes be adverse consequences for their offspring. If their baby has Rh-positive blood, the mother's blood may form antibodies against the foreign positive Rh factor. During the next pregnancy, the antibodies in the mother's blood may attack the Rh-positive blood of the unborn infant. Such destruction can be limited, resulting only in mild anemia, or extensive, resulting in cerebral palsy, deafness, mental retardation or even death.

Fortunately, a preventive control for the Rh problem has been developed. The blood of the new born infant is tested immediately after birth (by a blood sample from the umbilical cord). If an Rh-positive child has been born to an Rh-negative mother, the mother is given a vaccine to seek out and destroy the baby's Rh- positive blood cells before the mother's body begins producing antibodies. The red cells of later children will not be attacked because the blood of the mother was never allowed to develop the antibodies.

- 9. Maternal emotional states and stress:** Despite the fact that there are no direct connections between the maternal and fetal nervous systems, the

mother's emotional state can influence fetal reactions and development. This is true because emotions such as rage, fear and anxiety bring the mother's automatic nervous system into action, liberating certain chemicals (such as acetylcholine and epinephrine) into the blood stream. Furthermore, under such conditions the endocrine glands, particularly the thyroid, secrete different kinds & amounts of hormones. Cell metabolism is also modified. As the composition of blood changes, new chemical substances are transmitted through placenta, producing changes in the fetus's circulatory system.

These changes may be irritating to the fetus. One study noted that bodily movements of fetuses increased several hundred percent while their mothers were undergoing emotional stress. Infants born to upset, unhappy mothers are more likely to be premature or have low birth weights, to be hyperactive, irritable, squirming and to manifest difficulties such as irregular eating, excessive bowel movements, gas pains, sleep disturbances, excessive crying etc.

10. Teratogenic agents affecting embryo: It is any substance that causes a change in the genetic code (determining individual character). This in turn processes abnormalities in growth & behavior of the baby. The teratogenic agents environmental or genetic affect genes and in protein synthesis. The genes may become damaged. Enzymes may become totally destroyed.

LESSON-5

COMPLICATIONS DURING PREGNANCY

Many women go through pregnancy without any difficulty. Others suffer from a few minor discomforts, while some face serious major disorders.

Minor disorders of pregnancy & precaution to overcome

1. **Mouthwatering:-** By eating small amount of dry foods frequently will stop mouth watering after a short time.
2. **Morning sickness:-** This occurs after three months of pregnancy and passes away subsequently. The doctor should be consulted if vomiting continues. It is better to move about slowly instead of staying on the bed throughout the day. It is better not to keep stomach empty and something to be eaten frequently. Five or six meals a day may be more useful than the large ones. She should continue her usual work and activities.
3. **Constipation:-** It is caused by the pressure of the uterus on the intestines. It can be controlled by eating more fruits and green leafy vegetables. Laxatives be only taken after advice of doctor. Daily 8 to 10 glasses of boiled water should be drunk. In order to form regular habits, she should go to the latrine at a particular time every day.
4. **Muscle cramps:-** It is caused due to pressure of the baby on the large blood vessels. The pressure causes a slowing up of circulation in the legs. These muscle cramps can be relieved by rubbing the legs gently and by bending the foot forward. Hot applications may also be helpful.
5. **Heart burn:-** Heart burn is a kind of indigestion . It is a common occurrence during the last three months of pregnancy. When the fetus presses against the stomach and interferes with digestion. It is a pain caused due to indigestion and may be accompanied by regurgitation of bitter fluid from the

stomach. Taking half a glass of milk half an hour before every meal may help. Taking of soda and other medicines be avoided.

6. **Backache:-** It is caused due to increased weight and pull on the back muscles. She should take more rest.
7. **Insomnia:-** A pregnant mother should have 8 hours sleep at night. Sleeplessness is due to badly ventilated or over-crowded room. It may be also due to foetal movements. A broad binder round the abdomen to support the additional weight may add to mother comfort. Heavy meals late at night should be avoided. A cup of hot milk before bed time may induce sleep.
8. **Haemorrhoids:-** These are also called piles- dilated blood vessels in the rectum. They result from constipation during pregnancy. Application of cold compresses or inserting haemorrhoidal suppositories in the rectum cures it.
9. **Discharge of mucus from vagina:-** It is a problem during pregnancy in some cases due to more discharge of mucus. If the discharge varies from its normal, pale, yellow colour and watery consistency and contains blood (fresh/old), a doctor should be consulted.
10. **Circulation of blood in the legs tends to slow:-** Due to enlarged size of the uterus, the circulation of blood in the legs tend to slow. The enlarged viscose veins appear just below surface of legs. They are more common in subsequent pregnancies. The feet get swollen and the feet may be put up and an elastic circular bandage may be put on or around the feet, if trouble continues.
11. **Urination:-** Urination may be frequent during the early and later stages of pregnancy. In order to avoid, getting up in the middle of the night because of frequent urination, it may help to cut down on fluids after 6 P.M.

- 12. Pelvic Pains:-** It comes from the stretching of the abdominal muscles. They are quite infrequent and short lasting. Comfortable clothing and foot wear will help to control it. Adequate rest is necessary.
- 13. Shortness of breath:-** It is caused during the last month of pregnancy when the enlarged uterus presses against the lungs. For remedy, the expecting mother should lie down with her shoulders and head on a raised pillow.

Major discomforts/disorders during pregnancy

Besides the above minor disorders, there is possibility of certain major disorders occurring during pregnancy leading to complications. These are:-

1. Bleeding before the foetus is viable.
2. Bleeding due to the pregnancy.
3. Severe pelvic pains/cramps.
4. Severe and persistent headache.
5. Swelling of face, ankles, feet, fingers, hands (Oedema)
6. Painful burning urination.
7. Severe constipation
8. Flush of fluid from vagina.
9. Spots in front of the eyes or any visual disturbances.
10. Failure to feel movement of foetus for 3 to 4 days.
11. Chills with fever.
12. Exposure to german measles.
13. Excessive nausea and vomiting.
14. Fits

All these above symptoms are very serious in nature and the doctors should be immediately contacted. All serious complications of pregnancy are preceded by at least one or two or even more symptoms.

Apart from above complications, the expectant mother may suffer from the following disorders during pregnancy:-

1. Ante partum haemorrhage
2. Pelvic deformities
3. Radiation
4. Miscarriage
5. Toxemia
6. Pyelites
7. Premature birth
8. Chronic & acute diseases
9. Drugs effect
10. Maternal syphilis
11. The Rh factor

1. **Antepertum haemorrhage:-**Bleeding anytime after the 28th week of pregnancy is called, “antepartum haemorrhage. It is due to placenta previa and accidental haemorrhage. It may have an adverse effect on the baby such as malformation, premature birth and foetal mortality.

2. **Pelvic deformities:-** Pelvis becomes deformed when it is altered in shape or size. This may be due to genetic causes or due to some diseases of bones like osteomalacia ad rickets.

3. **Radiation:-**Excessive exposure to radiation has dangerous effects on developing foetus. Most common radiation is abdominal x-ray done during pregnancy. It may cause malformation of the foetus. Therefore, it should be avoided during first 4 months of pregnancy.

4. **Miscarriage:-** It is the birth of a foetus before it is old enough to survive. It occurs in one pregnancy out of ten. It normally occurs before 6 months of pregnancy-generally in 2nd & 3rd month. Over exertion, falls, lifting of heavy

weights may cause miscarriage. Bleeding is first warning followed by spotting and abdominal cramps. One should take immediate rest. Saving of all tissues, blood clots should be done for examination by doctor. Sometimes a minor operation is necessary when a part of embryo is expelled out.

5. **Toxemia:-** It is a complicated disorder develops during second half of pregnancy. There is great increase of blood pressure, albumin content in the urine and abnormal gain in weight. Also these may be swelling of face around eyes, hands, fingers, feet, ankles and persistent headache and abdominal pain. Taking salt free foods and taking rest completely is a must.
6. **Pyelitis:-**It is an infection on upper urinary passage. The symptoms are chills, fever, pains at the back of the waist and pain/burning when urinating. It disappears after medical treatment.
7. **Premature birth:-** It means birth of a baby before his full term is preceded by a sudden gush of fluid from the vagina meaning that water bag around the uterus had ruptured. It can be caused due to toxemia or other complications.
8. **Chronic and acute diseases:-**Any chronic disease suffered in the past or any acute disease developed during pregnancy must be notified to the doctor. Such diseases are diabetes, rheumatics heart disease, kidney disease, T.B. or syphilis which require special treatment during pregnancy.
9. **Drugs effects:-**Certain drugs taken by mother may affect foetus adversely. For example, 'Thalidomide', a hypnotize drug may cause deformed hands and feet of babies and affect mostly during 4-8 weeks of pregnancy.
10. **Maternal syphilis:-** It is a venereal disease mostly transmitted sexually. Suffering mother will cause her uterus and foetus affected. This occurs after 4 months of pregnancy. As a result, the following complications may arise.
 - i) Still birth

ii) The baby may be born with congenital syphilis,. Therefore, mother should be injected 10 daily injections of procain penicillin.

11. The Rh factor:- The Rh factor is a substance found in the R.B.C. mostly in 85-90% of human beings depending on race. If Rh factor is present, then person is called Rh +ve. If Rh factor is not present, that person is called Rh-ve. Rh+ve father and Rh-ve mother give birth to Rh+ve baby. It is responsible for forming anti bodies which enter into the baby and destroy his own R.B.C. A disease called Erythroblastosis fetalis is caused. Once an affected baby takes birth, all the babies after that will also be affected.

LESSON-6

CARE DURING PREGNANCY

Pregnancy is a natural, normal, physiological process. The extent of hazards and risks during pregnancy is determined by woman's own psychology towards pregnancy. So a pregnant woman must be taken care of as sincerely as possible. Many women are anaemic during pregnancy due to insufficient red blood cells. Anaemia is a serious factor in the high maternal death rate in India. Due to rationing and shortage of certain food stuffs in the modern age, the diet of pregnant woman has become a matter of great concern.

i) Diet – During pregnancy, a woman has to take food necessary for the maintenance of her own health and also the body of the developing foetus. The mother must have foods that are rich in protein, iron and calcium and all the vitamins. The diet of a woman during pregnancy must be one that contains all the essential food stuffs and at the same time without imposing any unnecessary strain upon her excretory organs.

ii) Furthermore, vitamins play a very important part not only in the maintenance of the health of the mother, but also in the well being of the child in future. Vit. 'C' can be supplied in the form of orange or any other citric fruit at a low price. Vit. A & D tablets also contain Iodine which are supplied free of cost to the pregnant and lactating mother through women's organization by CARE and UNICEF (CARE – Cooperative for American Relief Everywhere, UNICEF – United Nation International Children's Emergency Fund).

Milk :

Milk is a rich source of protein and calcium which is needed to build the baby's teeth and bones. Milk also provides Vit. B complex. Daily 1 litre of milk is needed for a pregnant or lactating mother.

Fruits :

Fruits and vegetables should be eaten daily. Raw carrots, radish, tomatoes, some citric fruits and leafy vegetables supply, the vitamins needed by the mother and the baby.

Body Building Foods :

Body building foods like fish, poultry, lean meat, groundnuts, beans and other protein vegetables are necessary. Liver and kidney are especially rich in blood forming materials. Butter supplies Vit. A which is needed for health.

Three eggs a week will furnish necessary iron to form blood.

Energy yielding foods like par-boiled rice, chapatti and bread are needed to keep a good body balance. She should drink 6 to 8 glasses of water every day.

On the whole the diet should be adequate and balanced. It should provide the following nutrients.

- a) Calories – 3,300 Cal.
- b) Protein – 55 gms
- c) Iron – 40 gms
- d) Calcium – 1 gm

Some Instruction to Mother**I) Diet during 1st trimester (3 months of pregnancy)**

During this period mother suffers from nausea and even lose weight. In order to overcome the problems of indigestion, small meals should be taken frequently. To prevent vomiting, there should be addition of thiamine and vitamins B complex.

II) Diet During Last Six Months

Unless a woman is underweight, her daily quota of calories should not be increased. During last 3 months, 20% energy requirement of the body is required, so there is need to increase quantities of carbohydrate and fat foods without replacing high protein foods, vitamins and minerals.

Dietary requirement of expectant mother

Sl. No.	Description	Sedentary work		Moderate work		Heavy work		Pregnant	Lactating
		Veg (in gms)	Non-Veg (in gms)	Veg (in gms)	Non-Veg (in gms)	Veg (in gms)	Non-Veg (in gms)	Gms	Gms
1.	Cereals	300	300	350	350	475	475	50	100
2.	Pulses	60	45	70	55	70	55	-	10
3.	Green leafy vegetables	125	125	125	125	125	125	25	25
4.	Other vegs	75	75	75	75	100	100	-	-
5.	Roots & tubers	50	50	75	75	102	100	-	-
6.	Fruits	30	30	30	30	32	30	-	-
7.	Milk	200	100	200	100	200	100	125	125
8.	Fats & oil	30	35	35	40	40	40	10	20
9.	Sugar & energy	30	30	30	30	40	40	10	20
10.	Meat & fish	-	30	-	30	-	30	-	-
11.	Eggs	-	30	-	30	-	30	-	-
12.	Groundnuts	-	-	-	-	40*	40*	-	-
13.	Calories	-	1900	-	2200	-	3000	300	700

* Additional 25gms of fats and oils can be included in the diet in place of groundnuts.

(III) Care of the Nipples

Inverted and flat nipples make breast feeding difficult. This can be prevented during antenatal period by advising mothers to massage the breasts from the ribs towards the front and bring out nipples. Nipples should be kept clean. The secretion must be wiped away.

3. Exercise and Rest

If pregnancy is proceeding normally, any kind of physical exercise within reasonable limits is permissible i.e., walking, driving, gardening, light housework, bending etc are good and strengthen stomach muscles. At the point of fatigue, it should be stopped. Violent physical exertion is to be avoided and sometimes result is miscarriages. 8 hours sleep at night and 2 hours rest after mid day meals should be advised.

(4) Personal Cleanliness

A daily bath should be taken where possible, but if this cannot be managed, the vulva should be carefully washed daily as the secretions from this region are much increased during pregnancy.

(5) Bowels

During pregnancy, the bowels are apt to be sluggish. This type of constipation should be avoided by regular intake of green leafy vegetables, fruits and extra fluids. Castor oil (Purgatives) should be avoided.

(6) Sexual Relation

Sexual relations are undesirable during pregnancy period and should be avoided particularly by women who had miscarriages during the 1st 14 weeks. Coitus should be forbidden during last 6 weeks owing to the possibility of harmful bacteria being introduced in to the vagina.

(7) Care of the Teeth

The teeth are subjected to decay during pregnancy. By taking required amount of milk which is chief source of calcium, consuming optimum quantity of green leafy vegetables and consulting dentist can help to avoid damage to teeth.

A woman is expected to:-

1. See the doctor regularly :- Once in a month regularly & twice or more in later stages per month.
2. Undergo all tests advised by doctor.
3. Report promptly to the doctor for any unusual signs or symptoms of diseases or any sudden change in her condition.
4. Little dangers like swelling of hands, feet, waist, wrists etc., abdominal and chest pain, bleeding from vagina, blurred vision, bladder troubles, chills and fevers, exceptional fatigue are to be promptly attended to by doctor.
5. Gush of fluid form vagina indicates breaking of water bag be intimated to doctor.

LESSON-7

Child birth process/phases of birth and problems associated with birth

The birth process is often referred to as labour. In this stage the hardest physical work a woman may ever do. A complete series of hormonal changes initiates the process. This is divided into 3 stages.

1. Dilation and Effacement of the cervix

The first stage of labour or birth process is the longest stage, lasting on an average, 12 to 14 hours in a first birth and 4 to 6 hours in later birth. Stage 1 covers the period during which two important processes occur namely dilation and effacement. The cervix (the opening at the bottom of the uterus) must open up (dilation) and also flatten out (effacement). At the time of actual delivery of the infant, the cervix must normally be dilated at about 10cm.

A good deal of the effacement may actually occur in the last week of pregnancy. The contractions of stage-1 of labour which are at first widely spaced and later more frequent and rhythmic, complete both process.

First stage itself includes two phases. In the early phase (latent phase) contractions are relatively far apart and are typically not too uncomfortable. In the later phase which begins when the cervix is about half way dilated (5cm) contractions are closer together and are more intense. This phase continues until the cervix is dilated to 8 cm. Finally, last 2 cm of dilation are achieved during the transition phase. In this phase, in which the contractions are closely spaced and strong, is the shortest phase. Following the transition phase comes the urge to help the infant out by pushing.

2. Delivery of the baby:-

Stage-2 lasts from half an hour to two hours. Strong contractions of the uterus continue but they do not do the entire job. The most important factor is the

natural urge that mother feels to squeeze and push. Once the cervix is fully open the baby is ready to be born. This is the actual delivery. When the baby's head moves and pass through the stretched cervix into the birth canal and finally out of the mother's body.

3. Delivery of the placenta:-

The third stage of labour is the delivery of placenta (also called the after birth and other material from the uterus).

Kinds of births

- 1. Normal or spontaneous:-** The baby emerges from the mother's body normally.
- 2. Breach:-**The baby's buttocks or legs come out first followed by trunk and then the head. There is usually a need to instruments. The mother needs heavy medication.
- 3. Transverse:-** The baby's body lies cross wise in the uterus. Unless the position can be changed, the baby must be brought into the world with instruments.
- 4. Instrument:-** When the baby is too large to pass through the mother's birth canal or when the position of the baby is not correct, the baby must be brought into the world by use of instruments.
- 5. Caesarian:-** When normal child birth might be difficult doctors may decide to operate the mother. Her abdomen and uterus are cut open to bring the baby into the world.
- 6. Precipitate:-** The birth is very speedy. There is a need for the use of instrument or time to medicate the mother.

Problems associated with birth

- 1. Anoxia:-** Reduced oxygen supply .

2. Haemorrhaging:- Fetus blood vessels breaks in the brain. It affects the supply of oxygen to nerve cells of the brain.
3. Low birth weight:- Those below 2500 gm (about 3.3 pounds) are called as very low birth weight.

a) Some infants have low birth weights because they are born too soon. These are usually called preterm infants (births before 37 weeks gestation)

b) Small-for –date baby:-These infants are usually light in weight. They may even completed the full 38 weeks gestation but weigh under 2500 gm.

Low birth baby have high infant mortality, lower level of responsiveness at birth, high risk at respiratory distress in early weeks. Lower Iqs, smaller size, problem in school.

Prenatal Environmental influences

Although prenatal environment is more constant than the environment outside world, there are many factors which can affect the developing embryo and fetus. Some of these factors are-

Teratogens:- Teratogen refer to any environment agent that causes damage during the prenatal period.

Harm done by teratogens depends on many factors.

- Amount and length of experience makes a difference. Larger doses over longer time periods usually have more adverse effects.
- Genetic makeup of the mother and child play an important role. Some individuals are better able to withstand harmful environments.
- Effect of teratogens vary with the age of the organism at the time of exposure. For exam- damage is more harmful during sensitive period. Sensitive period is a limited time span in which a part of the body or a behaviour undergoes rapid development.

During the period of zygote before implantation, teratogens rarely have any impact. If they do, the mass of cell dies. The period of embryo is a sensitive period

when serious defects are most likely to occur, since the foundations for all body parts are being laid down. During the fetal period damage caused by teratogens is usually minor. Some organs such as brain, eye and genitals can still strongly affected.

Teratogens not only have physical damage, these may also have psychological damage. For exam- a defect resulting from drugs the mother took during pregnancy damages not only child's development, can also change reactions of others to the child. As child grows older, parent-child interaction, peer relations and opportunities to explore environment may also suffer. These experience can have negative impact on cognitive, emotional and social development. Variety of teratogens which can cause damage during the prenatal period are radiation, maternal infections, chemicals and drugs like thalidomide, stilbestrol, tetracyclines, warfarin, phenytorin etc.

COMPLICATION DURING DELIVERY

1. Complication during delivery :- (The birth process and its consequences).

The ease or difficulty with which a baby is born and how quickly the new born begins to breathe can affect the infant's well-being. One major danger associated with birth is hemorrhaging, caused when very strong pressure on the head of the fetus breaks blood vessels in the brain.

Another is failure to begin to breathe soon after being separated from the maternal source of oxygen. Both hemorrhaging and failure to breathe affect the supply of oxygen to the nerve cells of the brain and produce a state called anoxia (Lack of oxygen). The neurons of the central nervous system require oxygen; if they are deprived of oxygen, some cells may die, which can cause later physical and psychological defects. If too many neurons die, the infant may suffer from serious brain damage, or in extreme cases, death or paralysis of the legs or arms or an

inability to use the vocal muscles. Anoxia in a newborn is more likely to damage the cells of the brain stem than those of the cortex. When the cells of the brain stem are damaged, motor defects are likely to occur. The child may show a paralysis of the legs or arms, a tremor of the face or finger or an inability to use the vocal muscles by which the child may have difficulty in learning to speak.

The general term 'cerebral palsy' describes a variety of motor defects associated with damage to the brain cells, possibly as a result of lack of oxygen during the birth process.

Anoxic infants appear more irritable to show more muscular tension and rigidity than do normal infants during the 1st week. Infants with mild anoxia score lower on tests of motor development. At age 3, they perform less well on tests conceptualization. By age 7 or 8, behavioural differences between normal and mildly anoxic children are generally small and their IQ scores are equal.

2. **Baby's heart beat** :- Labour time is most risk to the baby as during contraction of uterus, supply of oxygen is temporarily cut off. The doctor keeps a cheek intermittently gently by listening the heart beat of the baby. If the baby is in trouble, a caesarean operation is normally carried out.
3. **Birth defects**:- These are congenital defects. These may be inherited from parents due to illness, toxic condition of pregnant mother, abnormal condition in the uterus etc. Mongolism, cleft palate, colour blindness, haemophilia, congenital heart disease are some common birth defects.

Types of delivery :-

1. Overdue birth :-

When spontaneous labour does not occur at the expected time, then delivery is induced either by puncturing the bag of water or injecting medicines / hormones to get uterine contractions going.

2. **Caesarean birth** :- This is a major abdominal operation and is taken up when the normal birth of the child becomes impossible. It is done after the recommendation of doctor when he fears that normal birth is risky for the baby. The baby is removed from the uterus by surgical operation. This is done when the mother is ill or the pelvic region is too small or placenta entwined around the neck of the baby.

3. **Breach delivery** :- The buttocks of the baby appears first instead of head. This is slower, requiring episiotomy.
 4. **Forceps delivery** :- In the 2nd stage of labour, the baby may have to be delivered quickly – if there is an alteration in the baby's heart beat. The doctor does it with help of obstetrical forceps under local anesthetic, the blades can be slipped around the head to guide the baby out (cut); forceps are so made that they will not injure head.
- 5. Infant and maternal mortality :-**
The mortality rate refers the death rate either per hundred or per thousand persons.
1. **Neonatal mortality rate** :- it refers to death of children within one month of birth. Its rate is calculated as no. of deaths per 100 children born alive.
 2. **Infant mortality rate** :- It refers to death rate of children in the 1st year of life. It is calculated per 1000 children born. In India it is 120-150 per 1000 live births. In developed countries it is less than 20 per 1000.
 3. **Child mortality** rate refers to the number of death per 100 children of school going age in the first five years.
 4. **Maternal mortality** rate refers to the no. of deaths among women directly due to pregnancy or child birth occurring during pregnancy or within 40 days of delivery. In India 3 per 1000 live birth delivery.

Preparation for the birth of the baby

Antenatal care does not mean only preparation, blood or urine test and pelvic measurements. Besides all these important aspects of antenatal care both physical and mental preparation of the mother is very important too. These include :-

i) Discussion with the health personality

Sufficient opportunity should be given to the expectant mother to have a free and frank discussion with either a doctor or public health nurse or health visitor on different aspects of delivery. This will go in a long way in removing her fears about delivery.

ii) Select a clean area for delivery:-

The area of delivery must be cleaned and washed with detergent and phenyl. It helps to prevent the child and mother from infection as well as fever.

iii) Make the delivery area lighten and tiry

Always get the home ventilated. Light helps the midwife to check properly. Moreover the mother and baby need light and air for the better health.

iv) Keep old clothes ready for use :-

Cloth to be used during delivery must be cleaned. Old absorbant sarees, sheets and other things should be washed in cold water and dried in sun and should be folded and kept for future use.

v) Keep boiling water ready for delivery

The doctor will need and use in boiling to sterilize scissors, forceps etc. This will help to prevent tetanus and other infections.

vi) Have a warm blanket ready to receive the baby

The new baby has to make adjustment with the outer environment after his birth. As his mother body is very warm (101⁰F) and the air outside is very cool, the new born must be kept very warm to prevent feeling of chill and pneumonia.

Precaution:

- i. By providing extension education to the mother and health and family welfare to the family.
- ii. Timely maternity
- iii. By following at the surplus observation of the health ruller.
- iv. By raising economic status of the family.

Maternal mortality:

It indicates the no. of death of mother directly due to child birth and occur during pregnancy or 42 days after delivery.

In India, m.m – 3/1000 lives

In developed countries, it is less than 0.5.

Causes :

- (1) Malnutrition
- (2) Toxaemia
- (3) Anaemia
- (4) Haemorrhage
- (5) Abortion
- (6) Syphilis
- (7) Accident of labour

Preventions :

Most of these causes are preventable by providing antenatal and postnatal care or services. Most women are intelligent and interested in everything that makes them happy particularly during the maternity days. They are ignorant only because they have never had the chance to lower scientific about them.

Superstitious ignorant

Absence of adequately trained midwife and maternity centre are few in rural areas.

Infant and maternal mortality

Neonatal mortality is a death of children with one month of birth and its rate is worked out as the no. of such deaths out of every 100 children been alive.

Causes of neonatal mortality

1. Prematurity
2. It accounts for about 50% of death.
3. Asphyxia – suffocation
4. Birth injury
5. Congenital abnormalities
6. Jaundice

Infant mortality :

Death of children within one year of age.

No. of death per 1000 live births in 1 year. Average infant mortality in India is around 80% to 90% / 1000 lives.

In developed countries, it is quite less. Infant mortality is regarded as most sensitive for the health of community.

Causes of infant mortality:

- i) Sickness of the baby due to premature birth.
 - ii) Bad nutrition
 - iii) Dysentery, diarrhoea, whooping cough and diptheria.
 - iv) Lack of addition food that builds and protects the body during rapid growth.
 - v) Intestinal complaints.
- The little boy cannot conquer germ. This is the chief reason why same dies in India. Uncleaned food and water are the main causes.

LESSON-8

CARE OF THE NEW BORN BABY

The aim of care at birth is that the baby's basic need i.e. establishing breathing, adequate nutrition, body temperature and avoiding contact with infection are met. Also it will be important to help him in adjusting to the new life outside the mother's womb. As soon as he is born, doctor or the midwife rumpuses him by the feet-head downward to drain blood and fluid from his nose, mouth and stomach. Before cutting the cord, it is made certain that it has started pulsating.

In this way the infant gets about 100ml of additional blood. This will stand him in good state afterwards. It is advisable to make a note of the blood vessels in the naval cord. A single artery is usually associated with some congenital malformation.

Right place to sleep :-

A cradle is used for the bed of the baby. Though there is no hard and fast rule, it is of distinct advantage to place the baby in a prewarmed cot to sleep. This cot should be kept by the mother's bed side so that she can curdle fundle and feed him as and when needed. The mother can also keep a watch on the baby.

Babies birth:

As well as the baby is concerned, the next job is to clean and dressing up. His skin before going bath has patches of white substances on it (vernix) specially in the skin folds. The amount varies with the prematurity of the babies. The baby is first cleaned by baby oil or olive oil which removes the vernix and other diet. Then given a bath and powdered with talcum. A powdered dressing and bandages are placed on the cord to protect it from infection and soiling. First undress the baby and rub him over with oil. Some mothers like massaging the baby which she enjoys. It also develops his muscle tone. Then apply soap all over except to the baby's face which should be wide to the corner with a towel. The eyes should be cleaned with a moist cotton swap and the nostril with a cotton wick place him in the tip with one hand support his head holding him out of the water. With the other hand splash

water onto him. Then wrap him in a towel, wipe him dry and sprinkle talcum liberally over him specially in the skin folds and nappy area.

Clothing :-

Babies are sensitive and quickly affected by rough or sticky substances, heat, synthetic materials and tight clothes. Babies cloth should be loose and yet not too big. In summer, they should consist of a soft cotton vest and a diaper. Baby clothing should be durable, easily washable and should require little ironing. It is easier to put on and take up clothes which bottom up at the back. Plastic diapers should be avoided especially during humid hot weather as they irritate baby's skin.

Winter clothes should include a warm vest, a woolen coat woolen booties, a bunnet (cap) is option. A woolen shawl should be used to wrap the baby along with the sheet. Wool should not touch the baby's skin if possible as it irritates the soft skin. Try to avoid plits, fussy, frills, buttoas which may poke the baby's body.

Nappies :-Two types

- i) Cotton fabric nappies – Washable and ready to use again and again.
- ii) Readymade nappies – disposable and sterile and available from the sophisticated market.

How to fold :

- (1) Triangular** - Fold the nappy in a triangle and put the triangle in baby's buttock. One triangle should lie in between the leg; other corner should lie round the baby's waist. Join the two corners with the safety pin in the front.
- (2) Oblong nappy** – Put two ends at the back, bring two other corners to the front between the legs and join at the corner of end of the back.
- (3) Twisted nappy** :- More or less same as oblong nappy. Here a twist is given before bringing up in between the legs and join the ends of the back of the leg and safety pin.

Change the nappy as soon as it gets wet. Never rub infants back with the nappy, rather wash or sponge it with a cotton piece. Don't forget to dry the nappy area. Sprinkle powder on it before putting on another nappy. It is a good habit to change the nappy before and after each and every feeding session.

Washing of nappy:

Before washing the nappy, remove the stool by brushing it through running water, washing with soap and water is enough. But as an extra precaution, the washed nappy may be put in the dettol solution. Squeeze the water out and let the nappies dry out under sun and finally iron them. Dettol helps to prevent occurrence of the so called nappy or diaper rash, a difficult problem in some babies.

Babies hygiene:-

Eyes :-

The baby's eyes should be cleaned at least once in a day with moist cotton swab with white secretion collected in the corner. Kazol and other such things should not be put into the baby' eye.

Ears :-

Babies start hearing soon after birth but they hear low pitched sound than high one. This is why they recognize father earlier than mother. Don't get into the habit of pouring warm oil into his ear canals. There will be accumulation of more wax.

Nose :-

It is important to keep the nose clean else a blocked nose may cause undue crying and breathing difficulty and the nostril should be cleaned gently with a wick of cotton wool dipped in water. Baby sneezes frequently with no apparent reason. In this case, no treatment is required for cold.

Mouth :-

Baby's mouth does not need any special attention in these early days. Occasionally white deposits occur in the tongue which is sometimes because of thrush.

Umbilical stump:-

There are many ways of looking after the umbilical stump.

- (1) It should be cleaned with a little spirit after daily bath and leave it open.
- (2) Another way is; clean it, apply antiseptic powder, tie or bandage around the abdomen.

The cord usually separates from 6 to 10 days. In summer, it comes out earlier and in winter it comes out later on. A daily bath is to be avoided if you take the baby home before the cord is separated. Gently clean with oil with special attention to the creases and nappy areas are all that is required. Nails of fingers should be attended carefully. It should be kept short which may require cutting in every 3 to 4 days. Else he may cause ulcer in the mouth and scratches and sour (sores) on the skin.

CARE OF PREMATURE BABIES

Prematurity means a condition in which the new born infant is relatively unfit for extra uterine life because his prenatal development has not been completed. There is a lack of development or a retardation in development which has been caused by shortening of the period of the fetus during prenatal life.

Criteria of prematurity:- There are 2 (two) criteria in determining whether the new born infant is premature or not.

- 1) The length of the gestation period:** - When the gestation period is estimated to have been between 28 to 38 weeks 280 days long, the infant is considered to be premature.
- 2) Birth Size :-** This is judged either in terms of weight or in terms of relation of weight to length. This criterion is most commonly used than the length of the gestation period. When the infant at birth weights 2500 grams or less, he is considered to be premature.

Causes of Prematurity:-

There are 2 causes of prematurity.

- 1) **Spontaneous** :-It occurs when the age of the mother is below 16 years or more than 35 years. The known causes include poor socio-economic status, chronic and acute systematic maternal disease, antipartum hemorrhage, cervical incompetence, bicornuate uterus, multiple pregnancy and congenital malformation.

- 2) **Induced** :- The labour is often induced before term when there is impending danger to fetal life in uterus e.g. due to smoking by mother, maternal *diabetes mellitus*, placental dysfunction, fetal hypoxia, antipartum hemorrhage etc.

Management or Care of Premature Babies :-

Premature Baby :- A premature baby is one who is relatively unfit for extra uterine life because his prenatal development has not been completed due to the shortening of the period of fetus during prenatal life.

The care of premature babies under different regions are as follows :-

Management:- Advances in perinatal care including fabrication of a variety of electronic gadgets cannot compare with the unique security and tender care provided for the fetus by the with the unique security and tender care provided for the fetus by the utero-placental unit.

1. **Labor room** :- When a preterm baby is anticipated, the delivery should be attended by a senior doctor, fully prepared to take care the baby. The delayed clamping of cord helps in improving the iron stores of the baby. It may also reduce the incidence of severity of future hyaline membrane disease. Vit. 'K' 0.5mg should be given intramuscularly. The baby should be kept warm and transferred to the nursery as soon as breathing is established.

2. **Nursery:-** A prewarmed incubator should be available at all times to receive the baby with hypothermia or with a birth weight of less than 1800 gm. The following observation should be recorded by the nurses.
- a) Rectal or skin and incubator temperature hourly for 4 hours and then every 4 hourly.
 - b) Respiratory rate hourly for 24 hours and then every 4 hourly. The baby should be watched for any apneic attacks i.e. Respiratory problem or cessation of breathing.
 - c) Color, general activity, consistency of stools should be noted at the time of each feeding.
 - d) Jaundice should be checked twice a day during first week.
3. **Temperature regulation :-** This is the most critical factor determining survival during first 24 to 48 hours of age. In tropical country, raised environmental temperature during hot months, the term babies develop fever due to dehydration. In this case, the infant is best managed by cooling the environment rather than provision of extra fluids alone. The baby should be prevented from 'hypothermia' (poor ability to conserve heat in the body).
4. **Respiratory problems:-** For assessment and management of respiratory distress syndrome and apneic attacks; oxygen is given to prevent brain damage. Precautions should be taken to safeguard against the possible toxicity of oxygen.

Respiratory Distress Syndrome :- When the respiratory rate is more than 60 per minute in a quiet resting baby, the condition is called as respiratory distress syndrome.

Apnea:- It is an important cause of mortality and brain damage in premature babies. It is characterised by sudden cessation of breathing followed by cyanosis and limpness.

- 5. Feeding :-** Intravenous feeding is recommended for babies weighing less than 1200 gm and those with severe birth asphyxia, respiratory distress syndrome, apneic attacks and other acute illness. The preterm baby may not be able to suck or there may be in coordination between sucking and swallowing. So they should be fed by nursing personnel. Their digestive ability is normal except that the animal fat is poorly tolerated. The unsaturated fatty acids content in vegetable oil such as olive oil, coconut oil and corn oil are tolerated better.
- 6. Prevention of Infection:-** The handling of the premature baby should be reduced to bare minimum. Vigilance should be maintained on all procedures recommended for reduction of infections in the nursery. High index of suspicion, early diagnosis and treatment of infection are essential for improved survival.
- 7. Weight record:-** Accurate weighing of the babies is required for their well being. The weight should be routinely recorded on alternate days but in sick babies, daily weight record is recommended. Most premature babies lose weight during the 1st 3 or 4 days of age and loss is upto a maximum 10% of the birth weight. The weight remains stationary for the next 4 to 5 days and then the babies start gaining at a rate of 20-40gm per day. Excessive weight loss, delay in regaining the birth weight or slow weight gain etc. needs immediate attention.
- 8. Nutritional supplements :-** Haemoglobin and reticulocyte counts should be checked once a week. Iron, folic acid and multivitamin drops should be started at 2 weeks of age. Infants weighing less than 1500 gm should be routinely administered vit. E, 125 units/kg per day intramuscular after 1st week of life.

Transfer from incubator to cot :- A baby who is feeding from the bottle and is reasonably active with a stable body temperature, irrespective of his weight, should be transferred to the open cot. The baby should be observed for another 12 hours after putting the incubator off to see whether he can maintain his body temperature. The infant should stay in the incubator for as short a period as possible because incubators are main source of iatrogenic infection.

Child-Parent Contact:- It is very unpleasant experience for the parents to leave their child isolated in the nursery or in the incubator. They must know about the progress of the baby. Mother should be encouraged to come to the nursery to see and touch her baby. She should know the routine care of the baby, art of feeding, need for warmth, importance of hand washing and prevention of infection etc. during his visit to nursery.

Home Care:-In the developing countries like India, where the number of premature babies requiring care are more than the available facilities for special care for premature babies, it is essential that general principles of home care are highlighted. But the preterm babies should not be discharged unless he has regained his birth weight, is self-feeding from the bottle or breast and is showing a steady weight gain.

- 1) Before discharge, the mother should be encouraged to breastfeed her baby and look after his toilet needs.
- 2) She must be explained about the need and importance of maintaining a sepsis (free from bacteria) condition, keeping the baby warm and ensuring satisfactory feeding routine.
- 3) One public health nurse or experienced person must be provided for the care of the baby after discharge.
- 4) A periodic home visit should be made to assess the progress of the child.

Environmental Control:- Environmental control is most important for premature babies. The infant should be effectively covered taking care to avoid smothering (kill by suffocation). Woolen cap and stockings should be worn. The infant should

preferably lie next to the mother which serves as a useful biologically controlled heat source.

In winter, the room can be warmed with a radiant heater. A table lamp having a 100 watt bulb can be used to provide direct radiant heat. Hot water bottle, if used, should never come in direct contact with the baby. The cot of the mother and infant should be located away from the wall to reduce radiation heat loss. Premature babies do relatively much better in summer than in winter.

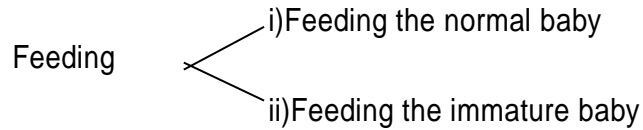
The visitors and handling of the infant should be reduced to bare minimum. The hands must be washed before touching or feeding the baby. Kissing of the baby should not be done. All the articles of the baby should be cleaned and sundried.

Feeding :- Breast feeding is ideal for the normal and premature babies and it must be encouraged when infant is unable to suck from the breast, expressed breast milk should be given with a bottle or dropper depending upon his maturity. (Undiluted cow's milk or full strength evaporated milk is recommended if formula feeding is unavoidable). Mother must be given detailed instructions and practical demonstration for maintenance of bottle hygiene to prevent contamination of feeds.

Cot.— Small narrow easily movable bed & bed for a young child.

LESSON-9

BREAST FEEDING, ARTIFICIAL FEEDINGS, WERANING AND IMMUNNIATION



Feeding normal babies

The first feed to the baby given is mother's milk. This is generally possible within 12 hours of birth. It should be offered as soon as the baby is keen to suck and the mother is well to suckle. The baby is straight away put on the breast.

A. Breast feeding:

The breast milk is the ideal food for the baby up to the age of 6 months. The milk that is secreted during the first 7 to 10 days (called colostrum) is rich in protein and protective antibodies. It is a readymade source of supply of natural food required for the baby. Human milk contains less protein and is required at par with slowest growth of infants. Especially the non-working mother of a low socio-economic background be encouraged to breast feed her baby for economic and hygienic reasons.

Preparation of Breast feeding

1. **Motivation:** The expectant mother should learn mother craft during discussion with nurses / lady doctors during pregnancy.
2. **Attention to breast:** A careful examination of breasts should be done in pregnancy. If the nipples are retracted (inverted) than that of protactile (everted), wearing of light weight plastic shells to be done. Nipples should be washed in plain water. Soap, antiseptic lotion should be avoided. On last month of pregnancy, application of 'Lanolin' cream may be done. It is advisable to wear an uplift brassiere about one/two sizes larger since sizes of breasts will increase towards last trimester and to prevent sagging.

Feeding Schedules (Feeding on time or planned feeding)

The baby should be breastfed on a semi demand keeping in mind that most of the babies need to be fed after 2 to 4 hours. During first few days, the babies fall asleep after taking a few sucks. They should be aroused gently for breast feeding. The mother should know burping her baby which safeguards against regurgitation. The adequacy of breast milk supply is indicated by:-

- a) Sleeping of baby 2 to 4 hours after the feed.
- b) Good gaining weight.

So the baby must be kept on a 2 to 4 hours schedules, starting up to 3 minutes on each breast and gradually increasing the time. During night 6 to 8 hours interval is recommended.

Complete emptying of breast is essential. The baby achieves this in 10 to 15 minutes. Unless quantity of milk is excessive, both breasts should be emptied

at each feeding session.

Advantages of breast feeding & breast milk

- i. Ideal composition: Breast milk fully meets the requirement of infant. The composition is ideally suited to infant.
- ii. No preparation needed:- It is always fresh, pure and ready for use requiring no preparation. So contamination is avoided.
- iii. Adequately warm:-it is available to the child at a correct required temperature.
- iv. Minimal contamination:-it is sterile and safe for the baby.
- v. It is easily digested and requires no preparation.
- vi. It has a psychological effect on the health of the mother.
- vii. It reduces infant mortality being free from contamination.
- viii. It contains protective antibodies which reduces chance of infection of baby from bacteria, viruses, and other diseases.

- ix. Economic significance:- If breast feeding is not encouraged, the demand for milk powder, bottles, teats and other materials will go on increase, thereby cost of maintaining babies will increase.
3. If mother is not taking care of health of food the baby will suffer. Mother's diet should be careful for sustaining breast fed baby. Mother should avoid alcohol and spicy foods; otherwise complains of baby for diarrhea constipation etc. will result. So, mother should be alert all the time and careful.
 4. The baby may not be advisable to be breast fed after 6 months and should be supplemented by outside sources of food. (lignite and semi solid diets); prolong breastfeeding will deteriorate the health of mother and loughing of breasts may result.
 5. During acute febrile maternal illness and development of breast diseases, the breast feeding is normally to be withheld temporarily and the baby to be artificially fed.
 6. Some women may fail to establish satisfactory lactation , although the condition is rare.
 7. The conditions like retched or cracked nipples and engagement of the breasts hinder satisfactory breast feeding and hinder the health of the baby.

B. Artificial feeding

When a child has to be fed otherwise than by human milk (breast milk), it is called artificial feeding. It is necessary when mother becomes sick or in case of inadequate breast milk. Cow's milk is considered as the best substitute of mother's milk. Artificial feeding is especially practiced in the form of 'bottle feeding'.

Feeding the baby

Nutrients available in human & cow's milk

		Human milk (%)		Cow's milk (%)
Proteins	-	1.5	-	3.5
Fat	-	4.0	-	4.0
Sugar	-	6.0	-	4.5
Salts	-	0.2	-	0.7
Water	-	88.3	-	87.3
	-	100.0	-	100.0
		(Reaction is alkaline		Reaction is acidic

(1) Cow's milk

Cow's milk is preferred for artificial feeding because of some best advantages over Buffalo or goat milks and its similarity in composition with human milk, but the following points need to be remembered while feeding babies with cow's milk.

- i) The amount of fat equals to that of human milk.
- ii) Sugar content is less but salt content is more.
- iii) Human milk is sterile but cow's milk contains bacteria. So it is to be boiled before giving it to the baby.
- iv) It is acidic while human milk is alkaline.
- v) It contains more of a particular variety of protein called casinogens.
- vi) Quantity of proteins is double than that of human milk.

vii) Milk whether human or cow's milk contains vitamins, but to make the cow's milk free from bacteria, it is to be heated and such prolonged heating destroys vitamins.

1. **Buffalo's milk**-It can be used and modified with proper dilution.

2. **Milk powder**:- Milk powders are costly but have the advantage of less contamination and adulteration. When it is to be started, it should be from a standard brand and should not be changed frequently from one brand to other.

a) Recommended dilution of cow's milk

Age of baby		Dilution
0-15 days	-	1 part of milk + 1 part of water (1:1)
2-6 weeks	-	2 part of milk + 1 part of water(2:1)
1 1/2 to 3 months	-	3 part of milk + 1 part of water (3:1)_
3 months	-	Whole milk should be given.

b) No. of feeds to be given

Age of baby		Dilution
0-2 weeks	-	6 to 18 nos. of feeding
2 nd week to 1 months	-	6 to 6 nos. of feeding
1 to 3 months	-	5 to 8 nos. of feeding.
3 to 7 months	-	4 to 5 nos. of feeding
7 to 9 months	-	3 to 4 nos. of feeding
9 to 12 months	-	3 nos. of feeding

c) Quantity of Cow's milk per feed for the baby

Age of baby		Amounts (ml)
0-2 weeks	-	60 to 90
3 weeks to 2 months	-	120 to 150
2 to 3 months (60 to 90 days)	-	150 to 180
3 to 4 months	-	180 to 210
4 to 12 months (120 to 3645 days)	-	210 to 240

While preparing dilution of milk and considering no. of feeds and quantity of milk to be fed to the baby as per above tables there may be of some variation from child to child. Also the following points are to be remembered for preparation of artificial feeds.

- 1) **Addition of sugar:-** Every 100 ml of milk needs one teaspoonful of sugar. The amount can be doubled , if the baby is constipated.
- 2) **Feeding bottles and teats:-** There are quite a no. of variety of feeding bottles available in the market. The best is widespread mouth bottle. Teats made of rubber and having bases are superior to the plain and finger-like ones. The holes should be made with a red hot needle in such a way that it shall allow 12 to 15 drops of milk/minute, when bottle is turned upside down.
- 3) **Hygienic preparation:-** Hygienic preparation be made from the contact of dirty hands, utensils, bottles, teats and water etc. Bottle should be boiled for 10 to 15 minutes in clean tap water. Nipple/teat should be boiled only for 3 to 5 minutes.

- 4) Addition of vitamins & minerals:- Supplements of vit.C (25 to 50 mg/day) and Vit. D (400 IU/day) and iron (1 to 2mg/kg/day) be made. All are available in the market in a single preparation.

Precautions to be taken with milk in Artificial feeding:-

- 1) The milk should not be over 12 hours old,.
- 2) It should not contain any preservative.
- 3) It must be clean.
- 4) It must not be skimmed.
- 5) The cows which give it must have been tested.
- 6) The child should be fed regularly and at equal intervals.
- 7) The bottles should be round at the botton and must always be kept clean.

Care of the feeding equipment

A right kind of bottle should be selected. A feeder with a long tube is unhygienic as it is difficult to clean perfectly. Broad bottles or boat shaped bottles, a teat at one end and a value at the other end (wide mouthed bottle) are recommended. The bottle should have clear markings for the measurement of milk.

Bottles brushes can be used which make cleaning easy. Without the use of brush, no bottle can be perfectly cleaned.

Teats:- Teats made of rubber and having bases are hygienic to plane and finger like ones. The hole should be made with a red hot needle. It should allow 12 to 15 drops of milk every minute when the bottle is turned upside down. This enables the infant to take as much milk as he needs without getting choked. After making hole, the teat should be sterilized by which the smell of rubber is also avoided.

Care of the feeder and teat:-

The bottle should be rinsed immediately in cold water, then washed in hot water. The bottle should be boiled at least 10 to 15 minutes in clean tap water. The nipples or teats should not be boiled in the same container as they have to boil only for 3 to 5 minutes...

For every feeding, the bottle should be washed with boiling water. The left over milk must be immediately discarded from the bottle and bottle should be thoroughly

washed with soap and water. Always, the teat should be covered to avoid flies and dust.

A solution of sodium hypochlorite can also be used for sterilizing the bottles instead of boiling. One table spoon of this solution is added to a liter of water and the bottle is soaked in it for 3 to 4 hours.

While feeding the baby with the help of bottle the bottle should be raised upward in such a way that there is no gap in the nipple by which air or wind cannot enter to the stomach of the child.

Advantage of bottle feeding:-

- 1) It is mobile and the mother can use anywhere she likes.
- 2) The mother can measure the quantity of milk fed by her baby whenever she finds that her baby completely empties the bottle. Additional 15 ml of milk should be offered during the next feed.
- 3) Whenever mother is ill, it is one of the best substitute of breast milk and avoid illness due to breast feeding.
- 4) This type of feeding is helpful for working mothers.

Disadvantages and problems with bottle feeding

1. While bottle feeding, sometimes a vacuum is created in the bottle by which the baby cannot be able to suck and feels uneasy. Simply by lifting the edge of the teat and allowing the air to enter into the bottle the problem can be dealt with.
2. If the hole in the teat is too big or too small, the baby will reject the bottle, or choke or exhausted. So care should be taken while forming the hole of the teat.
3. The bottle should be held obliquely so that its mouth or teat remains full of milk. This prevents excessive swallowing of air by the baby.
4. Bottle feeding is costlier than breast feeding and mother of lower socio-economic background cannot afford it.
5. Bottle feeding is easily susceptible to infection.
6. The baby may suffer from under nutrition, if the mother does not know the formula preparation of the milk for bottle feeding.

7. Bottle feeding baby especially taking cow's milk are often constipated due to the formation of casein curds which can be relieved by giving glucose water, extra sugar in the milk and honey to the baby.
8. It requires more time.

The following points summarize the requirements for artificial feeding.

- Good knowledge
- Facility for boiling and sterilizing
- Good source of water
- Reliable milk supply
- Adequate washing facilities
- Sufficient money
- To prepare feeds.

Feeding with the help of spoon, cup, glass or traditional feeding vessels.

For the 1st few months of life, the baby finds it difficult to take the milk with a spoon or a cup or with anything else. While feeding with a spoon, most of the milk droops out because of the forward and backward movements of baby's tongue. To avoid this, mother finds to put the milk at the back of the throat each time the baby opens his mouth. This may lead to choking the air passage and lungs. Besides, the mother holds the spoon with her index finger in it, rather than holding the handle. This leads to infection. Some traditional vessels called palada in South India. Jhinook in Bengal, Samuka in Orissa are much better, because these are easy to clean and convenient to hold.

The other traditional pot with the spout, also commonly used, but is not suitable, as it cannot be cleaned properly.

WEANING

Weaning is an important period in the life of a baby. It is one of the most dangerous periods in the life of the Indian child.

Weaning is a gradual process. It begins from the moment supplementary food is started till the child is taken off the breast. Since during this period the baby

is switched over from a solely breast milk diet to other foods. Weaning assumes considerable significance from the nutritional point of view. Great care has to be taken in selecting and introducing supplementary foods, so that in course of a few months the frequency of breast milk can be reduced and the child completely weaned with adequate nourishing diet.

Cameron and Hafrawdgr (1983); Acc. to them to 'wean' means to accustom. The process by which the infant gradually becomes accustomed to the full diet (adult).

How to wean the baby:-

1. Weaning must be gradual.
2. Should commence around six months of life when 1st supplements are introduced.
3. Should commence by omitting one nursing and in its place feeding a suitable quantity of the chosen supplement food.
4. Desirable to retain the early morning and late night nursing until the last.
5. Should not be postponed beyond the age of 18 months. At this stage, he is capable of eating and digesting a variety of foods at the age.

Types of supplements:-

- 1) Liquid supplements** (given along with breast milk; all these foods will be given).

Fresh cow's milk, boiled, cooked be used. Juice of fresh fruits like orange, tomato, mousumbi, grapes, green leafy vegetable soup can be given.

- 2) Semi-Solid supplements :-** Mashed well before feeding. Started after "Anna Prasanna" ceremony around 7th to 8th month of age.

First solid food offered to the child is cereal paste or gruel to which small quantities of ghee, milk and sugar is added or even salt.

Starchy vegetables like potato well cooked and mashed is also given. These give energy for active growth and also contribute smaller amount of body building and protective nutrients. Green leafy vegetables and others can be given. Other supplements like boiled egg yolk, boiled egg white, finely mixed and ground cooked meat, boiled mashed fish, finely cooked and mashed dal, mashed banana, fruit pulp can be given.

- 3) Solid supplements:-** (Top) chopped unmashed vegetables, chopped leafy vegetable, boiled and soft soft cooked rice, chapatti etc. can be given. Baby's gum need for the new teeth toast or biscuits is ideal to chew.

WEANING AND ITS EFFECT

Weaning :- The dictionary meaning of the term is “to be taken off the breasts, to accustom to food other than mother's milk”, or “introduction of top feeding”. When we talk about infant feeding and use the term “weaning”, what we usually mean is introduction of solids and semi solids.

Weaning is a gradual process of withdrawal of the baby from the breast. Most mothers can produce sufficient breast milk to sustain adequate growth only for the 1st 4-6 months. By this time, the baby weighs about 6 kg and requires about 600 Kcal for his growth. The aim should be to start adding semi-solids to the diet at this time so that the balance of the energy is supplied by the semisolids.

Thus., the process of weaning starts around the age of 4-6 months and should be continued gradually during the next 6months by reducing the number of breast feeds because the mother's milk alone is not sufficient to sustain the growth beyond 6 months. Weaning should be supplemented by suitable foods rich in protein and other nutrients. These are called supplementary foods.

Anything that is easily digestible can be introduced but one food should begin at a time. After watching the reaction of the child to that food for a week or two, another food should be introduced. First the food should be given in small amounts and slowly the quantity of the food should be increased as the baby begins to like it and to tolerate it satisfactorily.

Supplementary foods :-

Since the capacity of infants to digest coarse food is limited, the food preparations must be well-cooked and free from fibrous material. The role of different foods in the diet of weaned infants is described below:-

4-6 months :-

The supplementary feeding in case of 4-6 months baby, should be started with a mashed fruit like banana, or a cereal like suji. The cereal and pulse flours can be mixed and made into pudding or thick porridge and given to the infant after the addition of sugar and salt. A porridge can be made with atta, rice, ragi, millet etc.. A little oil or ghee can also be mixed in the porridge. Other fruits in season like papaya, mango etc. can be given in a similar way. Apples can be given after stewing them. In the hills, apricots and pears are a good weaning food. Several pre-cooked baby foods which are sold in the market may be given.

6-9 months

The baby is now taking some fruits and cereal. Seasonal vegetables like greens, beans, peas, carrots etc. can be boiled or steamed. Potatoes are a good food. When the vegetables are soft, these can be mashed and given in a semi-solid state. There is no point in giving only the water in which the vegetables have been cooked. It has no food value as far as calories go. The same applies to the soups. Soups take a long time to cook and taste good but often have little food value. However, their food value can be increased by thickening them with mashed vegetables or flour and by adding a butter or cream. The baby at this age, likes to use his hands and puts everything in his mouth. So he can be given a piece of toasted bread, crisp roti, biscuit, a piece of carrot etc. to nibble on.

9-12 months :-

A variety of household foods can be given 4 to 5 times a day. Combination of rice and legumes (Khichri) is quite popular. Idli, uppama, may also be given. A variety of vegetables and seasonal fruits can be given. Foods like curd, egg, khir, bread etc. can be given. A roti can be softened in milk, dal or gravy. The egg can be given as boiled or creamed. Fish, meat and other animal proteins can also be given.

1-½ years:-

By this age the child is eating all the household diets. It may still have to be softened and given without spices. More frequent feeds will have to be given and the child may eat in every 2 to 3 hours.

The whole process of weaning should be gradual and completed by the time the child is between 9 months and one year. There after he should be taking almost the adult diet of about 1,000 calories daily and the child will be left to complete his own weaning.

IMMUNISATION

In order to know about 'immunisation', first we have to know about immunity.

Immunity:- The defensive mechanism of the body is called immunity i.e. the security from disease to the body. It is also called on the ability of the body to recognize, destroy and eliminate antigenic materials that is foreign to its own. Antigenic materials are: bacteria, viruses etc. Immunity is an important mechanism by which the body is able to withstand or resist many infections in every day life.

Immune:- A person is said to be "immune" to an infectious disease when the germ which causes it is prevented from multiplying in the person's body.

Classification of immunity:- Immunity is of two types:-

- 1) Natural or inherited immunity
- 2) Acquired immunity.

The acquired immunity again classified into :- a) Active and (b) Passive

1) Natural immunity:- Natural immunity or inherited immunity is that immunity which the individual inherits by virtue of his genetic makeup. (This is the reason why some diseases which occur in animals do not occur to man & vice versa. (For example - Typhoid fever do not occur in animals). It is purely "a gift from the God".

Acquired immunity or artificial immunity:-

This is the immunity which man acquires as a result of infection or due to administration of vaccines. This immunity may be active or passive.

Active immunity:- it is the immunity which a person develops as a result of infection by pathogenic organisms or their toxic products. The body produces its own antibodies to fight the infection. Once the antibodies develop, the person is immune to further infection by the same organism for varying periods. Active immunity may be acquired by an attack of a disease like small pox, measles, by an infection like polio and by administration of vaccines.

Passive immunity:- When the protection is purely outside and short-lived i.e. without participation of body's inside defence, the so called antibodies termed as passive immunity.

or

When antibodies produced in one person are transferred to another to give protection against a disease, it is called p. immunity.

So, production of artificial active immunity to safeguard against a particular disease by introducing into the body through injection or orally an agent is what is called immunization. It is termed as vaccination or inoculation.

Or

Immunization is the technique for developing into the body against pathogenic organisms by use of different immunizing agents.

Immunizing agents:-

- i) Live vaccines:- B.C.G., Small Pox, Oral polio, yellow fever, measles.
- ii) Killed vaccines:- T.B., Cholera, whooping cough, plague, Influenza.
- iii) Toxoids:- Diphtheria, Tetanus.

Immunization schedule:-

3-9 months	Triple antigen (DPT)	3 doses	at monthly intervals
	Polio	3 doses	
	BCG	1 dose	
9-12 months:	Measles	1 dose	
1 ½-2 years	DPT	1 st booster (4 th dose)	
	Polio	1 st booster (4 th dose)	
School entry (5 yrs)	DT (Diphtheria & Tetanus)	- 2 nd booster	
	<u>Polio & Typhoid (2 doses monthly Interval)</u>	(5 th dose)	
Hepatitis B for jaundice		3 doses at the interval of	0,1 & 6 months.
10 years	Typhoid	2 doses at monthly interval.	
	Tetanus toxoid	“	
Pregnant women	T.T.	2 doses at monthly interval.	

B.C.G. Vaccination:-

B Stands for 'Bacillus' (a bacteria)

C stands for 'Calmette'

G stands for 'Guerin'

Both Calmette and Guerin are the names of the two French Scientists, who developed this vaccine against tuberculosis.

This B.C.G. vaccine offered definite protection against childhood tuberculosis. So, the child must get it as soon as possible after birth.

The standard site for giving B.C.G. is the left shoulder. A very small needle and special tuberculin syringe are used to inject the vaccine in to the skin. The vaccine is fairly safe. No fever is encountered. The vaccination site should not be

dressed or applied with antiseptic powder. In 2 to 3 weeks, a small elevation of the skin appears at the site of injection. By about 4th week, it grows in size and a small scar is appeared.

Small Pox vaccination:- Like B.C.G., small pox vaccination was recommended to be given as soon as possible after birth recently. Now that the disease is eradicated the world over, the W.H.O. no longer insists on compulsory small pox vaccine.

The upper arm is by far the most suitable site for this vaccine. This vaccination is done with a bifurcated needle. For mass scale vaccination, a jet injector may be used. The vaccination site should be left uncovered and without antiseptic powder. The site should not be wet or exposed to sun.

By this vaccination, fever irritability and itching may be there. A blister is seen which starts drying about the 10th day and lastly a scar is left.

Polio vaccination:- Poliomyelitis is a leading cause of paralysis of the limbs and crippling in childhood.

Administration of oral polio vaccine in the form of sweet tablesar drops, beginning at the age of 3 months, with an interval of 1 month, is a recognized means to protect against the disease. The vaccine is safe.

A booster dose of Polio should be given 12 to 18 months after the last dose of the primary vaccine. Another booster dose should be taken at the age of 5 years. The aim is to accomplish highest possible protection.

This is vaccine should not be given when the body is suffering from diarrhoea or a significant acute illness. The breast feeding should not be done before and after administration of the oral polio vaccine. A child who has earlier suffered from poliomyelitis should receive full immunization with the vaccine.

Triple Antigen Vaccination (DPT)

This is a combined vaccine against diphtheria, pertussis (hooping cough) and tetanus.

D.P.T. vaccination is done at the same sittings as for polio vaccination. Beyond the age of 5 years, pertusis component in the vaccine is omitted. Only D.T. is given at 5 years of age because there is no fear of whooping cough at this time.

Triple vaccine is given as deep intramuscular injection over the external aspect of the thigh or the muscle mass of the upper arm within a few hours of the injection. Fever develops in most babies and the baby may feel tenderness over the injection site. Little aspirin or paracetamol and hot foment may be applied. If an injection abscess is formed, medical advice should be taken.

If the body is suffering from epilepsy or any febrile illness, this vaccine should not be given.

Measles Vaccination:- This vaccine is not yet freely available and is expensive also. This vaccine is given in between 9 to 12 months of the child. Boosters are not required for this purpose.

If there is any acute illness, allergy, eczema, convulsions and gross malnutrition, this vaccine may not be given.

The baby may develop high fever and fits due to this vaccination. But, it is quite safe, if due precautions are taken. If there is still any complication, the advice of doctor should be taken.

Mumps vaccination:- This vaccine is very effective against mumps. Only one injection is sufficient. It is very safe also.

Rubella vaccination:- A single injection gives excellent protection against rubella or German measles. It is safe but expensive and not yet freely available in India. It is required to be given to the girls only between 1 year of age and puberty.

Typhoid vaccination:- This vaccine is usually given during the 5th year of the child and 10th year of the child. The month of March is the best time to give this vaccine. This will protect the child against typhoid and paratyphoid fevers when their season, that is summer.

It is usual for the child to develop local pain and fever following T.A.B. vaccination (Typhoid & Paratyphoid A&B). Aspirin or paracetamol may be given consulting with the doctor.

Cholera Vaccination:- Except under special circumstances and travel to certain countries, cholera vaccination need not be given.

Children under 5 years require 2 doses just one dose suffice for older children. This gives protection for 3 to 6 months.

The vaccine may cause local pain and fever which respond favourably to aspirin or paracetamol.

Influenza vaccination:- Currently this vaccine has got to be imported. Given as a subcutaneous (under the skin) injection, it protects against influenza, the so-called flues.

LESSON 10

CHARACTERISTICS, PHYSICAL DEVELOPMENT, MOTOR DEVELOPMENT

Each period in the life span is characterized by certain developmental phenomena that distinguish it from the other periods that precede and follow it. Like this the most important characteristics of infancy are:

1. Infancy is the shortest of all developmental periods

Infancy begins with birth and ends when the infant is approximately two weeks old for which it is the shortest period. It is the time when the foetus must adjust to life outside the uterine walls of the mother.

According to medical criteria, the adjustment is completed with the fall of the umbilical cord from the naval;

According to physiological criteria, it is completed when the infant has regained the weight lost after birth;

According to psychological criteria, it is completed when the infant begins to show signs of developmental progress in behaviour.

All the adjustments usually completed in two weeks but premature infants or infants with difficult birth require more time.

Infancy is subdivided into two periods.

- i. Period of parturition: This is the period from birth to fifteen or thirty minutes after birth. This begins when fetal body has emerged from the mother's body and lasts until the umbilical cord has been cut and tied. Until this is done, the infant makes no adjustments to the postnatal environment.
- ii. Period of neonate: this extends from the cutting and tying of umbilical cord to approximately the end of second week of postnatal life. During this period, the infant must make adjustments, to the new environment outside the mother's body.

2. Infancy is a time of radical adjustments

Birth is an interruption of the developmental pattern that started at the moment of conception. It is an graduation from an interval to an external environment to an external environment. Like all graduations it requires adjustments on the individual's part. Miller has commented, "In all the rest of his life, there will never be such a sudden and complete change of locate."

3. Infancy is a plateau in development

During infancy there is a slight regression than prenatal period such as loss of weight and a tendency to be less strong and healthy than at birth. This regression lasts for several days to a week, after which the infant begins to improve.

The halt in growth and development, characteristics of this plateau, is due to the necessity for making radical adjustments to the post natal environment. Once these adjustments have been made, infant resource their growth and development.

4. Infancy is a preview of later development

It is not possible to predict with even reasonable accuracy what the individual's future development will be on the basis of the development of birth. However, the new born's development provides a clue as to what to expect later on.

5. Infancy is a hazardous period

Infancy is a hazardous period both physically and psychologically. Physically, it is hazardous because of the difficulties of making the necessary adjustments to the totally new and different environment.

Psychologically, infancy is hazardous because the attitudes of significant people toward the infant are crystallized. The attitudes which were established during the prenatal period may change radically after the infant is born, but some remain, relatively unchanged or are strengthened

depending on conditions at birth and on the ease or difficulty with which the infant and the parent adjust.

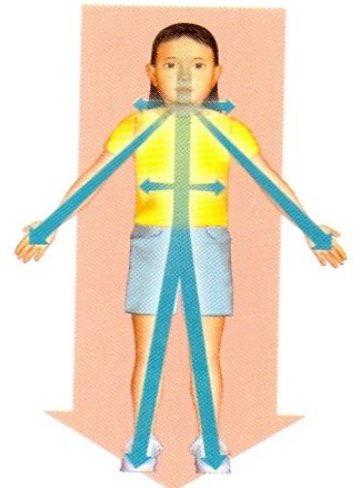
Physical Development during Infancy

Out line

- ❖ Physical development
 - ❖ Principles
 - ❖ Components
- ❖ Motor development during infancy
 - ❖ Principles
- ❖ Developmental milestones

Physical development: It refers to the development of body structure and its components. It includes height, weight, skeleton, muscles, bones, teeth and body proportions.

a) Principles of physical development: Physical development follows the principles of growth and development; cephalocaudal .(Physical growth occurs downward from top to the bottom of body. Ex. Infant gains control over head movements first and then trunk later leg movements) and proximodistal (The control of movements proceeds from central areas of body to outer or peripheral areas. For example, infants gain control over their trunk, then arm movements, hand movements and finally finger movements. Likewise they gain control over leg, foot finally toe movements)



Note:

- The process of physical development is not uniform throughout the human life span. Certain aspects of physical growth are at a faster rate while others may grow very slowly.
- There are major sex differences in growth pattern between boys and girls. This variation in growth and development gives rise to a specific body structure for boys and girls.
- There are individual variations in physical growth. These may be due to heredity or environment.

Components of physical growth during infancy:

- **Height and weight:** The average birth weight of an Indian child is 2.8 to 3.0 Kgs. Initially a baby loses weight and regains it by 10 days after the birth. The weight doubles by 4 months. Later on the weight gain is less rapid. The weight triples by the end of first year. Weight gain is slow during the second year of life, due to the greater expenditure of energy in creeping, sitting and walking.

The average height of a new born infant is about 50cms. And the height measures around 60cms by 6 months. By the end of second year the infant gains in height by 25 cms (i.e.75-85cms). Thereafter there is an increase of 7.5cm /year until 7 years of life.

- **Development of teeth:** the time of eruption of the first tooth varies and depends on heredity, nutrition and health. Girls are slightly advanced in teeth development over boys. The sequence of eruption is more important than their time of eruption, as it may lead to developmental irregularities.

The first teeth to make appearance are the lower incisors around 6-8 months followed by upper incisors. The molars appear later. By one year the baby has 4-6 teeth and by second year 16 teeth.

- **Development of skeleton / body frame:** it includes
 - Bone development
 - Muscle development

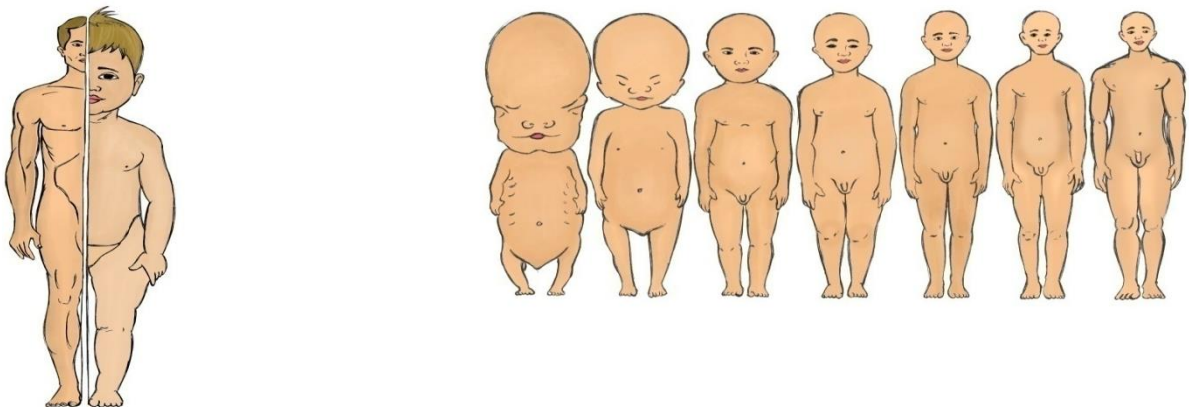
Bone development: the earliest form of bone is cartilage which is very soft, pliable structure. The cartilage gradually becomes bone through the process of ossification. (The process involves the deposition of calcium and other minerals on the surface of cartilage to make it hard and rigid. As most bones are not ossified during infancy, they are softer, more pliable and more sensitive to pressure and sudden movements. The time rate of ossification differs for various bones. Some of the bones of head and wrist ossify very early in life while others mature later. The soft spots in the skull ossify completely by 2 years.)

Sex variations are seen in bone growth; girls are developmentally more advanced than boys.

Development of muscles: the neonate has all muscle fibres. These fibres are small in relation to the overall size of the infant. However, during infancy period the muscles grow in size, increase in length, breadth, and thickness.

Muscle growth follows the cephalocaudal and proximodistal direction, that is head and neck muscles develop earlier than the muscles of trunk, arms and legs.

- **Development of body proportions:** small children differ from adults in size as well as in body proportions. After birth, the trunk and limbs of the body grow faster while head growth slows down giving rise to smaller head and longer limbs as the child grows older.



An infant is rather chubby with a big head and small limbs. By the time the child reaches six years his body proportions are equal and appear like those of an adult. The ratio of muscles and fat tissues contribute to a physique which characterizes each individual. Physique is usually established well by childhood and is continued into adulthood. Boys have more of muscle tissues and girls have more of body fat.

2. Motor development: It refers to the development of posture, locomotion and hand and leg skills. These are the result of bone and muscular development and maturation. Large muscle skills - leg skills, fine muscle/hand skills/finger skills are subsumed under motor development.

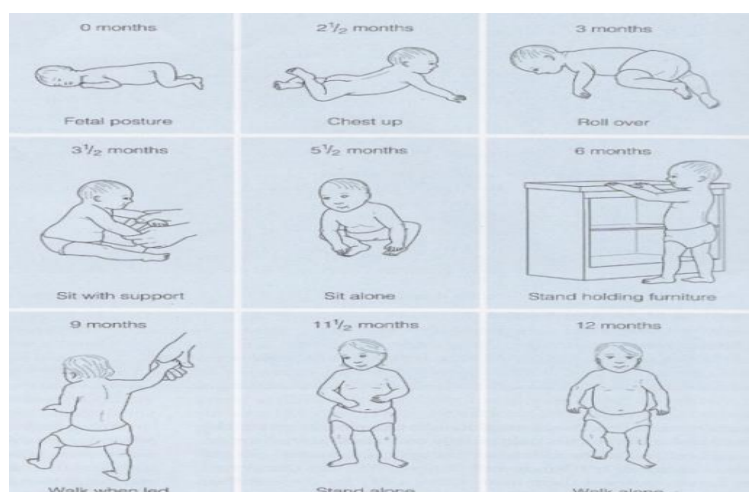
Principles of motor development: motor development is orderly and follows certain trends that are universal. Some of these are

- **Mass to specific trend:** on the performance of any activity, a general coordinated action comes first, followed by the development of more specialized specific actions. Eg. In throwing a ball, the child uses first his entire body then shoulders and finally arms.
- **Development moves from large to small muscles:** the child masters his larger muscles and then the fine muscles. Hence children are able to cut paper, sew button only after they are able to sit, stand, walk, hold, lift, and reach and other gross motor activities.
- **Cephalocaudal & proximodistal trend:** development moves from the central axis of the body to the extremities as well as from head downwards. For Instance, a child is able to lift his head within 2 months whereas it takes him one year to stand on his feet. Shoulder muscles develop prior to the finger muscles.
- **Bilateral to unilateral trend:** a very young child is equally proficient with both sides of the body. As children grow older they develop a marked preference and greater efficiency in one side of the body.
- **Develop from maximum to minimum muscular involvement:** as the children grow, their muscular coordination also develops which helps them in performing a task with minimum muscular involvement.
- **There is an order in motor development:** motor development follows an orderly step by step pattern of development in any given activity. There are certain active stages that the child has to pass through.

Motor development during infancy: it is one of the major tasks of infancy. The fine motor system governs the movement of hands, fingers, feet, toes, and hips. Gross motor system governs the movement of head, body, arms and legs. Even in the activity pattern, head is the first to be controlled, while control over the legs and feet, movement of walking comes last.

Gross motor skills

- **From birth,** the child attempts to move his limbs and muscles, acquires control over them.



- **2- 3 months** The infant first gains control over head and neck, next he can move his trunk, legs and arms and control over fingers come last.

By 3 months infant can raise his chest and can roll over on his trunk.

- **Around 4-5 months**, the infant can reach further and grasp an object. Grasping objects is an important developmental milestone as it allows the infant to experience both the sensation of touching objects and manipulating them.

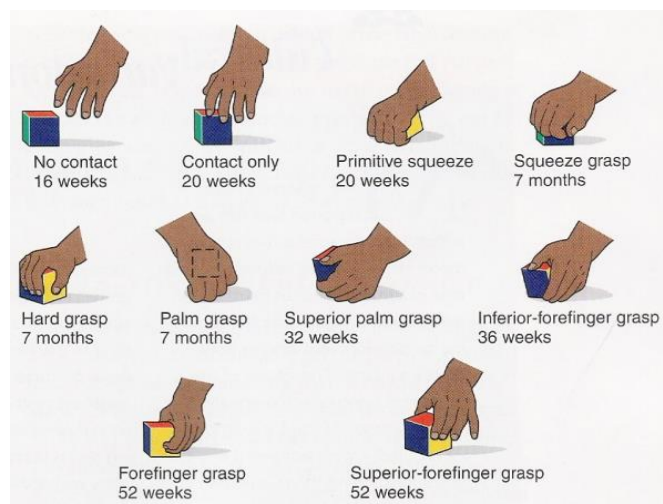
By 4 months the infants can sit with support

- By 6 months infant can sit alone and around 7-8 months he can stand with the help of furniture
- By 9 months an infant can walk with support
- Around 11 months he can stand alone
- Around 12 months he can walk alone and explore environment
- Around one and a half to two and a half years, walking skills become refined and the toddler is proficient at moving about. He can open cabinets, climb stairs, pull the table cloth, and feed himself.
- By 2 years, the child can run, jump and climb up steps and walk down without assistance.

Fine motor skills:

The toddler can move things, push and pull objects, put things in containers, stretch and bend. The two primary events of infancy are locomotion (**Locomotion** includes the act or the ability to move from place to place)and prehension.

Prehension includes reaching and grasping. It is one of the important achievements in infancy. It also forms the basis for a wide range of important infant/toddler skills, self help skills, block building, tracing, scribbling and so on.



Sensory motor skills and cognitive skills:

The child's sensory abilities of vision, hearing, taste and touch are in the process of development during infancy. The cognitive processes; thinking, understanding, perceiving, ability to solve problems begin at this stage of development.

Developmental norms / milestones:

Norms are stages related to the age at which the various traits, skills or other characteristics appear. Generally children start walking, speaking, and show bowel control around 15 months of age.

In the same manner, norms are worked out with respect to growth of intelligence, social behaviour and language development. But these norms indicate the average age at which certain behavioural characteristics manifest themselves. It must be noted that there is an age range at which these appear. For example, the norms for walking alone may be 15 months, but the range varies from 15 months to 18 months. It does not mean that a child who started walking earlier than the norm is more active or intelligent and the child who walked later than the norm is inactive and slow. The norms help us to understand normal behaviour and development.

Developmental milestones / norms

Age	Development
2 months	Turns head towards light
2-3 months	Smiles, recognizes mother, turns head towards sound
3-4 months	Can hold his head
4-5 months	Can turn on his side
5-6 months	Sits with support, makes gurgling sounds
6-7 months	Sits on his own, the first tooth appears
7-9 months	Crawls
9-12 months	Stands with support
12-15 months	Walks alone, speaks few words
15-17 months	Walks upstairs with support
17-24 months	Stands up right without support, jumps off floor, and speaks short sentences.

Conclusion

Locomotion and prehension skills are the main aspects of physical development during infancy and toddlerhood. Development is continuous and at the end of every two months, child is capable of a new set of body skills. While most children achieve the milestones according to schedule, there may be some who lag behind. It is but normal for some children to reach the milestones behind schedule.

Characteristics of New Born Baby



Outline:

- Physical Assessment of new born child (APGAR Test)
- Characteristics of new born
- Physiological changes and adjustments in post natal life
- Sensory capabilities of the new born

Neonate is a term applied to child from birth to about one month. Many significant and exciting changes take place during this period. The first month is a very critical period in the baby's life. It is distinguished from rest of infancy because during this time the baby must adjust from closed and protected environment of the mother's womb to open independent environment.

Apgar test: one of the most useful and popular measures of the physical condition of the infant at birth is 'Apgar' instrument devised by Virginia Apgar in 1953. The test is designed to assess the basic life processes of the infant. It is administered immediately after the birth. It measures the skin color, heart rate, reflex irritability, muscle tone and respiration. A perfect Apgar score is 10 points. A score of 7 or more is considered normal. Scores below 7 generally have body processes malfunctioning and require at least observation and perhaps special attention. A score of 4 or less requires immediate emergent measures.

The five life signs according to APGAR TEST are

A – appearance/colour of the skin.

P – Pulse rate/heart rate.

G – Grimace/reflex irritability.

A – Activity/muscle tone

R – Respiration

A – appearance/colour of the skin: A healthy pink colour of the skin indicates the proper functioning of heart and lungs. The absence of normal pink colour may indicate respiratory or heart problem.

P – pulse rate/heart rate: usually infant's heart beat varies from 150-180 beats/minute, and then drops to 135 per minute after one hour of birth. A heart beat less than 100 may indicate a difficulty.

G – Grimace: the new born should respond vigorously to external stimuli. No response should indicate impairment of central nervous system.

A – Activity level: it is evaluated by the degree of infant's resistance when examiner's attempt to extend its limbs.

R– Respiration: regulation of respiration usually accompanies a healthy cry.

The APGAR scoring method

Sign	0	1	2
Heart rate	absent	Slow less than 100beats/minute	Over100beats/minute
Respiratory	absent	Slow or irregular Breathing	Good crying, strong Breathing
Muscle tone	Flaccid/Limp	Weak	some flexion Active motion, strong
Reflex	no response	Weak cry, grimace	Vigorous cry, grimace
Irritability		cough or sneeze	cough or sneeze
Color	blue, pale	Body completely pink, extremities	blue pink

Physical appearance / charecteristics of new born:

At birth neonate is approximately 50 cm (20”) long and weighs 2.5kgs (7.5 pounds).

Physiological changes and adjustments in postnatal life:

Birth represents transition from a parasitic life of a sheltered existence in a relatively invariable environment to physiologically autonomous existence in a less protected

and highly variable environment. Immediately after the birth the neonate starts respiration for its survival. Birth cry becomes the first sign of life after birth.

Remember

The new borns must accomplish four major tasks for survival. They are

- Breathing on their own
- Changing blood circulation
- Controlling body temperature
- Ingesting food



The two major cardiovascular changes of birth are

- a) Termination of placental circulation links with the mother and the placental blood stream.
- b) Obliteration at birth of shunts that channel foetal blood away from lungs.

The neonate oxygenates his own blood and lungs are inflated with air. Neonatal pulse rate is approximately twice as that of an adult. For the first time ingestion and digestion of food occur after birth. The neonate loss weight during the first few days of life but tends to regain his birth weight after a week. The kidneys also become functional at this time as waste cannot be disposed through placental channel.

All neonates are not equally equipped to adjust to the abrupt changes at birth. It is important to detect any problem at the earliest possible moment.

- Skin is smooth and covered with vernix. It has relatively large flat nose, high forehead, receding jaws. These factors change and give way to individual characteristics that are usually attractive.
- Eyes appear dark blue and mostly have blank gaze.



- The head looks too big for the body. There are some spots on the skull, i.e. fontanelles, one is above the eyebrow, and other is on the crown of the head.
- The palms of hands are finely lined, nails are thin and creases are seen at the wrist.
- The legs are often drawn up against the abdomen and the tender legs measure shorter compared to the arms.
- The knees stay slightly bent and legs are more or less bowed. Genitals for both sexes are seen to be larger than normal.
- Trunk gives a peculiar look such as short neck, small sloping shoulders, large rounded abdomen, slender narrow pelvis and hips. On feet only heel bone is visible. Other bones are cartilages.

Sensory capabilities of new born:

- **Vision / sight:** the retina of the eye does not reach its maturity at birth. Fixation of the eye will be very immature.
- **Hearing:** of all the sensory activities, hearing is at the lowest stage of development at birth. The average new born gives no evidence of hearing ordinary sounds during the first days of life.
- **Smell:** the sense of smell is well developed at birth. They can react to different smells.
- **Taste:** sense of taste is also well developed at birth. Reaction to sweet is positive and for sour, bitter and salty tastes negative.
- **Skin sensitivities:** skin sensations are to touch, pressure, temperature and pain, which are present at birth. Some parts of body are, however, more sensitive to touch than others especially the lips. Skin on thigh, trunk, forearms and the other parts of the body are less sensitive. The child is more sensitive to cold than heat.
- **Organ sensitivities:** hunger contractions are fully developed at birth and they occur at more frequent intervals compared to adults.

- **Reflex irritability:** the new born child will show irritability in various parts of the body, if we touch in different areas. It is otherwise called as reflex action.

Reflex: It is an innate connection between stimulus and response in which certain types of incoming sense of stimulus release a particular response. Behaviour patterns that are well integrated and which are excited by a specific stimulus are called reflexes. "Automatic response to a stimulus is also known as reflex".

It is defined as an '**involuntary reaction to some environmental stimulus**'. Some reflexes are directly related to vital functions. They include breathing, blinking, sneezing, sucking, swallowing, rooting.

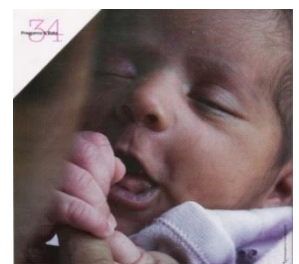
The reflexes that appear early in life and then cease to exist are referred to as **Primitive reflexes**. Ex: Moro, babinski, palmar

A good number of neonatal reflexes persist into adulthood but many postural and primitive reflexes disappear by first year of life. Their appearance, strength and disappearing at specific times are indications of nervous system functioning.

1. **Rooting reflex:** It occurs when infant's cheeks are touched. The infant turns head towards the object that touches his cheek with his mouth wide open. This reflex disappears by 9 months.



2. **Sucking reflex:** Once an object touches his lips the infant automatically begins to suck. It disappears by 6 months.



3. **Palmar reflex:** It is otherwise called as Darwinian or grasp reflex. When an object touches the infant's palm, the infant automatically grasps the object. At birth, it is so strong that infants can support their full body weight while clinging and being lifted. It disappears at 3 months.



4. **Babinski reflex:** An infant fans and extends his toes outwards in response to a slight tickle / stroke on the sole of the foot. It disappears between 2 – 9 months.



5. **Moro reflex / Embrace / startle reflex:** Occurs when the infant is held in a way to create an impression of falling or to a sudden noise. Infant throws arms outwards and then brings them together to the center of his body. It disappears by 3 –6 mth



6. **Stepping / walking reflex:** When an infant is held upright with his feet against a flat surface and is moved forward, he will attempt to walk. It disappears by 2 – 3 months.



7. **Swimming reflex:** An infant will attempt to swim, in a coordinated way if placed in water in a prone position. Disappears by 6 months.

8. **Pupillary reflex:** Pupils of an infant will narrow in bright light and widens in dim light. This reflex is permanent.

9. **Tonic neck reflex:** when an infant's head is turned to outside, he will extend his arms and legs to that side and throws his arm and leg on opposite side as in a fencing position. Disappears after 4 months.



10. **Ocular neck reflex:** An infant will tilt his head back and away from a light shining directly into his eyes.

11. **Plantar reflex / toe grasp reflex:** similar to grasp reflex, when an object is placed near soles of an infant's foot the infant tries to flay his foot. Disappear by 8-12months.

12. **Withdrawal reflex:** if we prick the sole of the foot with a pin, the new born withdraws his foot.



Conclusion

New born baby indicates many characteristics that are precursors to later development. Except for some reflexes, which completely disappear, most other characteristics get modified as the child grows.

Lesson-11

EMOTIONAL DEVELOPMENT DURING INFANCY

Outline

Emotional development

- Emotions- definition
- Individual differences in emotional responding
- Emergence of emotions during infancy
- Development of emotions in childhood and adolescence and concepts in emotional development
- Emotional regulation

Emotions are a part of complex set of interconnected feelings, thoughts and behaviours (Newman & Newman,2003).

Emotions are the feelings, both physiological and psychological that people have in response to events that are personally relevant to their needs and goals (Kaulenger&Kaulenger, 1979).

The word emotion is used to imply a system of feelings instead of a single feeling. It is used to describe certain behaviour such as fear, anger, joy, disgust and affection.

Emotion is related in some way to motivation as an energizer of behaviour and emotions can be classified into fear, anger, affection and others.

Emotions are universally seen in all cultures and they seem to have an adoptive function.

There are individual differences in emotional functioning. This could be the result of biology for instance, temperament, gender specific hormones and environmental factors such as socialization by parents, peers and cultures.

Individual differences in emotional responding: Emotionally, children are seen to be different from each other even in early infancy. Some infants are fussy and dependent and others may be cheerful and easy, some are fearful and anxious and others may actively seek novelty and adventure. Some are quiet and shy and some are sociable and outgoing.

Development in all areas evolves from mass or general behaviour to specific activity, this principle applies to emotional development too.

Emergence of emotions during infancy

- A baby's life is relatively simple and spontaneous. Child places no restraint on free expression of its emotions.
- The baby's emotions are brief and transitory, although expressed more frequently than adults.
- As soon as emotion is past, it is forgotten and the baby is free from stress and strain until new conditions arise.
- During infancy there is a definite relationship between emotional states and personal organismic needs like need for food. The baby cries for food and after fulfillment of this need, the cry will subside.
- Usually the mother is the first emotional climate to the infant. If the mother is gentle and loving, makes infant comfortable, the infant may develop positive and friendly response towards others.
- Therefore, early mother- child relationships influence both immediate behaviour and long term adjustment.

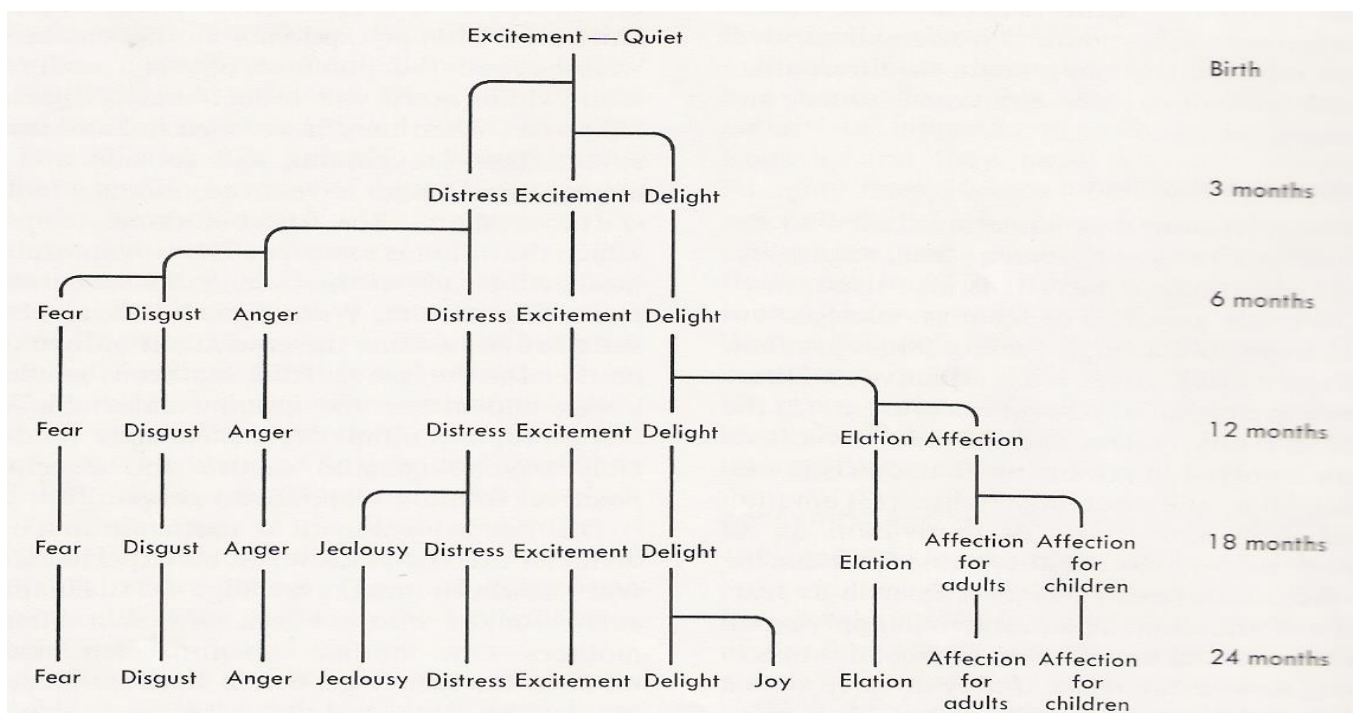


Fig: Primitive emotional states differentiated with age (We need a reference for this picture)

Development of emotions in Childhood and Adolescence and concepts in emotional development

- The first emotion that is evident in the newborn is general, undifferentiated type of response i.e. **excitement**. This behaviour soon changes to some specific types of emotional responses. The next emotion to be detected after excitement is **Distress**; this is observed by the end of 1 month.
- **By the end of second month** the feeling of delight can be noted. Between 3-6 months **anger, disgust and fear** are reflected. The two fears that seem at birth are sudden withdrawal of support to the body and a reaction to a loud voice/ harsh noise. All the other fears are learned.
- **By 3 months** smile appears but this is indiscriminately used regardless of situation.
- **By end of 6 months** child smiles at familiar persons and more selectively.
- **During 7-8 months** infant expresses distress in response to being left by the mother. This is called *Separation anxiety*. (Separation from familiar persons produces more anxiety than from unfamiliar persons).
- **During 9-10 months** many babies show a pronounced fear of unfamiliar people. This is called *Stranger anxiety* (a wary or fretful reaction that infant often displays when approached by an unfamiliar person). Usually this starts at 6 months and peaks at 8-10 months and generally disappears by 15 months. This is not universal characteristic of infancy. Infants exposed to limited variety and number of caregivers show more stranger anxiety than infants who are exposed to a diversity of people.
- **By 1-2 years** infants are capable of discerning emotional meaning underlying an adult's facial and vocal expressions and incorporate this meaning into their interpretation of the adult's behaviour. This is known as *social referencing*, (observing emotional cues of others and using such cues to interpret the possible implications of an event for one self. For instance, if mother shows negative emotions such as wariness,

infant may withdraw; on the other hand if she shows positive emotion, infant is more likely to approach the situation with confidence.) Social referencing illustrates how members of a cultural group build a shared view of reality during the infancy. As the children grow older, they acquire a broader range of emotions. They also become increasingly aware of their own and others feelings. Changes that occur in the emotional responses are the products of complex interactions of maturation and learning. In early days of infancy children respond to emotional states of others. For instance, if one child cries, the other child also cries. It is called *emotional contagion*, (tendency for infants to cry spontaneously when they hear other infant's crying).

- **By 2-3 years** children can talk about their own emotional states and others experiences and they can recognize emotions are connected to people's desires.
- **By preschool age** children show evidence of *self conscious (Self conscious emotions*: they include guilt, shame, embarrassment and pride.) emotions that reflect awareness of social standards and other people's concern about adherence to these standards.

Acquisition of Language Ability during Infancy

Lesson Outline

- What is language
- How acquisition of language takes place
- Milestones of early language development
- Factors affecting language development

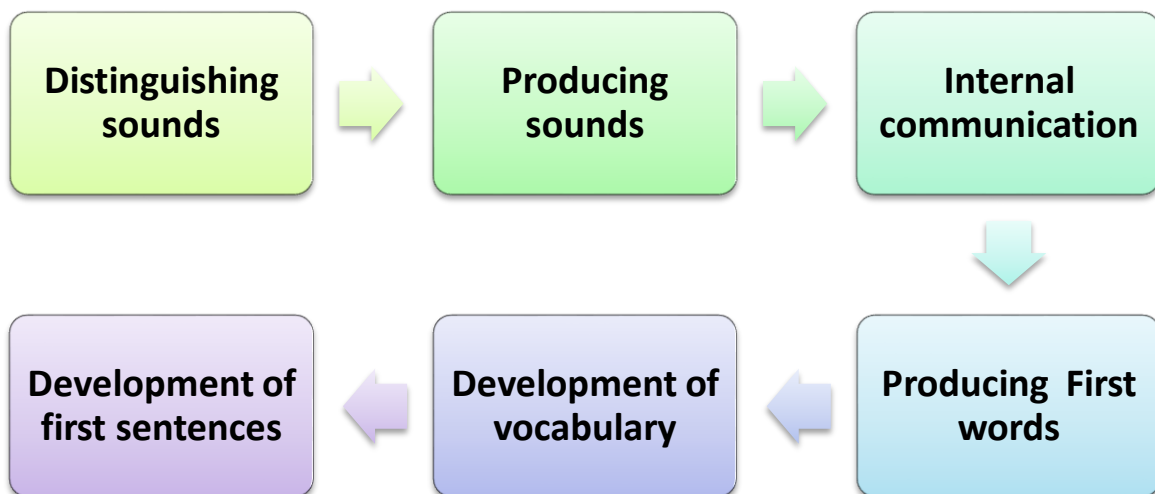
What is language?

- Language serves as a necessary means of communication It is the primary form of expression through which people communicate their knowledge and thoughts.
- Language is a well ordered system of rules that each adult member of the community comprehends in speaking and writing.
- It is an important tool in the field of education; it is used as a vehicle through which education is imparted to the child.

- Child's language develops from simple to complex. i.e. from individual sounds to syllables, to one word sentence to two word sentences to complex complete grammatically accurate sentences.

Acquisition of language

Before they utter words, infants must become proficient in distinguishing and producing sounds of their native language. They need to identify the individual words and their meanings from the streams of sounds they hear spoken around them.



1. **Distinguishing sounds of speech:** children must be able to discriminate sounds of language before they can put sounds together. Each language uses a subset of 100-150 possible phonemes for instance, English language has about 45 phonemes. Languages differ in terms of phonemes they contain.
2. **Producing sounds of speech:** repetitive vowel sounds such as ahh, ooh at 2 months is called cooing. Then by 6 months infant begins to combine the consonant sounds with vowels such as ba, da. Between 6-10 months infant repeats consonant – vowels combinations of sounds like mama, baba. But during this stage child does not associate any meaning to these sounds.
3. **Internal communication:** infants can communicate their needs through gestures and vocalizations before they utter a word. Communicative abilities of infants are dependent upon their cognitive abilities. For instance, to communicate their needs infant has to point towards object. For this he needs to understand cause and effect relationships.

4. **First words:** Children's ability to understand language called receptive language precedes their ability to produce language or expressive language. The first words are usually the names of common objects or people which are present in their immediate social setting. Eg. Mama for mother, dada for dog. The ability to say words indicates a remarkable increase in children's level of abstract thinking. They now understand the correspondence between a mental concept and the set of sounds. The child's first words are Holophrases, individual words that convey as much meaning as sentences.
5. **Development of vocabulary:** Once a child understands the sound and word connection (by 12-18 months), he adds around 3 words per month to his vocabulary. After 18-24 months a vocabulary explosion often occurs, in which child quickly acquires a larger number of words at a rapid rate. By age 2 he invents new words by changing a noun to a verb.

Sometimes child uses certain words which are outside the bounds of the category named by the word. This process is called overextension. For instance, a child may use the word doggie to refer any animal with four legs. Sometimes children use words to refer a small group than the word exactly names, this is called under extension. Eg. The child may use a word shoe for slipper.

6. **Development of First sentences:** At about 18 months, many children produce sequence of words, usually separated by long pauses. They shift from using holophrases to true sentences. Children's early sentences emphasize early meaning and usually refer to actions of objects. Children's earliest sentences are called Telegraphic speech because they contain only the most essential and informative words. This speech gradually becomes elaborated as children develop more sophisticated language skills.

Mile stones of language development

- **At birth** - the child's cry is reflective but within a month becomes differentiated. He uses different cries to indicate different needs.
- **One and half month** - the child uses vowels and giggles. The vowel sounds are called cooing. It indicates that the child feels comfortable and happy. The child begins to coo usually in response to mother's smile and talk. This cooing and gurgling develop gradually into what is called babbling in which the child makes a variety of pre speech sounds. The child uses babbling to practice speech sounds and control over the speech organs. This practice reaches the peak between 6-9 months. Eventually syllables are alternated

and more varied. For instance, . Aba-da-da-ma-da di. This babbling seems to denote pleasure and also seems to be a kind to vocal practice.

- **Ten months:** Infants begins to try to imitate speech. Though these sounds are not meaningful but refer to something.

Ex. Da for dog

Ba for birds

- **Around One and a half years,** the child has an active vocabulary of about 50 words and can understand many words. During this period the child moves into linguistic period. That is, he begins to use meaningful speech. Understanding the context in which the child is using that word is very important. This is a Holophrases and telegraphic periods: the child substitutes the sounds or omits the original sound.

Ex. Child's Word

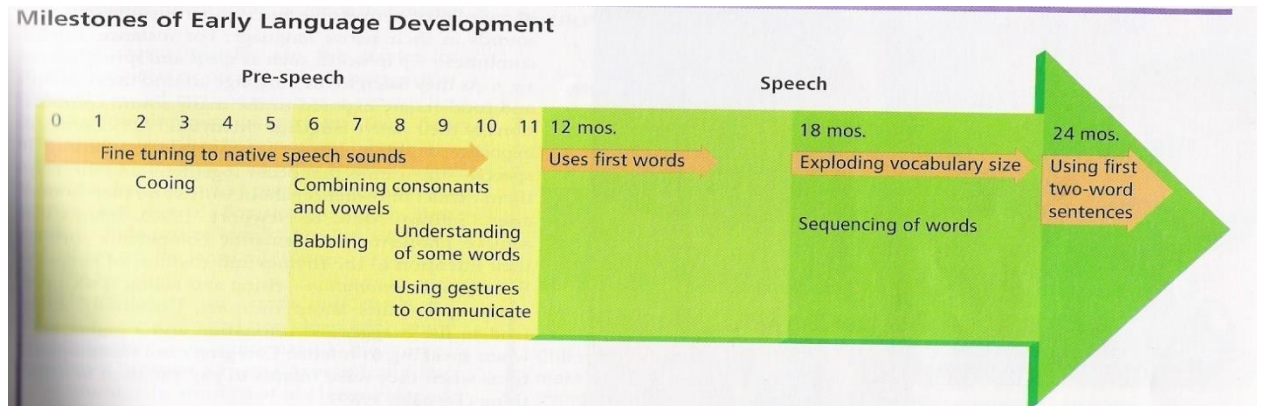
Real word

Green

Green

(Check this example, should it be Child's word - greem and real word - green?)

- **By two and a half years** the child can combine the words into short sentences, though most of them are incomplete. The sentences are used together with gestures to communicate a thought. They contain one or more nouns, a verb, and an adjective and adverb. Less essential words such as prepositions, pronouns and conjunctions are omitted. Ex: "Want water", "Sit chair"
- **In the third year,** the child learns the use of grammar or different structures which help her to express different meanings. Sentences increase in length until they are complete. Meaning is increased and the context can be understood in child's speech.
Ex. I no go to bed
- **Around three and a half to four years** the child can make sentences and learn the use of pronouns, adverbs and other connecting words – where, why, when, what, who, which and to use the negatives in several ways. Syntax is usually almost like adults. They include all parts of speech. Later on they use more complex and compound sentences with greater frequency as years increase.



Insert the following information in the above graph

36 months

- Produce meaningful sentences
- sentences increase in length
- Use of grammar

48 months

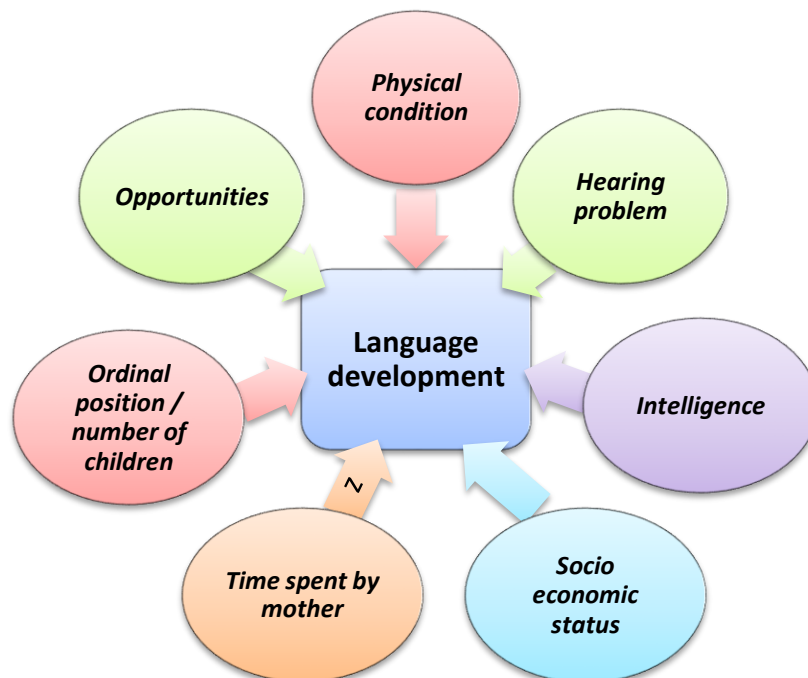
- Make sentences by using adverbs, pronouns, connecting words and opposites etc
- Make complex and compound sentences

Factors affecting language development:

There are individual differences in language development. They could be due to many factors like

- **Physical condition:** It has an important influence on development of language. Severe and prolonged illness during the first two years can retard the development of speech.
- **Hearing problem:** Children who are hard of hearing are also unable to develop speech at normal rate.
- **Intelligence:** children of superior intelligence talk early and are advanced in every phase of language development. Children of low intelligence are slow in their language development.
- **Socio economic status:** Children of higher socio economic group are more advanced in language than those of lower income groups since social contacts and relationships of the child have an important influence on speech development.

- **Time spent by mother:** the amount of time spent by mother or caregiver during early years has a significant relationship to the language development of the child. Healthy family relations aid good speech development since children imitate adults in order to acquire speech and language. Children of orphanages are slow because of lack of affectionate personal relationship with an adult who indulges in verbal interaction with the child.
- **Ordinal position / number of children:** the only child has the mother's undivided attention for longer periods than a child who has brothers and sisters. Twins and triplets are retarded in speech development as compared with singletons.
- **Opportunities / experiences:** opportunities for language development through verbal interaction with adults and play with other children of their own age stimulates language acquisition.



Social development during Infancy

Out line:

- Social development- definition
- Social development during infancy
- Social development during other periods of life span

Introduction

Every infant like every adult depends on other people for existence. The first social group, the family determines what kind of individual the child will be during early years. This group plays an important role in establishing attitudes and habits.

Social development is a process whereby an individual's attitudes, skills, motives, standards and behaviour are shaped by the society. These behaviours are desirable and appropriate according to the society.

Social development follows a pattern. (Every child usually passes through certain phases of becoming socialized like their peer group).

Insert a hand symbol Note: Children must learn social skills and how to make adjustments to others.

companionship of others as long as their bodily needs are taken care of. Social behaviour begins when the baby first distinguishes between objects and persons. The first social response of the baby is to adults.

- **1st month:** the baby is not ready for social stimulation. Behaviour patterns are undergoing organization. The baby stares at faces close by and seems to enjoy following the movements of objects.

- **2nd month:** they are actively aware of adults who take care for them, but are not aware of other babies in the same room. They gradually respond to smiles of those around them.

- **By end of 3rd month,** they may turn their head in response to a voice or mother's movements. Mother's social presence is beginning to be felt.

- **At 4 months** there is an increased demand for sociability. They need attention of the people.

- **At 5-6 months** they may begin to cry when people leave the room or their presence. They smile or cry to reply to adult's stimuli. Interest towards people and interaction with immediate environment will increase. Their powers of perception develop rapidly.

- **At 7 months** they may join in a group game. They can respond to more than one person at a time. They enjoy attention of others but prefer familiar faces and exhibit fear towards strangers.
- **Between 8-10 months** they may show aggressive behaviours such as pulling hair, grabbing toys and so on. They also imitate some vocal sounds. They are aware of other children close by them. Their attention towards themselves decreases and attention on toys and family members increases.
- **By 1 year** child enjoys social exchanges (eg. Give and take) are greatly enjoyed.
- **By 15 months** child is busy with her own business of walking, bending and stooping and mastering body movements, instead of bothering about the people around.
- **By 18 months** child is still getting into everything, never seeming to stay in one place for any period of time. She is explorative and responsive to adults and conscious of social approval.

Social development after infancy

Preschool Age: - Early in this stage the child exhibits egocentric behaviour. But when he comes in contact with the groups he becomes less egocentric. Play takes a significant role for socializing the child and the child acquires primary socializing experiences. Co-operation, sympathy, sharing develops with the advancement of the age. The child adopts behaviors and attitudes of a model in order to possess the desirable attributes of that model. The model could be any significant person in the child's life.

School Age: In this stage peer group assumes an important role, since a child spends more time away from the family and in the company of friends. Peer group at school and play group in the community are important socializing agents in this stage. The peer group is important in the development of identity, attitudes and values. Child's position in the group greatly influences his self concept. The child

develops socially acceptable behaviour more effectively like co-cooperativeness, altruism, sharing with others and other prosocial behaviours. Influence of group also leads the child to indulge in behaviors not socially acceptable.

Adolescence: Social development in this stage is intense in nature. In the early period of adolescence the child experiences puberty growth spurt. This brings in marked changes in their physical appearance and in emotional attitudes. She may feel that she is distinct from others and may withdraw from the group. But with age, it will disappear and child tries to be socially accepted. She identifies with others, irrespective of race, religion and gender. Hetero sexual relationships also help a great deal to widen the social horizon of the adolescent.

Adulthood: In this stage socialization is stable. At the early phase in the social contact, hetro sexual relationships reach peak point, but after that decrease according to the advancement of age. In early period of this stage an individual is anxious to improve social status.

Old Age: In this stage the social development is limited due to limited social contact and development of some unsocial behaviour. People in this stage only keep contact with their own group. Development of ego centrism also makes them socially isolated. Retirement from their assigned job and roles may make people socially isolated, arouse depression and boredom. This could further be aggravated due to physical and mental disability as they grow older.

Conclusion:

Social development is progressive change in social skills starting from no interest in the social world at the neonatal stage to becoming a socially competent individual in the society. Early childhood lays the foundations for this change to occur in an individual.

LESSON-12

ANTECEDENT INFLUENCE FOR INFANCY GROWTH AND DEVELOPMENT

Infant growth and development is fascinating to witness, to which most parents can attest. The rate at which a baby goes from being a helpless newborn to sitting, crawling and walking is nothing short of astounding. In the first year of life, several key factors can influence a baby's development positively- and the good news is that parents can do concrete, everyday things to ensure their infant is happy, healthy and thriving.

1. Good Nutrition

First things first: To grow well, babies must be fed properly. "Feeding of your baby appropriately during the first year of life is extremely important, as more growth occurs during your baby's first year than any other time in her life. Starting good eating habits at this early stage will help set healthful eating patterns for life," notes Children's Hospital Boston. For the first few months, all a baby needs is breast milk or formula; you should not start solid foods before an infant is 4 months old. When a baby does start solid foods, parents should try to offer a variety of foods early, which may lead to good eating habits down the road.

2. Stimulation and Interaction:

Infants need lots of stimulation and interaction, which is essential for their cognitive and emotional development. Talking, singing, playing music, carrying on "conversations" (such as exchanging babbling-type sounds counts for conversation), and reading stories with babies builds their vocabulary, demonstrates emotions, and teaches problem-solving skills, says the California Childcare Health Program. The program recommends that parents provide their infants with a variety of experiences and surroundings, and visit museums, aquariums, zoos and farmers' markets to stimulate their senses. Babies in the first year also love it when you read to them, the CA Childcare Health Program notes -- and, even though they cannot follow the story, the pictures and sound of a parent's voice are fascinating to them. And perhaps most important of all, the program says, is touch, which is critical for

infants, because it is how infants know their parents love and want them. Physical contact with parents and caregivers sends signals to infants' brains, telling them to grow and to make important connections.

3. Secure Attachment

A healthy, secure attachment in infants, which is defined as "the emotional connections babies form with their parents and caregivers," develops gradually over time, if adults provide "consistent, sensitive" care, note Linda Gillespie and Amy Hunter of the National Association for the Education of Young Children. This idea stems from attachment theory, which is the work of psychologists John Bowlby and Mary Ainsworth, which holds that babies relate to their primary caregiver, in different ways, depending on the quality and consistency of their care. A secure attachment is crucial: As the U.S. Department of Health and Human Services writes, "The importance of early infant attachment cannot be overstated. It is at the heart of healthy child development and lays the foundation for relating intimately with others, including spouses and children. It affects parents' abilities to nurture and be responsive to their children. The effects of infant attachment are long-term, influencing generations of families." Parents can create a healthy attachment in their infant by reading her cues (such as crying, screeching, laughing, turning away, pointing) and responding promptly to her needs and wants -- which is how an infant learns that the caregiver is "a source of comfort and security," say Gillespie and Hunter. They also note that research demonstrates that how parents interact directly with their babies affects later development: Babies who display secure attachments become children who learn their world is a safe place to be because the people in it are caring; that close relationships feel good; that their attempts at communication result in responsiveness and understanding; and they can feel confident in exploring their world, which enables them to learn.

4. Adequate Sleep

Once infants are past the newborn phase, which is usually between 3 and 4 months, they need between nine and 12 hours of sleep per night for optimal health. When they get this sleep depends, as nap times of infants

vary, with most taking 30-minute to 2-hour naps one to four times a day. As tough as it is to teach a baby to sleep well, parents should try to instill good sleep habits in infancy, notes Michael J. Breus, Ph.D. in the article "Good, Sound Sleep for Your Child" on WebMD. He notes that babies who do not get enough sleep are more "fitful and socially demanding," and are not as comfortable playing independently. And it is not just the baby years that are affected: Breus contends that chaotic and erratic sleep patterns in infancy relate to problems with learning, attention and memory in childhood. To establish positive sleep habits, HealthyChildren.org recommends that you put infants to bed drowsy, but not asleep, allowing them to become "self-soothers" who can fall asleep independently and who also can put themselves back to sleep in the middle of the night if they wake in their cribs. Also important: Developing regular daytime and bedtime schedules, creating an enjoyable and relaxing bedtime routine, and creating a sleep-friendly, optimal temperature in a quiet and calm environment for babies.

LESSON-13

DIFFERENT STAGES OF DEVELOPMENT

Characteristics, Physical Development & Motor Development

According to Elizabeth & Hurlock, the stages of development are:

1. Prenatal period-Conception to birth
2. Infancy-From birth to the end of 9th week i.e. after 2 months.
3. Babyhood-9th week to 2 years of age.
4. Childhood-2 years to 11/12 years or upto puberty.

This childhood is again divided into two types.

- i) Early childhood- 2 years to the end of 6th year.
- ii) Late childhood-7th year to 11/12 years

5. Adolescence -11/12 years to 20 years of age.

This is subdivided into 3 stages

- i) Preadolescence period-11/12 years to 14 years
 - ii) Early adolescence period-14 years to 16/17 years
 - iii) Later adolescence period- 16/17 years to 20 years
6. Adulthood-21 years onward

According to other psychologists:-

1. Infancy- Birth to 2 years
2. Childhood- 2 years to 11/12 years
3. Adolescence- 11/12 years to 20/21 years
4. Adulthood- 21 years onward.

Early childhood

Meaning of early childhood-

Childhood begins after babyhood at approximately the age of two years and extends to the time when the child becomes sexually mature at approximately 13 years for the average girl and 14 years for the average boy.

Childhood is subdivided into two periods- early and late childhood. Early childhood extends from two to six years and late childhood from seven to the time when the child becomes sexually mature. Thus early childhood begins at the conclusion of babyhood- the age when dependency is practically a thing of the past and being replaced by growing independence- and ends at about the time the child enters first grade in school.

As the age of six marks the beginning of the compulsory school period in our culture, it serves as a convenient dividing line between early and late childhood. This dividing line is significant because when the child leaves his home environment and enters school, new pressures and new expectations lead to great changes in the pattern of his behavior, his attitudes, interests and values. As a result, children become 'different' people from what they were earlier. It is this difference in their psychological make up rather than the difference in their physical make up that justifies dividing this long span of years into two subdivisions, early and late childhood.

Another reason of placing the dividing line at six years is of social factors. There is relatively little difference in the physical growth and development of children before and after they are six years old. For exam-the five year old is not radically different from the seven year old.

Characteristics of early childhood

Just as certain characteristics of babyhood make it a distinctive period in the life span, so certain characteristics of early childhood set it apart from other periods. These characteristics are reflected in the names that parents educators and psychologists commonly apply to this period.

1) Names used by parents:-

Most parents consider early childhood a problem age or troublesome age. While babyhood represents problems for parents, most of these centre around the baby's physical care. With the dawn of childhood, behavior problems become more frequent and more troublesome than the physical-care problems of babyhood.

The reasons of behavior problems are-the child gradually develops a distinctive personality and demands an independence which he may be incapable of handling successfully. In addition, young children are often obstinate, stubborn, disobedient, negativistic and antagonistic. They have frequent temper tantrums, irrational fears and suffer from jealousies.

Early childhood age seems to be less appealing than babyhood to many parents. The dependency of the baby is now replaced by a resistance on the children's part to their help and a tendency to reject their demonstrations of their affection. Furthermore, few young children are as cute as babies, which also make them less appealing.

Parents also refer early childhood as the toy age because young children spend much of their waking time playing with toys studies of children's play have revealed that toy play reaches its peak during the early childhood years and then begins to decrease when children reach the school age. This does not mean that they are not interested in playing with toys but with entrance to first grade. Children are encouraged to engage in games and modified forms of sports which does not require the use of toys. When alone, they continue to play with toys, up to third or 4th grade.

During the preschool years, nursery schools, kinder gartens, day-care centers and organized play groups, all emphasize play which makes use of toys. As a result, whether young children are playing alone or with peers, toys are an important element of their play activities.

2) Names used by educators:-

Education refer to early childhood as the “pre-school age”, the period preceding the child’s entrance into school or to distinguish it from the time when children are considered old enough both physically and mentally to cope with the work they will be expected to do when they begin their formal schooling. Even when children go to nursery school or kinder garten, they are labeled preschoolers rather than school children. The early childhood years, either in the home or in a preschool, are at a time of preparation.

3) Names used by psychologists:-

To the psychologists, early childhood is the ‘pre-gang age’ , the time when the child is learning the foundation of social behavior. This learning will prepare him for the more highly organized social life of the school.

Early childhood is the period when the major development is that of control over the environment. So many psychologists refer to early childhood as the exploratory age. Having acquired a workable control of his own body during the first two years of life, the child is now ready to explore his environment. He wants to know what his environment is, how it works and how he can be a part of it. This includes people as well as inanimate objects. One common way of exploring in early childhood is by asking questions, thus this period is often referred to as the questioning age.

Imitation of speech and actions of others are more pronounced during early childhood . For this reason, it is also known as the imitative age. However, in spite of this tendency, most children show more creativity in their play during early childhood than at any other time in their lives. For that reason, psychologists also regard it as the creative age.

Significance of early childhood years

The early childhood years i.e. 3-6 years is the most impressionable age in one’s life. It represents a remarkable period of physical and psychological development. Personality development begins during infancy, but during early childhood only one

sees the uniqueness of the individual emerging in complex ways. He acquires the ability to communicate with others- and to be communicated with- through the use of words which are symbols to represent ideas.\

During this period children can move about freely, so they are better able to explore the world around them.

As their ability to communicate grows, they become intelligent enough to use their memory power, they relate in more significant ways to others to members of their family with whom they come in contact.

At the pre school stage, personality develops through starting new activities, getting new ideas and through exploration of places, people, language, objects and materials.

The study of early childhood is very useful for teachers, or parents to plan curricular and co-curricular activities. Whatever is learnt at this stage gets so deeply embedded in him that it becomes difficult to change it later on. Therefore, a rich environment and rich experiences are to be provided to the child to develop good habits, proper attitudes and a questioning mind.

- Early childhood is regarded as the teachable moment for acquiring skills because children enjoy repetition essential to learning skills.
- Speech development advances rapidly during this stage. So improvement in comprehension as well as in difficult speech skill are also seen.
- During this stage, the foundation of social development are laid.
- Early childhood is characterized by morality by constraint- a time when children learn, through punishment and praise, to obey rule automatically.

PHYSICAL DEVELOPMENT DURING EARLY CHILDHOOD

Growth during early childhood proceeds at a slow rate as compared with the rapid rate of growth during babyhood. Early childhood is a time of relatively even growth, though there are seasonal variations, July to mid-December is the most favourable time for increase in weight and April to mid-August is most favourable for increase of height.

The major aspects of physical development are as follows:-

1. **Height**-The average annual increase in height is 3 inches. By the age of six, the average child's height is 46.6 inches.
2. **Weight**- The average annual increase in weight is 3 to 5 pounds. At age six, children should weight approximately seven times as much as they did at birth. The average girl weighs about 48.5 pounds and the average boy weight 49 lbs.
3. **Body proportions**- Body proportions change markedly and the 'baby look' disappears .Facial features remain small but the chin becomes more pronounced and the neck elongates. There is a gradual decrease in the stockiness of the trunk and the body tends to become core-shaped with a flattened abdomen, chest is broader and flatter, shoulders are broader and more square. The arms and legs lengthen and may become spindly and the hands and feet grow bigger.
4. **Body build**-For the first time in early childhood differences in body build become apparent. Some children have an endomorphic or flabby fat body build, some have a mesomorphic or sturdy muscular body build and some have an ectomorphic or relatively thin body build.
5. **Bones and muscles**:- The bones ossify at different rates in different parts of the body following the laws of developmental direction. The muscles become larger, stronger and heavier with the result that children look thinner as early childhood progresses, even though they weigh more.
6. **Fat**-Children who tend forward endomorphy have more adipose than muscular tissue; those who tend toward mesomorphy have more muscular than adipose tissue; and those with an ectomorphic build have both small muscles and little adipose tissue.\

7. **Teeth**-During the first four to six months of early childhood, the last four baby teeth-the back molars—erupt. During the last half year of early childhood, the baby teeth begin to be replaced by permanent teeth. The first to come out are the front central incisors- the 1st baby teeth to appear. When early childhood ends, the child generally has one or two permanent teeth in front and some gaps where permanent teeth will eventually erupt.

There are individual differences in all aspects of physical development. Children of superior intelligence, tend to be taller in early childhood than those of average or below-average intelligence and to shed their temporary teeth sooner. While sex differences in height and weight are not pronounced, ossification of the bones and shedding of the temporary teeth are more advanced, age for age, in girls than in boys. Children of higher socio-economic groups tend to be better nourished and receive better prenatal and post natal care, variations in height, weight and muscular development are in their favour.

Environment and stimulation- Children who got better environment and stimulation tend to grow bigger and stronger.

SKILLS OF EARLY CHILDHOOD/MOTOR DEVELOPMENT

Early childhood is the ideal age to learn skills. There are 3 reasons for this.

First. Young children enjoy repetition and are therefore, willing to repeat an activity until they have acquired the ability to do it well.

Second-Young children are adventuresome and as a result , are not held back by fear of hurting themselves or of being ridiculed by peers as older children often are.

Third:-Young children learn easily and quickly because their bodies are still very pliable and because they have acquired so few skills that they do not interfere with the acquisition of new ones.

Early childhood may be regarded as the 'teachable moment' for acquiring skills. If children are not given opportunities to learn skills when they are developmentally ready to do so and when they want to do so because of their growing desire for independence, they will not only lack necessary foundation for the skills their peers have learned but they will lack the motivation to learn skills when they are eventually given an opportunity to do so.

Typical skills of early childhood

What skills young children will learn depends partly upon their maturational readiness but mainly upon the opportunities they are given to learn and the guidance they receive in mastering these skills quickly and efficiently. Children from poor environments, generally master skills earlier and in larger numbers than children from more favoured environments not because they are maturationally more advanced but because their parents are too busy to wait on them when it is no longer necessary.

There are sex differences in the kinds of skills children learn. Early in childhood, boys come under pressure to learn play skills that are culturally approved for members of their own sex to avoid mastering those which are considered more appropriate for girls. Boys are for example encouraged to learn skills involved in ball play, just as girls are encouraged to learn skills related to homemaking.

In spite of variations, all young children learn certain common skills, though the time they learn them may vary somewhat and the proficiency with which they learn them may be different. These common skills can be divided into two major categories: hand skills and leg skills.

Hand skills:- Self-feeding and dressing skills, begin in babyhood, are perfected in early childhood. The greatest improvement in dressing skills generally comes between the ages of 1 ½ and 3 ½ years. Brushing the hair and bathing are skills which can be acquired easily in early childhood. By the time children reach kindergarten age, they should be able to bathe and dress themselves with a fair degree of proficiency, to tie their shoe laces and to comb their hair with little or no assistance.

Between the ages of five and six, most children can become proficient in throwing and catching balls. They can use scissors and can mold with clay, make cookies and sew. Using crayons, pencils and painting, young children are able to colour outlined pictures, draw or paint pictures of their own, and make a recognizable drawing of a man.

Leg skills:- Once young children have learned to walk, they turn their attention to learning other movements requiring the use of their legs, they learn to hop, skip, gallop and jump by the time they are five or six years old.

Climbing Skills are likewise well established in early childhood between the ages of 3 & 4, tri-cycling and swimming can be learned. Other leg skills acquired by the young children include jumping rope, balancing on rails or on the top of a wall, roller skating, ice skating (on double runners) and dancing.

Handedness:- Early childhood may be regarded as a critical period in the establishment of handedness. The reason is that, during this period, children abandon the tendency to shift from the use of one hand to the use of the other and begin to concentrate on learning skills with one hand as the dominant hand and the other as the auxiliary or helping hand.

There is evidence that handedness- or the tendency to use one hand in preference to the other – is not firmly established until sometime between the ages of three and six years. This, of course, does not mean that children cannot change the dominant hand if they want to do so. For example- should first graders discover that it is a handicap to use their left hand when they are trying to imitate the model of right-handed writing the teacher puts on the chalk board, they can change to using the right hand as the dominant hand if their motivation to do so is strong enough. However, with each passing year, the habit of using one hand as the dominant hand in preference to the other hand becomes more firmly established. As a result, changing handedness becomes increasingly difficult.

Though there is no evidence of research findings, it is said that children who attend preschools-nursery schools or kinder gartens-or who are cared for in day-care centre or day camps during the summer months, are less likely to develop left-handed tendencies than children whose early childhood years are spent mainly in the home and with neighborhood play groups.

The reason for this is that, in preschools, teachers and other caretakers are advised to encourage children to use their right hands and are expected to teach

new hand skills in such a way that children who are still somewhat ambidextrous will find the case of right hands relatively easy and for less confusing than they will by the time they reach first grade. [Not all preschools emphasize the encouragement of right-handedness but many more do than those which ignore this aspect of guidance.] By contrast, many parents believe that handedness is a hereditary trait and as a result, when they see their children using their left hands, they assume that they are naturally left handed and do nothing to encourage them to learn new skills with their right hands as the dominant ones.

Because many of the hand skills young children learn can not be carried out with one hand but require the use of both hands, both hands must be trained to carry out the skills. However, few skills require that both hands play equally important roles in carrying out the skills. Consequently, in teaching young children new hand skills emphasis should be placed on the movement made by the dominant hand and these by the auxiliary hand. These movements are often quite different. In the case of crayoning, for example- the dominant hand uses the crayon and the auxiliary hand holds the paper in place, so the child can crayon a figure on it. In buttoning a garment, most of the movements of pushing the button through the hole are done by the dominant hand while the movements made by the auxiliary hand consist mainly of holding the garment in such a way that the button will be close enough to the buttonhole to be inserted in to it.

Motor development:- Motor development is the development of control over bodily movement through the coordinated activity of nerve centre, nerves and muscles. It helps in acquisition of new abilities e.g. walking, climbing, jumping, running, writing etc.

Factors affecting physical and motor development

- 1. Good health and nutrition:-** It determines the biological growth i.e. the quantitative and qualitative growth of the child. The better the health and nutrition, the larger children tend to be as compared to those whose nutrition and health are poor.
- 2. Intelligence:-** Bright children tend to be taller and heavier than average and below average.

3. Sex difference:-

4. Immunization- Children who were immunized against disease during the early years of life grow larger than those who were not immunized.

5. Emotional tension- Placid children grow faster than those who are emotionally disturbed though emotional disturbance has a greater effect on weight than height.

6. Environment:- a)Family-Love, affection and care from family members. If all their requirements will be met at the right time, their growth will be faster.

b)Social horizon- The opportunity for socialization also helps for physical and motor development.

7. Racial factor:- Children of hot and cold climate's development vary from each other.

8. Child rearing practices:- Children from democratic child rearing practices are better developed than authoritarian and permissive.

9. Heredity:- Children of taller parents tend to be taller.

10.Opportunity for development.

11.Guidance and supervision

12.Exercise- Motor development

Motor development means the development of control over bodily movements through the coordinated activity of the nerve centre, the nerves, and the muscles. This control comes from the development of the reflexes and mass activity present at birth. Until this development occurs, the children will remain helpless.

Motor skills are fine coordination in which the smaller muscles play a major role.

Lesson-14

SOCIAL DEVELOPMENT & COMPANIONS IN EARLY CHILDHOOD

At all ages, companions may be of three different kinds: They are :-

- 1) **Associates**:- Associates are people who satisfy an individual's companionship needs by being in the same environment where they can be watched and listened to. There is no direct interaction between the individual and the associates. At any age, associates can be of either sex and of any age. For example adults enjoy watching and listening to children just as children enjoy watching and listening to adults.
- 2) **Playmates**:- Playmates are people with whom individuals engage in pleasurable activities. Their age and sex are less important than the interests and skills they have in common with the individual for whom they serve in this role. Children prefer playmates of their own sex.
- 3) **Friends** :- Friends are not only congenial playmates, but they are also people with whom the individual can communicate by exchanging ideas and confidence and by asking or giving advice. Throughout childhood and adolescence, the most congenial and most satisfactory friends are those of the individual's own sex and level of development, who have similar interests and values.

In childhood, companions are mainly associates and playmates. But young children may refer some of their favourable playmates as friends.

During the 1st year or two of early childhood, when contacts with others are mainly in parallel or associates play, children's companions are primarily associates. Later, when they engage in cooperative play, their companions become their playmates. At this time, children are having one or more favourite playmates with whom they play as well as communicate their feelings, emotions, interests and aspirations for the future. These children play the roles of playmates and friends

only towards the last part of early childhood when egocentric speech becomes more socialized does this happen.

In the selection of companions, children prefer older children to their own ages and levels of development who can do what they are able to do. Children younger or older may serve as associates but not playmates because their play is on a different level.

Young children give little consideration to the traits of associates but when it comes to selecting playmates and friends, the traits of these individuals become very important.

They want playmates who not only have the play skills but also want their playmates to be good sports, cooperative, generous, unselfish, honest and loyal. These qualities are even more important in the children they select as friends. Socio-economic differences and racial differences are less important to them.

Substitute Companions:-

When companionship needs are not met, most young children often try to fill their needs by substituting imaginary playmates or by treating a pet as if it were a real person.

Lonely children create playmates in their imagination and play with them as if they were real playmates. These imaginary playmates have the qualities children would like real playmates to have.

Leaders in Early Childhood:-

In early childhood, leaders are characteristically larger, more intelligent and slightly older than the other members of the play group. Older and intelligent makes it possible for them to offer suggestions for play which the other children are willing to follow. In addition, bigger children are given respect (respect to size) as a result of their habit of obedience to adult requests.

There are two types of leaders in early childhood.

1. Most are tyrannical bosses who show little consideration for the wishes of others. If the tyranny becomes too great, the leader loses status and is replaced by another.

2. Some leaders in early childhood are “diplomats” who lead others by indirect and artful suggestions or by bargaining. Girls at this age frequently assume the role of leadership in groups containing boys.

CONCEPT OF SOCIALIZATION AND DISCIPLINARY PRACTICES

Social development is concerned with the process of socialization i.e. the acquisition of the ability to form interpersonal relationship and to behave in accordance with social expectations. Social development also refers to the child's relationship with people (how to get along with others, what is the expected social behaviour and how to communicate).

Socialisation plays a major role in social development of child. It is a continuous process which goes on from the time of birth till death. By this process only child learns to control his emotional expression, when and what to speak, behave or react, all this is learnt through the process of socialization.

Socialization can be defined as a continuous process by which a child learns to behave according to the rules of his society and acquires values, attitudes and knowledge needed to get along in the society i.e. individual to behave like others in his society and culture. Early socialization is very Important.

Basically there are two reasons for the importance of early socialization.

Firstly-the type of behavior the child shows in social situations that effects their personal and social adjustments.

Secondly-social foundations once established, tend to persist as children grow older. (Friendly, happier babies usually better adjusted as they grow older).

Socialization in Early Childhood:-

One of the important developmental tasks of early childhood is acquiring the preliminary training and experience needed to become a member of a 'gang' in late childhood. Therefore early childhood is called 'pregang' age. The foundations of socialization are laid as the number of contacts young children have with their peers increases with each passing year. Not only do they play more with other children but they also talk more with them.

The kind of social contacts young children have is more important than the number of such contacts. If young children enjoy occasional social contacts, their attitude towards future social contacts will be more favourable than if they have more frequent social contacts of a less favourable kind.

Essentials of Socialization:-

1. Biological maturation
2. Developing capacity to differentiate and empathize in order to function effectively in the social world. Empathy is the ability to put oneself in the position of another person and to experience what that person experiences. This develops only when children can understand the facial expression and speech of others. This social insight normally increases with age.
3. Ample opportunities need to be offered.
4. Children should be motivated to be social which depends on satisfaction.
5. Socialised speech is another essential aspect when children progress from egocentric to socialized speech, the peers and others take interest in conversing about variety of topics rather than about self.

Pattern of socialization:- The pattern of social development is similar for all children. There are two reasons for only slight variation in the pattern of socialization. .

1. The pattern of physical and mental development is similar for all children, even though minor variations do occur, arising to differences in intelligence, health and other factors. The slight variation is due to this difference.
2. Within a cultural group, social pressures and social expectations lead to similar learning experiences for all children. But because the daily life of each individual family is different, a little difference may be found.

Social development begins in babyhood with the appearance of social smile. Young children smile when they see their mother and cry intensely when they see any stranger. This is because the tie with a bond of attachment with the mother.

In early childhood, social skills of sharing and taking turns, co-operating, learning to get along with others, understanding what it means to be a girl or a boy are typical at this period. Adults need to encourage these from time to time. They learn self control, rules also gradually become internalized. Adults need to explain these rules.

The major goals of socialization are:-

- a) To develop a positive self concept in children.
- b) A feeling of self confidence, independence.
- c) Developing a strong ability for giving and receiving affection.
- d) Developing an attachment or bond.
- e) Developing an interest in other people.
- f) Learning to communicate with others.

These goals are achieved with increase in age and maturation.

Between the age of 2 & 3 years, children engage in parallel play, play in which young play independently beside other children rather than with them. It is the earliest form of social activity young children have with their peers.

Then comes associative play in which children engage in similar activities with other children. Next comes cooperative play, in which they are part of the group and interact with group members.

Next comes the role of onlookers, watching other children at play but making no real attempt to play with them. From this they learn social contacts and what their behaviour be in a social situation.

In this way patterns of early socialization takes place.

Disciplinary practices (child rearing practices)

The disciplinary practices are as follows:-

1. The Authoritarian Pattern:-

The authoritarian approach means that the teacher or parent is very strict and has the authority and thus control the situation,. They take all the decisions whether they are big or small and children have to simply follow. Children cannot question her authority. There is a very little opportunity for the children to take initiative because everything is dictated and demanded. As a result, children may either become submissive or obey the adult without question or may become rebellious or aggressive.

2. The Permissive Pattern:- It is the other extreme . It is totally free approach. Let the child do whatever he wants to. Whatever the child does; is alright. Parents are least bothered and totally non interfering. For exm; when a child throws certain things-parents don't say no to that also. Children do need to have some limitation placed on their actions. When there are no limits, insecurity develops. Sometimes, children may become dominating and would always want the adults to behave according to their desires.

3. The Democratic Pattern:-In a participatory approach where parents and teachers feel that things/situations can be sorted out together. The teacher-parent creates situation where children can be helped, to take decisions about various

things. Everyone's needs are taken into account. Decisions made through mutual discussions which are widely accepted by the children irrespective of the presence of adult to supervise or not. Consistency in behavior should be maintained without switching from one style to another. Otherwise, children may be confused about their role by different types of discipline they receive.

The common effects of discipline on children's behavior, attitude and personality are as follows:-

Effects of discipline on young children.

1. Effects on behavior:- Children of permissive parents become selfish and disregard the rights of others and are aggressive and unsocial. Those who are subjected to strict, authoritarian training are obedient in the presence of adults but aggressive in peer relationship. Children are brought up under the democratic discipline learn to restrain behavior they knew wrong and they are more considerate of the rights of others.

Effects on attitude:-Children whose parents are either authoritarian or permissive tend to resent those in authority. In the former case, they feel they have been treated unfairly. In the later case they feel their parents should have warned them that not all adults will accept undisciplined behavior. Democratic discipline may lead to temporary anger but not to resentment. The attitude formed as a result of child training methods tend to become generalized to spread to all persons in authority and to persist.

Effects on personality:- The more physical punishment is used, the more likely the child is to become sadden, obstinate and negativistic. This result in poor personal and social adjustment which are also characteristics of children brought up with democratic discipline makes the best personal and social adjustment.

Childhood misdemeanors:-

Misdemeanors:- Mild forms of breaking of rules or misbehavior. These are very common during early childhood regarding them as troublesome.

Common causes:-

- 1. Ignorance of the fact that** their behavior is disapproved by the social group. Sometimes they may have forgotten it or they may not understand all the different situation the rules applies to. For example; they don't know that it is wrong to take the material possession of others.
- 2. In need of attention:-** To get more attention sometimes they break the rules. They feel that they are being ignored by the parents, teachers or siblings.
- 3. Boredom:-**When they have too little thing to do or to pass their time, they want to stir up some excitement; they may want to test adult authority, to see how much they can get away with or without being punished.

The most common forms of misdemeanors are – thumb sucking, bedwetting, temper tantrum, lying, cheating, destructions. Most of these are associated with immaturity and become less and less as children grow older.

Temper tantrum:-This refers to a violent display of bad temper.

Factors influencing social development

- 1. Home:-** The culture of the home, the language spoken in the home, the behaviors displayed by the parents and elders become a part of the children's personality and socialization. Children who are over protected develop traits of dependency and are completely insecured.
- 2. Parent-Child relationship.**
- 3. The socio-economic status:-** The socio-economic status of the home, the language spoken by the parents; the type of family interaction, the child's ordinal position, stability of family etc. Children from democratic homes usually make the best of social adjustments (child rearing practices),

4. Consistent value system.

5. Peers and adults:-Child's social behavior is affected by peers and adults in the school and in the neighborhood. Pre-school children imitate the pattern of social behavior of their peers to get social acceptance. Peers have significant effect in child's learning because they give approval and attention, they show affection, they provide model. But the amount of effect depends upon the degree of intimacy, the tendency to submit or dominate, the ability to cooperate etc.

EMOTIONAL DEVELOPMENT

CLASSIFICATION OF EMOTIONS AS GIVEN BY BRIDGES:- (Age specific emotions).

An emotion may be described as incited state of the entire organism. A true emotion is a highly arousing experience. Not only one part of the body experiences an emotion but the whole body feels it. Emotions may be pleasant e.g. joy, happiness, affection, delight or unpleasant e.g. fear, anger, jealousy, disgust etc.

According to 'Watson' a new born displays three primary or basic emotions. These are love or affection, fear and anger.

The emotional development given by Bridges can be easily understood from the table given below.

<i>Sl.No.</i>	<i>Age</i>	<i>Emotion</i>
1	At the time of birth	Excitement
2	0-3 month	Excitement, distress, pleasure
3	3-6 month	All above+ delight, Anger
4	6-12 month	All above + affection
5	12-18 month	All above+ Jealousy
6	18-24 month	All above+ Joy

SOME EMOTIONS OF CHILDREN:-

- 1) **Excitement:-**During first 3-4 months, infant shows this emotion which is characterized by motor quieting, heart rate deceleration.
- 2) **Distress:-**Young children express distress by crying which may be due to physical pain, hunger, cold or discomfort. According to Bridges children give expression to distress in three ways:-
 - i) Calling some elder for help.
 - ii) Opposing interference
 - iii) Expressing displeasure silently
3. **Affection & love.**
4. **Delight:-**Smiling and laughing are signs of delight. Physical and mental health affect the feeling of delight. A sick and weeping or sleeping child cannot display this feeling.

CHARACTERISTICS OF EMOTIONS (Children's emotion)

1. **Emotions can be detected by symptoms of behaviour:-** An adult is generally able to hide his feelings and emotions. But children's emotions have physical expression. Exm.-when he is angry, he cries, resist, start biting nails, becomes irritable etc.
2. **Children's emotions are brief:-**The young children's emotions last only a few minutes and then end abruptly. An annoyed child starts playing after some time and shows affection.
3. **Children's emotions are intense:-** If a child is happy he will show his happiness by many actions but if he is annoyed, show by crying, irritations.

4. **Children's emotions are transitory:-** They shift from laughter to tears, from anger to smiles or from jealousy to affection which cannot be possible in case of an adult.
5. **Children's emotions appear frequently:-** Children's emotions are shown again and again without social disapproval.
6. **Children's emotional responses are different:-** The behavior becomes more individualized when the child starts interacting with the environment and feels the influences. For example:- One child will run out of the room when he is frightened, other will hide behind the mother, still another might start crying.
7. **Emotions change in strength:-** Emotions that are very strong at certain ages vary in strength as the child grows older. For example:- temper tantrums are frequent before the child enters school, later as they decrease not only in frequency but also in intensity.

Emotions of early childhood

The emotions of early childhood are more common and more intense. It is a time of disequilibrium or imbalance when children are out of focus in the sense that they are easily aroused to emotional outbursts. As a result, they are difficult to live with and guide. This is true of the ages 2½ to 3 ½ and 5½ to 6½ years.

Although any emotion may be "heightened" in the sense that it occurs more frequently and more intensely, than is normal for that particular individual, heightened emotionality in early childhood is characterized by temper tantrums, intense fears and unreasonable outbursts of jealousy . Part of the intense emotionality at this age may be traced to fatigue due to strenuous and prolonged play, rebellion against taking naps and the fact that they may eat too little.

Much of the heightened emotionality characteristics of this age is psychological rather than physiological in origin. Most young children feel that they are capable of doing more than their parents will permit them to do and revolt against the restrictions placed upon them. In addition, they become angry when they find they are incapable of doing what they think they can do easily and successfully. Children whose parents expect them to measure up to unrealistically high standards will experience more emotional tension than the children whose parents are more realistic in their expectations.

Difference in the child's health and his environment influence the patterns of emotional behavior established during babyhood. The child who, as a baby, was kept in a quiet environment and whose needs were met promptly and consistently, is less likely to suffer from intense emotional outbursts as he grows older than the child who, as a baby, lived in a noisy environment, with his needs unattended.

The arrival of a new baby also sparks off intense emotions. The young child who has been accustomed to his mother's undivided attention may bitterly resent her preoccupation with a new baby and show it by frequent and intense outbursts of anger and jealousy. His changes from being a happy, calm child to a tense one, comes mainly from his change in environment.

The child's sex and his position within the family will have a marked influence on his emotionality. The first-born child has more status to defend than has the second but is handicapped in his struggle with his sibling by parental restrictions. Second children encouraged by their parents to defend themselves, are less hesitant to express their anger and so attack directly.

The emotional stress is greater for the child if his sibling is of the other sex or if there is a large age difference. The child, whose parents expect him to measure up to the standards they set, will experience more emotional tension than will the child whose parents are more permissive.

During early childhood, it may not be possible to control the environment making the emotions pleasant as it was done during babyhood. The more independent the child, the more situations to frighten, anger, annoy or frustrate him. If he experiences too many of unpleasant emotions and too few of the pleasant, his outlook on life will become distorted and the development of 'unpleasant disposition' will result. In addition, he soon acquires a facial expression that makes him look sullen or generally disagreeable- an expression that contributes to the decline in his appeal. Since, unpleasant emotions are not good and become habitual, steps should be taken to reduce these emotions to a minimum by preventing fears, anger, jealousy and anxiety whenever possible, and by trying to counter-balance them, with stimuli that will give rise to pleasant emotions of happiness, joy and affection.

This does not mean that a young child should be protected from all unpleasant situations. It only, means that prevention of unreasonable fear, jealousy and anger should be attempted. When that is not possible, attempts should be made to explain to the child why he cannot do certain things and why he cannot have as much attention as he may want. If he learns to tolerate frustrations when he is young, he will avoid aggressive attacks on all frustrations.

Young children experience most of the emotions normally experienced by adults. However, the stimuli that cause them and ways in which children express their emotions are markedly different. The common emotions of early childhood are:-

- | | | | |
|----------|--------------|---------|--------------|
| 1. Anger | 3. Jealousy | 5. Envy | 7. Grief |
| 2. Fear | 4. Curiosity | 6. Joy | 8. Affection |

1. **Anger:-** Anger is the most commonly expressed emotion in early childhood; partly because many anger-provoking situations arise in a young child's life and partly because a young child discovers soon that the expression of anger is a quick

and easy way to get what he wants. The most common causes of anger in young children are conflicts over playthings, the thwarting of wishes, the vigorous attacks from another child, another child's use of offensive language, over toilet and dressing interruptions in their activities etc. Children express anger through temper tantrums. Tantrums are characterized by crying, screaming, stamping, kicking, jumping up and down, striking, throwing one-self on the floor, holding the breath, stiffening the body or making it limp.

2. Fear:- The young child is afraid of more factors than the baby or the older child. The development of intelligence makes it possible for him to recognize potential dangers in situations which formerly had not been recognized as such.

Conditioning, imitation and memories of unpleasant experiences play important roles in arousing fears. Fear of certain specific events, such as darkening the room for screening a film, may lead to fear of darkness. Stories and pictures with frightening elements and even radio and movies with loud noises, may give rise to many types of fears.

At first a child's response to fear is panic; later, responses become more specific and include running away and hiding, crying and avoiding frightening situations and making such verbal responses as 'take it away', 'don't want to go', or 'can't do it'.

3. Jealousy:- Jealousy is the feeling of angry resentment directed towards other people. It is always evoked by social situations, especially those involving individuals whom the child loves. Among young children, jealousy is aroused when they think that parental interest and attention are shifting towards someone else—especially a new arrival in the family, or they may be jealous of an older sibling who is granted more privileges and parental favouritism, or may be jealous of a sibling who because of poor health must be given more attention. The child is far less likely to be jealous of children outside the home than of his siblings.

Young children may openly express their jealousy (the same way the anger deed) or they may show it by reverting to infantile behavior such as bed-wetting, pretending to be ill, or being generally naughty, thumb sucking etc. All such behavior is a bid for attention. First-born children display jealousy more often than later born. Jealousy is more common in small families of two or three children than in larger ones.

4. Children are curious about anything new that they see and also about their own bodies and the bodies of others. They want to know why bodies differ and how they work. The questioning age begins between the 2nd and third years and reaches its peak at 6th year. The children curiosity is satisfied, only when his questions are properly answered. But the 1st responses to curiosity take the form of sensor motor exploration; later by asking question.

5. Envy:- Young children became envious of the abilities or material possessions of another child. They express their envy in different ways, the most common of which is complaining about what they themselves have, by verbalizing wishes to have what the other has or by appropriating the objects they envy.

6. Joy:- When a young child is happy, he is literally “happy all over”. They find many sources of joy and laughter. Young children derive joy from such things as a sense of physical well being, incongruous situations. Sudden or unexpected noises, slight calamities, playing pranks on others and accomplishing what seem to them to be difficult tasks. They express their joy by smiling and laughing, clapping their hands, jumping up and down or hugging the object or person that has made them happy. The manner in which the child will express his joy will depend not only on the intensity of the emotion, but also on the social pressures on him to control it.

7. Grief:- Young children are saddened by the loss of anything they love or that is important to them, whether it be a person, a pet, or an inanimate object, such as a

toy. Typically they express their grief by crying and by losing interest in their normal activities including eating.

8. Affection:- Young children learn to love the things-people, pets or objects that give them pleasure. They express their affection verbally as they grow older but while they are still young, they express it physically by hugging, patting and kissing the object of their affection.

Variations in emotional patterns:-

Many factors influence the intensity and frequency of emotions in early childhood. Emotions are intense at certain ages and less so at others. Temper tantrums. For example, reaches their peak of severity between the ages of two and four after which they become shorter in duration and give way to sulking, brooding and whining.

Fear follows much the same pattern, partly because young children realize that there is nothing frightening about situations they formerly feared and partly because of social pressures that make them feel that they must conceal their fears.

By contrast, jealousy begins around the age of two and increases as the child grows older.

Young children vary greatly in amount of curiosity and in the way they express it. Bright children, it has been found, are more active in exploring their environment and ask more questions than those of lower intellectual ones.

Sex differences in emotions come mainly from social pressures to express emotions in sex-appropriate ways. Because, temper tantrums are considered sex-appropriate for boys than for girls; boys throughout early childhood have more tantrums and more violent tantrums than girls. On the other hand, fear, jealousy and affection are considered less sex-appropriate for boys than for girls and thus girls express these more strongly than boys.

Family size influences the frequency and intensity of jealousy. Jealousy is more common in small families, where there are two or three children than in larger families where none of the children can receive much attention from their parents.

Envy on the other hand, is more common in large than in small families; the larger the family, the fewer material possessions the children will have and therefore, the more likely they are to envy one another's thing. First-born children display jealousy more often and more violently than their later-born siblings.

The social environment of the home plays an important role on the frequency and intensity of the young children's anger. For example; temper tantrums are more frequent in homes where there are many guests or where there are more than two adults. Similarly, the child with siblings has more temper out bursts than the only child. The kind of discipline and the child-training methods used also influence the frequency and intensity of the children's angry outbursts. The more authoritarian the parents are, the more likely the child is to respond with anger.

LESSON-15

COGNITIVE DEVELOPMENT

Jean Piaget and his co-worker conducted researches on the development of cognition in children for more than the last forty years. His theory of cognitive development explains the qualitative development in the intellectual abilities. According to David Elkind "Cognition is knowledge and the mental processes involved in its acquisition and use." Generally cognition can be explained as the process of gaining knowledge about the world through perception, memory and thought. Cognitive development involves the orderly changes that take place in the way children understand the world and solve problems. Jean Piaget developed a very influential theory of cognitive development and divided the development of cognition in four periods which are interdependent or there are four stages of cognitive development according to Piaget. These are:

- Stage I - The sensory –motor period or stage i.e. birth to 2 years.
- Stage II - Pre-operational stage (2-7 years)
- Stage III - Concrete operational stage (7-11 years)
- Stage IV - Formal operation (11 to adulthood)

Stage I-The Sensory–Motor Period:-This period is from birth to 2 years of age. The child since his birth starts interacting with his environment and through the process of constant interaction he gets knowledge of the world. It is sensori – motor stage because the behavior of the child operates on sensori-motor level. This period is very crucial for laying the foundation to understand the world. Babies at this stage organize their physical action schemes such as sucking, grasping and betting for dealing with the immediate world. Piaget divided this period into further 6 stages.

Stage I (Birth To One Month)- The use of reflexes:- When Piaget talked about the infant's action structures, he used the term scheme or schema. A scheme can be any action for dealing with the environment such as looking, grasping, hitting or kicking. The most prominent reflex is sucking reflex. Babies automatically sucked

whenever their lips are touched. According to S.P. Chaube, even at the time of birth to 2 years of age, the child shows his intelligence by some of his activities. For example- he drains the piece of cloth towards himself for catching hold of the toy placed on it. Piaget does not regard this work of the child as 'operation'. He has named it as schema of action.

Primary Circular Reactions (One to 4 months):-A circular reaction occurs when the baby acts upon a new experience and tries to repeat it. For example, when a child puts his finger in his mouth accidentally and tries to repeat it again. It is known as primary circular reaction because they involve the co-ordination of parts of the baby's own body.

Secondary Circular Reactions:- (4 to 10 months):- These reactions occur when the baby discovers and reproduces an interesting event outside himself or herself. For example – a child lying in a cradle hits the toy hanging on it with his leg. The child observes it moving and then repeats it and observe it moving again and become happy.

The Co-Ordination of Secondary Reaction (10 to 12 months and in some other book sixth to 10th month):- In this stage, the infant's actions become more differentiated. The infant learns to co-ordinate two separate schemes to get a result. For example- A child wants to grab an object and there is an obstacle i.e. an adult puts his hand over it. The infant at this stage can think of striking the hand out of the way and grab the toy. So here the child co-ordinates two separate schemes- striking and grabbing to obtain the goal.

Tertiary Circular Reactions (12 to 18 months) (In some book between eleventh month and a year and a half):- At this stage, children experiment with different actions to observe the different outcomes. For example- A year old boy was sitting in the bath tub, watching the water pour down the faucet. He puts his hand under the faucet and notices how the water sprayed outward. He repeats this action twice, making the interesting sight last. But he shifted the position of his hand sometimes

nearer; sometimes further away from the faucet, observing how water spray out at different angles. He vary his actions to see what new different results would follow.

Final Stage i.e. The Beginnings of Thought (18 months to 2 years):- At this stage, children seem to think out situations more internally before they act. The most widely known example is Lucienne and a match box. Piaget placed a chain in the box, which Lucienne immediately tried to recover. She possessed two schemes: turning the box over and sticking her finger in the box's slit. None of the schemes were successful. She then stopped her actions and observed the slit very carefully. Then, several times opened and closed her mouth wider and wider. After this she promptly opened the box and obtain the chain. Children at this stage are also capable of deferred imitation i.e. the imitation of absent models. By the end of sensori-motor stage, children develop the capacity to recognize that objects continue to exist even when they are not seen or perceived. This ability is known as object permanence. The child becomes capable of representing things mentally. For example=-somebody says the word 'dog', the child gets a mental picture of an object which makes a 'bow bow' sound. The child's mental development can be influenced by the providing adequate stimulation i.e. Visual, sound, play materials, books etc.

Stage-II Pre-Operational Stage- (2-7 years)- This period refers to the age from 2 to 7 years. During this period, the child uses language and images with certain facility. The child engages what is called as "symbolic play" i.e. a wooden block may be considered as a car, a round ring as steering wheel, a round bead as a chocolate etc. During this stage, the child's thinking is basically unsystematic and illogical. True thought and operations do not yet exist. Children do not have the ability to engage in a discussion but they partake in collective monologues. Preoperational children believe that everyone else thinks as they do. The child's thoughts are still limited to the perceptual and motor characteristics of the objects or the situations. Perceptual characteristics are those which are quite visible. For example- Size, texture, colour etc. The motor activities are whether the object is

manipulated, turnable, throwable etc., he cannot think beyond what he sees. This period is marked by some attainments. For instance, language is acquired very rapidly. Behavior in the early part is egocentric but by the age of 6 or 7 years children become communicative and social. Now he can solve some small problems of his own initiative.

Limitations of The Pre-Operational Child: Since the thinking of the child is highly influenced by the perceptual characteristics, i.e. what he sees in terms of colour, size, length, shape etc., the child is unable to understand that since nothing has been added or subtracted from the objects, there should be no difference in the original quantity or number.

The Other Limitations of the Pre-Operational Child Are:-

1. Pre-operational thinking tends to be egocentric that is the child at this age cannot understand the other's point of view. In the sense the child in this age group tends to think that what he thinks and understands is the understanding all have and that there can be no other view to this.
2. Pre-operational thinking tends to focus on only one aspect or dimension of a problem at a time. For example –while looking at the height of an object, the child is unable to consider any changes undergone in its width. The child is unable to handle multiple characteristics.
3. **Pre-operational thinking tends to involve transductive reasoning.** The pre-operational child reasons from one specific to another specific event, as opposed to inductive and deductive reasoning, i.e. in other words, the child cannot think from particular to general or general to particular. Like for instance, the child knows that all birds therefore but will be unable to conclude that all birds have feathers.
4. The pre-operational child cannot understand relational terms such as larger than, darker than etc. For exm- coming back to those, two boys in this age

group, know who is 'good' and who is 'bad' or who is the hero and who is the villain. The young child cannot appreciate that people cannot always be categorized like that and there could be characters in the story or the film which may have shades of good and bad in them.

5. Class inclusion which means that he cannot reason between part and whole simultaneously.
6. The child at this stage is not able to understand how things operate internally or how things relate to one another.

These limitations make the pre-operational child's thinking illogical and inconsistent.

Stage-III The concrete operational stage (7-11 years): This period begins from seven years of age and continues up to eleven years of age. Here the first mental operation exists. The ability to conserve volume develops in children i.e. the amount of substance may remain the same even though the shape of the material or size of the container has changed. A child during this stage acts directly or concretely on objects. Children become less egocentred. They experience differences between themselves and other's behavior. Children become more social and cooperative. They follow rules and orders faithfully. They form more complex mental actions on concrete elements of their world. They develop the ability to classify; i.e. the ability to sort out objects on the basis of common features like colour, size or shape. A child begins to classify objects into three or more categories only by the age of eight or nine.

The older child can understand the gradation but the younger child cannot. This is so because the older child has the ability to see the relational merit or demerits of a set of object. Like they have the basic understanding that A is larger than 'B', 'B' is larger than 'C' they are able to perceive the shades of differences and place the objects in an orderly series.

This process by which the child observes the relational difference in set of objects and organizes them in a series on the basis of these differences is called seriation.

Now children can reason about things with which they may have had direct personal experience. But they are limited to thinking about what is 'reality' and cannot deal with what might be 'potentiality'. The child therefore may not be able to think the aspects like- democracy, religion, morality etc.

The concrete-operational child lacks the ability of Hypothetico-Deductive thinking. That is the child is unable to logically think of different possible aspects of a problem and thinking out the irrelevant and selecting that is most appropriate.

Stage-IV The formal operational stage (11 to adult):-This period starts from about the age of 11 and continues to 15 years. During formal operations, thought processes can be made at hypothetical and abstract level. The capacity for abstract reasoning can be seen. For example- If Shyam is shorter than Sunil and Shyam is taller than Ravi, who is the tallest? At the level of formal operative however adolescents can order their thoughts in their minds alone. Now, thinking reaches its highest degree of equilibrium. When adolescents think about the various possibilities inherent in a situation before hand and then systematically test them, they are working like true scientists.

According to **Flavell (1977)**, adolescents engage in meta-thinking i.e. they develop the capability of thinking about the thinking process rather than merely thinking about the content of their thoughts. They engage in both hypothetic deductive and empirico-inductive reasoning. The concrete operation is limited only to empirico-inductive reasoning.

Formal thought is flexible and effective. Adolescents are able to deal with complex and highly abstract problems of reasoning. At concrete operational stage, child works with the actual, the formal operational adolescent sees possibility as

well as actuality. The adolescents when confronted with a problem consider all the alternatives.

COGNITIVE PROCESSES

The important cognitive processes are:

- 1) perception
- 2) memory
- 3) inference
- 4) evaluation of information
- 5) the use of rules

- 1) **Perception:-** Perception can be defined as the detection, recognition & interpretation of sensori stimuli i.e. The information got after treatment of the sensation so as to react accordingly is perception or simply knowing about things is perception. Example in a class; all gain the same information, but they represent it differently.

What you hear is input, how you react is output and the process in between is perception.

Nature of perception by Gestalt.

- 1) Perception is a process but not a product.
It is to organize and interpret the sensory impression.
- 2) Perception involves response
- 3) Perception provides organization.
- 4) Perception involves sensation
- 5) Perception is completely individualized
It depends on attention, motivation, past experience, need, perceptual cognitive style. It involves schema.
- 6) Perception is an extractor of information.

2. Memory:-Three types of memory can be defined.

- 1) Sensory memory for the stimuli one has just perceived.
- 2) Short-term memory lasting about 30 seconds and
- 3) Long-term memory in which material is stored for later retrieval.

Memory can be measured by recognition or recall. At all stages, recognition memory is better than recall, but the difference is more pronounced in younger than in older children. Memory requires the cognitive units of images and symbolic concepts.

With development, children's memory relies more heavily on symbolic concepts, their concepts come to match those of adults and they are better able to describe their concepts. They also become able of integrating more information in working memory. Their metamemory-their awareness of what is required to remember information and ability to assess their own memory capabilities, improves as does their ability to generate and use strategies for remembering things.

3. Inference:- Children show improvement in the process of inference, generating anticipations and expectations about implicit information on the basis of what they know. As a result, their problem-solving strategies become more efficient and flexible. When children produce novel and unusual solutions to a problem, they are described as creative.

4. Evaluation:-It is the cognitive process of judging the accuracy and appropriateness of one's ideas. [Individual differences in evaluation of alternative hypotheses are demonstrated by differences in reflex-impulsivity]. Reflective children approach problems cautiously, evaluating many possible solutions before producing an answer. Impulsive children respond more quickly and as a result make errors more often. Children become more reflective with age.

5. **The use of rules:-** The use of rules still another process that becomes more efficient as children develop. Children gradually learn to use combinations of rules rather than focusing on one at a time.

A set of executive or metacognitive processes develops by which children learn to understand and monitor their own thinking and problem solving. As children grow, they gradually acquire an understanding of what kinds of competences and cognitive processes are appropriate and necessary for what kinds of situations and they learn how to monitor their own mental activity. These executive processes are important in enabling children to apply their cognitive competencies appropriately and efficiently.

COGNITIVE UNITS

- 1) **The schema:-**A major cognitive unit involved in perception is the schema. It is the mental representation of objects, events or situation. It preserves the most essential aspects of the event in a unique pattern. Without schema one cannot be able to perform a task properly.

For example; Looking outside through the window for a few seconds, one will be able to tell 90% of the name of the objects present in the scene.

Young children have a remarkable capability to create and store schema. The pattern of unchanging elements forms the basis for the schema.

For example; All cars have 4 wheels; doors and an engine- these are unchanging elements.

It permits children to recognize an event encountered in the past.

- 2) **Images:-**Images are mental pictures formed due to prior experience though not directly yet through any media.

Example:-You have not seen dinosaur directly; but seeing in T.V. or as someone tells you, you form an image of dinosaur in your mind.

Each person's subjective experience provides commanding support for the existence of images, and laboratory data too, suggest that thought and memories sometimes take the form of mental pictures.

[Under everyday life, a child's decision to use images in recalling information to solve a problem depends on whether that information has become a part of child's conceptual knowledge]. Information that is not yet firmly integrated into the child's conceptual knowledge is apt to be recalled by means of images. Because, knowledge becomes more conceptual with development; one would expect older children to rely on imagery less often than younger children in many problem situations.

3) Symbolic concepts:- A symbolic concept differs from both a schema and an image because the latter two units are faithful to the physical aspects of the events they represent. N.B. [Images and symbolic concept are involved in memory (cognitive process)]

By contrast, a symbolic concept represents experience more arbitrarily. For exm;- the word 'food', written or spoken, that suggests that it stands for things that are edible and nutritious.

A symbolic concept is a representation of the qualities that are shared by a set of related but discriminately different events. The concept food does not represent any one edible object; it stands for the qualities of being edible and nutritious. In addition, a concept can refer to private feelings and ideas and therefore need not be observable. Exms- the concept of pleasure fun and sadness.

FACTORS AFFECTING COGNITIVE DEVELOPMENT

The major factors are:

- 1. Maturation of the nervous system:-** The maturation of the nervous system is the biological base for the cognitive development. It has been reported by web (1974) that some degree of maturation interacting with experience is necessary for movement into the next stage of cognitive development.

- 2. Role of physical experience:-** It is a universal fact that there could be no knowledge development without contact with objects in the environment. A person gains knowledge not by passively copying objects in the environment but by acting upon that. **Reid and Gallagher** have cited the following example. “A child of 5 or 6 discovers, by experience that counting from left to right a dozen pebbles in a line produced the same sum as counting them from right to left or in cyclical order. The child learns the principle that sum is independent of order. However, the new knowledge was obtained from the actions carried out on the pebbles and not looking passively at them or noting physical attributes, such as weight or hardness. Put another way, the child did not discover a property of pebbles; the child discovered a property of the actions of ordering. The pebbles had no order, the child’s action introduced the order. A person, learns, them from action carried out on objects or logico-mathematical experience. When the child learns from the perceptual properties of objects, by noting their weight, colour or hardness, it is physical experience.
- 3. Social transmission:** The role of education and language:- The third important factor that affects the cognitive development is social factor or role of education and language. There can be no effect from social or linguistic experiences unless the child is ready to assimilate and integrate them into his own cognitive structures. The child’s language becomes more adequate to allow expression of possible combinations. Language, then, is not the source of intelligence, but rather an instrument or tool in the service of intelligence itself.

LESSON -16

LANGUAGE DEVELOPMENT

Language is the ability to communicate with others. It includes every means of communication in which thoughts and feelings are symbolized to convey meaning including different forms of communication as written, spoken, sign, facial expression, gesture etc. Speech is one of the forms of language. The normal language development is necessary to make a child well adjusted in the society. The children who learn to communicate will make better social adjustment with others as compared to the children who are retarded in its language growth.

Many people use the terms speech and language interchangeably. However, they are not synonymous. Language encompasses every means of communication in which thoughts and feelings are symbolized so as to convey meaning to others. It includes different forms of communication like writing, speaking, sign language, facial expression, gesture, pantomime and art.

Speech is a form of language in which articulate sounds or words are used to convey meaning. Because it is the most effective form of communication, it is most important and most widely used. Speech is a motor-mental skill. It not only involves the coordination of different terms of message of the vocal mechanism but it also has a mental aspect- the association of meanings with the sounds produced. Then only the sound produced is known as speech. Communication means an interchange of thoughts and feelings. This interchange can be carried out with any form of language-gestures, emotional expressions, speech or written language- but most commonly and effectively done by speech.

Functions of Language for the Child

The purpose that language serves are many and varied. They are as follows:-

- i) **Language as a means to make wants and needs know:-** The child at first tries to convey and satisfy his needs just by some signs and symbols. When he realizes that there are many situations which are not satisfied that means, he starts using language to express his needs and feelings precisely.
- ii) **Language as a means for expression of emotions:-** During infancy laughing, cooling, crying, bubbling etc. are the chief means of expressing pleasure and displeasure. But during early childhood the child is becoming less direct, less physical, much more symbolic in his expression of emotion. Instead of hitting, he starts using hitting words.
- iii) **Language as a device of gaining information:-** Asking questions and getting information/answers is an important activity in this period. He learns about the world around him by asking questions.
- iv) **Language as a means of social interaction:-** Pre-school children are highly motivated to engage in social behavior. The pre-school child learns that he has to depend on others for many things. For that, it is necessary to expand his skills in communicating with others. Through language it is easy to assign roles and it is the basis of organization. Through language we can come to some agreement with others.
- v) **Language as an aid to pre-school identification:-** The desire to be recognized by others is strong in each one of us. Through language one may be able to tell what he is and what he might be and gets personal identification.

Language Developing During Early Childhood

Language development during early childhood attains greater complexity and is used for many ends. During this stage, the child learns to communicate his complex feelings and motivation to others and uses language to solve problems

which he formerly solved by physical means. Instead of trial and error attempts, the child surveys all possible solutions to the problem in terms of language. He remembers, generalizes, and reproduces former experiences through words and applies them in the context of the present situation. Language becomes the means of understanding his environment or securing further information about the world of people and events and of acquiring other intellectual skills such as reasoning, number concepts, time concepts etc.

During the pre-school years, the child's pronunciation improves markedly up to the age of 4 and 4½ years; he uses a small proportion of complex and compound sentences. But by 5 to 6 years, their proportions rise and every form of sentence structure appears in the child speech.

During this period the child uses language for narration more extensively than in toddlerdom. Phantasy and wishful thinking are often mingled with reality in the children's narratives. At 4 years, a child has marked ability to narrate events and tell stories. Around this stage, children begin to use language for the expression of complex thought and reasoning.

At the age of 3 years, children go through a phase of reveling in the use of bad language. They do not understand what they are saying, but do realize that these words hurt adults. A year later, children also use dirty words. They love to indulge in "toilet talk" and have a full understanding of its meaning. But once the child understands that others do not like such word, they stopped talking these words.

At the age of 3 and 4 years, children go through the question asking stage. The child's questions may serve many motives other than curiosity. Sometimes, the questions are asked for establishing social contact or receiving attention or gaining reassurance, solace or help. Some questions spring from worry, fever or uneasiness. Children often repeat the question even after it has been answered.

Such repetitions may be for the purpose of getting attention, but it may also indicate that the child is puzzled or disturbed.

The most common questions are those that concern God, death and sex.

Death's idea is difficult for the pre-school child to grasp. Children between 3 to 5 years do not think death as the final end rather think it as absence for a longer or shorter time. So it is better to explain that in death there is cessation of breathing, feeling and moving. But according to Spock, by 4 or 5 years, most children make some kinds of adjustment to the idea of death partly by suppression and partly by denial.

Factors influencing language development

- Physical condition has an important influence on the development of language. Severe and prolonged illness during the first two years can retard the development of speech i.e. degree of maturity.
- Higher socio-economic group (status) also has a marked influence on language development.
- Social contact and relationships of the child have an important influence on speech development.
- Level of intelligence also determines language development. Children of superior intelligence talk early and are advanced in every phase of language development.
- Family members exert considerable influence on language development. Much of the child's language development takes place through imitation of the language pattern of adults and the motivation of family members to learn and use new words.
- Environment in which a child lives also exert an considerable influence on child's language development.

Lesson-17

IMPORTANCE OF EARLY STIMULATION

Outline

- Stimulation
 - Meaning
 - Significance
 - Uses
 - Objectives
 - Components
- Areas of early stimulation and activities

The growth and development of the young child from birth to 3 years is a fascinating story. The child is born with genetic potential for learning and intelligence. But the optimal development cannot be realized unless it is challenged by the environment. These challenges stimulate the child to develop and learn.

Stimulation: Stimulation is defined as efforts to activate child's early development. It is more than a series of exercises, a continuous dialogue between the child and those who care for the child.

Early childhood stimulation attempts at providing learning experiences to the child so as enhance her development. The experiences that are planned for stimulation should be in accordance with the child's maturational level. This process must be started right from birth and must involve activities that demand close interaction between mother and child. Optimal stimulation is that which is appropriate, nonrestrictive, responsive and effective.

Significance of early stimulation:

- Development is very rapid during early years.
- It is during this period that the child learns to deal with his environment and satisfy his needs.
- The nurturing experiences the child receives during early years serve as a foundation for his subsequent learning.

- Environmental influences have the greatest effect on the child during periods of rapid development.
- The early years are very plastic, impressionable and formative for the growth and development of the child. Therefore enrichment or deprivation during the early years of life will be particularly vital for the subsequent development of the child.
- Research has shown that the early stimulation has a dramatic effect on the brain development.
- Research has also shown that, increased tactile, visual, motor stimulation helps low birth weight babies to become more alert and weight babies to become more alert and gain weight
- It encourages the child's inbuilt capabilities such as understand the immediate environment, develop concepts, make adjustments, explore and manipulate and solve problems
- It helps in channelizing the inbuilt energies in a constructive way, which adds to the pleasure and satisfaction of the child.
- It helps in bringing out the best potential in the child.

Objectives of early childhood stimulation:

- To ensure the healthy development of the child.
- To develop in the child basic trust and emotional security.
- To stimulate intellectual curiosity in the child.
- To enhance the language development of the child.
- To develop adequate muscular coordination.
- To make the child sensitive to the rights and privileges of himself and others.
- To develop basic values of sympathy, tolerance, helpfulness and kindness.

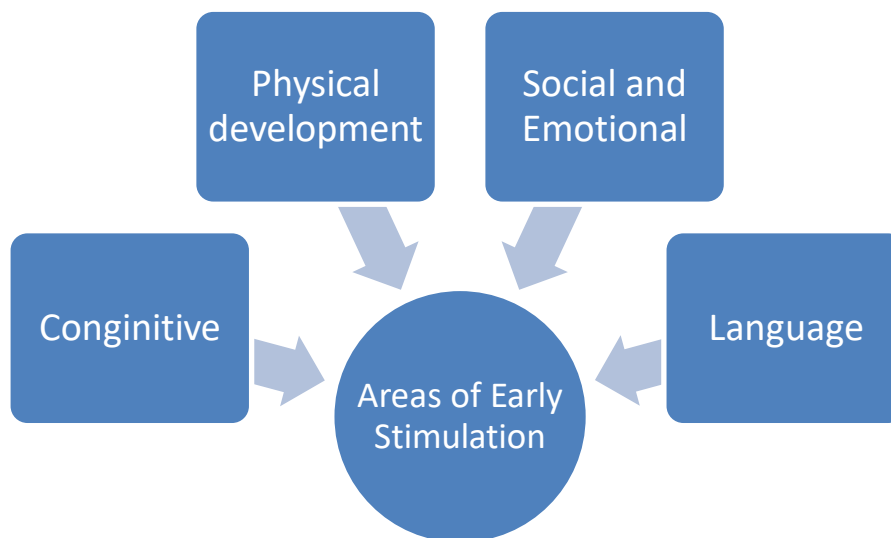
Components of stimulation:

Ribble points out the most important three types of sensory experiences that are essential for the proper development of the child are tactile stimulation, eye to eye contact and auditory stimulation

Stimulation can be given in the following areas

- Tactile & kinesthetic
- Visual
- Auditory
- Verbal
- Motor
- Cognitive
- Social

Besides these the other important stimulation to be included are verbal, motor, cognitive and social. The simple routines of play and communication foster both sensory and motor skills. Songs and stories help the child to build up vocabulary and increase their imagination.



1. Stimulation for physical development during infancy:

During early years children learn the skills of movement. Parents must plan and implement the activities to encourage practice of physical skills by providing conducive environment.

How to stimulate the physical development? :

- Encourage the child to hold and examine objects
- Provide tiny soft materials to facilitate use of fingers and to promote self help activities.



Suitable activities:

- Gross motor activities: Pulling a toy, pushing a toy, spinning toy, rolling a ball, squeezing a toy, bouncing a ball, walking, balancing and throwing a ball.
- Fine motor activities: scribbling with pencil, putting pegs into peg board, putting cutouts into slots, threading beads, putting play material into the basket and taking them out, tearing a paper, peeling the banana, kneading dough, playing with blocks.

2. Stimulation for social emotional development during infancy:

Children have a basic need to develop social competence and a positive concept of self. Parents must nurture social and emotional development through interactions.

How to?

- Providing the child experiences like comforting, talking, playing music.
- Paying attention if the child demands.
- Playing interactive games.

Activities:

- Mirror game
- Outings
- Lifting baby up and down.
- Social activities: identify and name different members of the family, cajoling, hugging a toy, playing with other children

3. Stimulation for language development during infancy:

- Parents should initiate interactions/conversations with the child in the early months even though the child may not respond verbally
- Language is important for cognitive development
- Verbal interactions will be responded by the baby in the form of exploring the environment and engaging in communication with the parent

How to?

- Speaking facing the child at eye level of the child.
- Encourage vocalizing, smiling and imitative oral responses.
- Use picture books and repeat the names of objects that the child points to

Activities for language development:

- Informal conversation
- Learning new words
- Tell me about (objects shown)
- Stories
- Picture books
- Rhymes and poems

4. **Stimulation for Cognitive development during infancy:**

Activities for cognitive development

- play with blocks,
- naming pictures, objects
- listening to a story,
- imitating sounds,
- talking,
- describing day – to – day activities
- following simple directions,
- assembling pieces of puzzles
- associating similar objects

Conclusion

Stimulation involves efforts to activate the child's development. The nurturing experiences the child receives in the early years of life serve as foundation for her subsequent learning. To help children grow and develop, providing appropriate stimulation at every period of growth is important. The child learns comparatively more in the first year of life than any other period. If the child does not get appropriate stimulation in the early years, it will have an adverse effect on her development and intelligence. All the areas of development are interrelated. So the child must be given adequate stimulation in all areas to promote over all development.

LESSON-18

PHYSICAL DEVELOPMENT IN LATE CHILDHOOD

Late childhood is a period of slow and uniform growth until the changes of puberty begins, approximately 2 years before the child becomes sexually matured.

Followings are some of the important physical changes that take place before the puberty growth spurts begin.

- 1. Height:-** The annual increase in height is 2 to 3 inches. The average 11 years old girl is 58 inches tall and average boy of 11 years is 57.5 inch tall.
- 2. Weight:-** The annual increase in weight ranges from 3 to 5 pounds. The average 11 years old girl weighs 88.5 pounds while the average boy of same age weighs 85.50 pounds.
- 3. Body Proportions:-** Although the head is still proportionally too large from the rest of the body, some of the facial disproportions disappear as the mouth and jaw become larger, the forehead broadens and flattens, the nose becomes larger and acquires more shape, the lips fill out, the neck becomes longer, chest broadens, the abdomen flattens, the arms and legs lengthen, the hands and feet grow larger, but at a slow rate.
- 4. Homeliness:-** The body disproportions, careless grooming and tendency to wear clothes like those of peers contribute to homeliness.
- 5. Muscle fat ratio:-** Fat tissue grows more rapidly than the muscle tissue which has a marked growth spurt beginning at puberty. Children of endomorphic builds have more fat than muscle tissue while the reverse is true of those of mesomorph builds. Ectomorphs do not have a predominance of either for which they look scrawny.
- 6. Teeth:-** By the onset of puberty, a child normally has 28 of the 32 permanent teeth. The last four called "wisdom teeth" erupt during adolescence.

Good health and good nutrition are important factors in the child's growth and development. The better the health and nutrition, the larger children tend to be. Children who were immunized against disease during the early years of life grow larger than those not immunized. Emotional tensions also affects physical growth. The growth of emotionally disturbed children is very slow though it has a greater effect on weight than on height.

Physical growth follows a predictable pattern although variations do occur. The ectomorph who has a long, slender can be expected to weigh less than a mesomorph, who has a heavier body. Mesomorphic children grow faster than those with ectomorphic or endomorphic children.

The bright children tend to be taller and heavier than those who are average or below average in intelligence. According to Laycock & Caylor, "The gifted child probably comes from a home where all the children grow bigger" because of better nutrition and care. (the difference of sibling ceases to exist).

Sex differences in physical growth is relatively slight in early years, becomes more pronounced in late childhood. Because boys begin their puberty growth spurt approximately a year later than girls, they tend to be slightly shorter and lighter in weight than girls of same age. Girls also get their permanent teeth slightly earlier than boys while boys' heads and faces grow larger than girls.

Adult height of children during late childhood years can be approximately determined by parental stature to some extent but it is also affected by good nutrition and health.

SKILLS OF LATE CHILDHOOD

At the beginning of the late childhood the skills the children show are actually learnt in early childhood years. What skills older children learn depends partly on their environment, partly on the opportunities given to them for learning, partly on their body builds and partly on what is in vogue among their age-mates.

Marked sex differences occur at this stage and influence the skills. Girls surpass boys in skills involving finer muscles like painting, sewing, weaving and hammering while boys are superior to girls in outdoor muscular activities like throwing basket ball, kicking football and chasing broad jumps.

The socio-economic status of the family likewise has a marked influence on the number and kind of skills children learn. The skills which lower socio-economic levels children are more concentrated related in the areas of self-help and social-help skills while upper and middle classes learn the various play skills.

Categories of skills in late childhood:-

The skills of late childhood can be divided into four categories i.e. self-help skills, social help skills, school skills and play skills.

- 1. Self-help skills:-** Older children should be able to eat, dress, bathe and groom themselves with almost as much speed as an adult. These skills should not require the conscious attention that was necessary in early childhood.
- 2. Social-help skills:-**Skills in this category relate to helping others. At home, they include making beds, dusting, sweeping and at school they include emptying wastepaper baskets, washing chalkboards and in play groups, they include helping to construct a tree house play grounds etc.
- 3. School skills:-**At school, the child develops, the skills needed in writing, drawing, painting, clay modelling dancing, serving, cooking and wood working.
- 4. Play skills:-**The older child learns such skills as throwing and catching balls, riding a bicycle, swimming in connection with play.

All the categories of skills contribute directly or indirectly to children's socialization.

Handedness:-By the time the children reach late childhood, most children are so predominantly right or left handed that changing handedness is far from easy. Many left handed children become ambidextrous (able to use both left and right hand equally well) during late childhood, though there is a favour to use the left hand because of the difficulties involved in changing handedness. Once skills have been well learned, relatively few children who are left handed begin to change the use of their right hand later.

LESSON-19

SOCIAL GROUPINGS AND SOCIAL BEHAVIOUR IN LATE CHILDHOOD

The older child is no longer satisfied playing alone at home, or doing things with members of his family only. From the time he enters the school, until the physical changes of puberty begin to develop, the desire to be with and to be accepted by the gang becomes stronger and stronger. Therefore, late childhood is called as the "gang age". At this time, social development is taking place rapidly. They want to be with gang or group so that they can get sufficient number of friends to play the games and sports.

Children's gangs or children's groups:-

Children's 'groups' or 'gangs' are only play groups. These groups are not associated with juvenile delinquency. Children's gangs are markedly different from adolescent gangs.

Characteristics of children's gangs:-

- 1) Children gangs are play groups.
- 2) A child is invited to be in a gang.
- 3) Members of a gang are of same sex.
- 4) No. of membership in a gang slowly increases.
- 5) Boys' gang sometimes engage in socially harmful activities than the girls' gangs.
- 6) Gang activities include games, sports, going to movies, eating together etc.
- 7) Gang has central meeting place usually where they can avoid watchful eyes of the adults.
- 8) Gang/group leader represents the gangs ideals and is superior in most respects to the other members.

The most important of these characteristics that, gangs are social groups formed by children themselves, not by adults- their main purpose is to have fun, not

to engage in mischief or other forms of unsocial behaviour. Effects of gang/group belongingness:-

The ways in which gang belonging leads to improved socialization in late childhood are:-

1. The child learns to be loyal to the group.
2. The child learns to conform to group standards.
3. The child learns to play games /sports.
4. The child learns to take part of those who are mistreated.
5. The child learns to accept and carry out responsibilities.
6. The child learns to compete with others.
7. The child learns socially accepted behaviour.
8. The child learns to be cooperative.
9. The child learns to be independent of others.

The unfavourable effects on children of gang belonging.

1. It often results in friction with parents and rejection of parental standard as they spend more time in gangs than in family.
2. It develops antagonism between sexes. Some boys prefer friendship with girls when others object to it. Girls also become jealous over the freedom given to boys.
3. It creates discrimination among the late childhood members on the basis of experience. Religion and socio-economic standings.
4. The treatment of gang members over the non-gang members is harsh. Once older children have formed a gang, they become cruel to those whom they do not regard as their friends. It reaches peak at the age of 11 years.
5. The new member first gets in touch with one-member of the gang and slowly introduced by him and finally gets a place in the gang.

Companions in late childhood:-

Companions in late childhood may be associates, playmates and friends.

- i) Associates:-** Associates are people who satisfy an individual's companionship needs by being in the same environment where they can be watched and listened to. There is no direct interaction between the individual and the associates. At any age, associates can be of either sex and of any age. Adults, for example, enjoy watching and listening to children just as children enjoy watching and listening to adults.
- ii) Playmates:-** Playmates are people with whom individuals engage in pleasurable activities. Their age and sex are, on the whole, less important than the interests and skills they have in common with the individual for whom they serve in this role. Children prefer playmates of their own sex.
- iii) Friends:-** Friends are not only congenial playmates, but they are also people whom the individual can communicate by exchanging ideas and confidences and by asking or giving advice. Throughout childhood and adolescence, the most congenial and most satisfactory friends are those of the individual's own sex and level of development, who have similar interests and values.

Older children unlike younger children are not always satisfied with associates. To fill their social needs, companions must play the role of playmates or friends.

Boys tend to have more extensive peer relationships than girls. They prefer to play with groups rather than with one or two boys. But girls play with one or two girls than the groups.

Older children choose their friends in a way that they perceive as similar to themselves and those who meet their needs. Physical attraction affects first impression in selection of friends and playmates.

The school as well as neighbourhood is important as older children are restricted to smaller area from which they are to select companions from their own grade or standard and normally from the same sex and not from opposite sex.

Personality traits are important in the choice of companions, whether they play the role of playmates/friends. Older children give weight age to cheerfulness, friendliness, kindness, honesty, good sportsmanship in their playmates as well as friends. As the days of childhood come to a close, children show a preference for companions with similar socio-economic, racial and religious backgrounds.

Treatment of Companions:-Within every gang, there is a great deal of fighting among its members. Often children in a gang are not on speaking terms with some of their playmates or friends. Many of these quarrels are made up and friendly relationships are re-established, others are not.

When the children quarrel with a gang-mate, there is a tendency for the group to refuse to play with the child. Sometimes, this quarrel is temporary and play relationships are soon re-established. At other times, it persists and the child may be dropped from the gang.

The same pattern is found in children's friendships. As a result these friendships are rarely static. Children shift from best friend to enemy, from casual acquaintance to close friendship.

Quarrelling, bossiness, disloyalty, underhandedness, conceit and incompatibility are the reasons for changing friends by older children. However, as children grow older, their friendships become more stable. Girls have more stable friendship than boy's members.

Socio-metric status:-Socio metric status is the status the older children enjoy in the social group. Before late childhood draws to a close, most children are aware of their own socio metric status and also the socio metric status of their age-mates. They know that some are well accepted and liked by their age-mates while others are marginally accepted and still others are either rejected or voluntarily withdraw from their age mates.

The degree of acceptance children enjoy is influenced to some extent by the child training methods used by their parents. Children from democratic homes tend to be better liked and better accepted than from authoritarian or permissive child-training methods.

Attractive children are better accepted than less attractive age mates (as people tend to attribute more favourable traits to those who are attractive than to those who are less attractive).

Social skills and social competence also contribute to the socio metric status of older children. As 'Gffman' have explained, "Popular children are more knowledgeable about how to make friends."

The ordinal position of a child within a family likewise affects social acceptance. Later-born children, it has been reported, tend to be better accepted by their age-mates than the 1st born siblings.

Once children's socio-economic status in a group has been established, it tends to remain constant. There are two reasons for this:-

First, children get into the habit of behaving in certain ways and once established, these habits tend to persist. For example – children can readily develop the habit of being generous if their generosity is encouraged by parents and appreciated by peers. As a result they will be liked by their age-mates.

Second, children acquire reputations which persist and affect the judgements their age-mates make of them. When children acquire the reputation of being poor sports or of being immature, the reputation not only spreads to all group members, but also tends to persist, even when children change the behaviour pattern.

Leaders in late childhood

The children chosen by the group members reflect group's ideal. They are not only liked by the majority members of the group, but they have also many qualities which admire the group members. The children who play leadership roles should have strong personality traits and skills like sportsmanship, honesty, generosity, cooperativeness etc.

Socialisation can be defined as a continuous process by which a child learns to behave according to the rules of his society and acquires values, attitudes and knowledge needed to get along in the society.

Socialisation plays a major role in social development of child. It is a continuous process which goes on from the time of birth till death. By this process only infant learns to control his emotional expression, when and what to speak, behave or react all these are learnt through the process of socialization.

LESSON-20

COMMON EMOTIONAL PATTERNS OF LATE CHILDHOOD

The common emotional patterns of late childhood are similar to those of early childhood. These are as follows:-

1. **Anger:** Causes of anger in children is due to conflicts over playthings, attacks from another child. Children express anger by crying, kicking, jumping, striking etc.
2. **Fear:-**Conditioning, imitation, memories of unpleasant experiences play important role in causing fears.
3. **Jealousy:-** Older children become jealous when they think that parental interest and attention are shifting towards youngsters or someone else in the family. They pretend to be naughty or pretending to be ill.
4. **Curiosity:-**Children become curious about anything they see new. Due to social pressures and punishments, they start asking questions.
5. **Joy:-**Children express joy by smiling, clapping their hands, jumping up and down, sudden and unexpected noises.
6. **Sadness:-** Children express sadness due to loss of anything they love or important to them (toys, pets etc.). They express by crying, losing interest in their normal activities.
7. **Affection:-** Children learn to love the things, people, pets, objects which give pleasure to them. They express their affection verbally by hugging, patting and kissing the objects of their affection.

Periods of heightened emotionality:-

There are times during late childhood when children experience frequent and intense emotions. The physical and environmental causes account for this. The physical causes i.e. when children are ill or tired, they are likely to be irritable

and fretful. Just before childhood ends, when the sex organs begin to function, heightened reaches its peak.

Environmental causes of heightened emotionality are due to adjustment to new situation, breaking of home due to divorce or death of parents.

Generally, late childhood is a period of relative emotional calm. The reasons for this are:-

1. The roles older children are expected to play are well defined and children know how to play them.
2. Games and sports provides a ready outlet for pent-up emotional energy
3. Because of improvement in their skills- older children are less frustrated in their attempts to accomplish various tasks than they were when they were younger.

Beginning of emotional catharsis

The dictionary meaning of catharsis is the outlet for clearing the system of pent-up emotional energy is emotional catharsis.

The older children realise that pent up emotional state is unpleasant to them.

So, they discover by trial and error than by guidance, that they can choose their pent up state by strenuous play, laugh or even by crying. Once discovered, it becomes a new way for older children to handle their emotional expressions to conform to social expectation.

Some children who have close, intimate friends discover before childhood comes to an end that it helps greatly to discuss with their friends the situations that give rise to unpleasant situations- their frustration, fears, jealousy and griefs, so that they get new solutions to their problems and also minimise tension. This also enables them to express emotion in socially approved ways.

Definition of emotion:

An emotion may be described as an incited state of the entire organism. A true emotion is a highly arising experience.

Emotion & Emotional expressions in late childhood

When a child enters late childhood, he gradually discovers that violent expressions of emotions, especially the unpleasant are unacceptable to his contemporaries. Therefore, he tries to make his emotional expressions pleasant. They learn that their age mates regard temper outbursts as babyish. Withdrawal reactions to fear as cowardly and hurting others in jealousy as poor sportsmanship. As a result, older children acquire a strong incentive to learn to control the outward expressions of their emotions. So emotional expressions in late childhood are pleasant ones. The child giggles, laughs, twitches, rolls on the floor and shows animal spirits. These indicate that the child is happy and making good adjustment. However, all emotional expressions at this age are not pleasant. Outbursts of temper do occur and the child suffers from anxiety and feelings of frustrations. Girls often dissolve into tears or temper outbursts. Boys express their annoyance or anxiety by being sullen and moody.

The common emotions of late childhood differ from those of early childhood in two respects:-

1. They differ in the kind of situation that gives rise to them and
2. They differ in the form of emotional expression.

These changes are the result of broadened experience and leaning rather than of maturation.

LESSON-21

COGNITIVE DEVELOPMENT IN LATE CHILDHOOD

Increase in understanding in late childhood:

As older children's world expands with their entrance into schools, so do children's interests. And with this broadening of interests comes an understanding of people and things which formerly had little or no meaning. Children now enter what piaget has called the "stage of concrete operation" in thinking a time when vague and nebulous concepts of early childhood became specific and concrete.

Children associate new meanings with old concepts on the basis of what they learn after starting school. In addition, they derive new meaning from the mass media, especially movies, video and television. In building up social concepts for exam. They associate cultural stereotypes with people of different racial, religious, sex or socio economic groups-stereotypes which, for the most part, they have learned from the mass media.

As children read text books in school and consult encyclopaedias and other sources of information, they not only learn new meanings for the old concepts but they also correct faulty meanings associated with old concepts. Their own experiences likewise give them meanings for their.

In the development of concepts, emotional weightings are added as well as new meanings. Sometimes these emotional weightings are new and sometimes they are reinforcements of former emotional weightings. From their religious teaching at how or in Sunday school, for example; children may associate pleasant emotional weightings with death. Later, as they watch movies or television shows involving death or see pictures of dead people in magazines or newspapers, they may develop quite different concepts and differs emotional weighting to these concepts as they are covered by those vicarious experiences.

Because older children's concepts are more varied than those of preschoolers, it is understandable that their concepts change in different directions and becoming more varied. However, certain concepts are commonly found among

older children in the American culture of today. The concept that change most and the new ones most commonly developed in late childhood are given below.

Common categories of concepts in late childhood.

1. **Life:**-While some older children find it difficult to understand that many things that move- a river, for example; are not alive, they became increasingly aware that movement is not the sole criterion of life.
2. **Death:**- Children who experience death of a family member or pet have a good understanding of the meaning of death, and the emotional weighting of their concepts of death is coloured by the reactions of those around them.
3. **Life after death:** Concepts of life after death depend mainly on the religious instructions children receive and on what their friends believe.
4. **Bodily functions:** Until children begin to study hygiene in elementary school, many of their concepts about bodily functions are inaccurate and incomplete. This is especially true of internal bodily functions (concepts of digestive process and of location of different bodily organs).
5. **Space:** -By using scales and rulers, children learn the meaning of ounces, pounds, inches, feet, seven miles. From reports of space exploration in the mass media, they develop concepts about outer space.
6. **Numbers:** Numbers take on new meanings as older children use money and work out arithmetic problems. By the time they are nine or ten years old, children understand number concepts to 1,000 and beyond.
7. **Causality:**- Concepts of physical causality usually develop earlier than concepts of psychological causality. Children know, for example, what causes rain or snow earlier than what causes people to become angry.
8. **Money:**-Children are to understand the value of various coins and bills when they start to use money. Opportunities to use money vary markedly and are greater in the lower socio-economic status families than in the upper.

9. **Time:-** The rigid schedule of the school day enables children to develop concepts of what they can accomplish in a given period of time. Social studies in school and mass media help them to develop concepts of historical time.

Self:-

10. Children's concepts of themselves become clarified when they see themselves through the eyes of their teachers and classmates when they compare their abilities and achievements with those of their peers.

11. **Sex roles:-** Not only do boys and girls develop clear concepts of approved sex roles, but before childhood is over they may also learn that the male role is apt to be considered more prestigious than the female role.

12. **Social roles:-** Older children are aware of their peers social, religious, racial and socioeconomic status and they accept cultural stereotypes and adult attitudes towards these status. This leads to group consciousness and in many cases to social prejudice.

13. **Beauty:-** Older children tend to judge beauty in terms of group standards rather than according to their own aesthetic standards. What the group regards as beautiful or ugly, they accept as their own concepts.

14. **The comical:-** Older children's concepts of the comical are based partly on what they have observed others to perceive as funny and partly on what they themselves can comprehend as in the case of riddles.

Concepts of early childhood

1. Life
2. Death
3. Bodily functions
4. Space
5. Weight
6. Numbers
7. Time
8. Self
9. Sex roles
10. Social awareness
11. Beauty
12. Comic

LESSON-22

LANGUAGE DEVELOPMENT IN LATE CHILDHOOD

As children's social environment widens (broadens), they discover that speech is an essential tool for gaining acceptance in a group. They also discover that the simpler forms of communication like crying, gesturing are not acceptable to the society. This gives them a strong incentive to speak better. (For communication, speech is most important. For example; deaf children become socially isolated because they cannot hear what other children say and hence cannot participate in group conversations).

There are four sources in late childhood for improving speech. (Sifting of children).

First:-Parents from middle and upper socioeconomic groups may feel that speech is essentially important and thus motivate their children to speak better by correcting faulty pronunciations and grammatical mistakes and encouraging them to take part in family conversations.

Second:-Radio and Television provides good models for speech for older children- as they do for preschool children. They also encourage attentive listening on the part of older children which results in an improvement in the ability to comprehend what others are saying.

Third:-After children learn to read & to add to their vocabularies and they become familiar with correct sentence formation.

Fourth:- After they start school, mispronounced words and wrong meanings associated with words are usually quickly corrected by their teachers.

Areas of improvement

In spite of the fact that children are given similar opportunities to improve their speech in school, there are marked variations in the improvements made. There are also variations in the amount of improvement in speaking. An analysis that takes place in

the different tasks involved in learning to speak. An analysis of these tasks will show where the improvement occurs.

1. (a) Vocabulary building:- Throughout late childhood children's general vocabularies grow up very rapidly. Various sources like school, radio, T.V. Peer help them to communicate in speech and writing which is called as "general vocabulary".

It has been estimated that average first graders know between 20,000 and 24,000 words or 5 to 6% of words in a dictionary. By the time they are in 6th grade, most children know approximately 50,000 words.

The older children not only know new words but also know new meanings of the old words. Children from better educated families increase more vocabularies. Girls get more vocabularies than the boys.

Besides, during late childhood some special vocabularies are also learnt. These include colour vocabulary, number vocabulary, money vocabulary, Etiquette vocabulary (please, sorry, thank you), time vocabulary, slang word vocabulary, secret vocabulary etc.

Sex differences are marked in special vocabularies. Girls have larger colour vocabularies than boys because of their greatest interest in clothes and decoration. Boys have larger interest in rough and slang words than girls.

Pronunciation:- Errors in pronunciation are less common at this age than early. A new word may be incorrectly pronounced at the first hand but after hearing the correct pronunciation once or twice, children are generally able to pronounce it correctly. This, however, is less true of children of lower socio-economic groups who hear more mispronunciations in their homes than children from better socio-economic groups with better environments.

b. Forming sentences:- The 6- year child should have command of nearly every kind of sentence structure. From 6 to 10 years, the length of sentences will

increase. These long sentences are generally less used. After 10 years age, the child begins to use shorter and more compact sentences.

2. Improvement in comprehension:-With an increased interest in group living, the children develop desire to communicate with group members. Improved comprehension is aided by school training. Children discover that they must pay attention in the class and learn their lessons. Concentration is increased by listening the radio and watching T.V. The most important and useful aid to improved comprehension is socialized speech.

3. Content of speech: The content of speech depends much upon their age, their personalities, the no. of social contacts, satisfaction they desired by contacts and the size of the group to which they speak. The larger is the group, more socialized is the speech.

When older children talk about themselves, it is usually in the form of boosting-boosting for common possession of things, materials; older children also like to criticize and make fun of other people mostly behind their back. However, the content of speech depends on children's intelligence and their socialization.

4. Amount of talking:- As the late childhood progresses, there will be progressively less and less talking. The children gradually discover unnecessary talking being meaningless and the peers also want to dominate in conversations.

Throughout the late childhood, the girls talk more, age for age, than boys and children from upper groups talk more than those from lower groups. Boys discover that too much talking is regarded as sex-in-appropriate while children from the lower socio economic groups are afraid of being ridiculed due to poor quality of their speech.

Normally, as childhood draws to a close, children talk increasingly less.

LESSON 23

CHARACTERISTICS OF ADOLESCENCE

The term adolescence comes from the Latin word *adolescere* meaning “to grow” or “to grow to maturity”. The primitive people in earlier civilization do not consider puberty and adolescence to be distinct periods in the life span; the child is regarded as an adult when capable of reproduction.

The term adolescence has a broader meaning. It includes mental, emotional and social maturity as well as physical maturity. According to A.P. Jersold, one of the great psychologists, “Adolescence is that span of years during which boys and girls move from childhood to adulthood mentally, emotionally, socially and physically.

The followings are some of the characteristics that distinguish it from the periods that preceded it and the periods that will follow it.

1. **Adolescence is an important period:**

Adolescence is one of the periods when both the immediate effects and long term effects are important. Some periods are important for the physical and some for their psychological effects but adolescence is important for both.

Accompanying these rapid and important physical developments, especially during the early adolescent period, rapid mental developments occur. These give rise to the need for mental adjustments and the necessity for establishing new attitudes, values and interests.

2. **Adolescence is a transitional period:-**

Transition does not mean a break with or a change from what has gone before but rather a passage from one stage of development to another. As Osterrieth has explained, “The psychic structure of the adolescent has its roots in childhood and many of its characteristics that are generally considered as typical of

adolescence appear and are already present during late childhood.” The adolescent at this time, is neither a child nor an adult. If they behave like children, they are told to “act their age”. If they try to act like adults often accused of being too big for their britches. So there is confusion about the roles the individual is expected to play.

3. Adolescence is a period of change:

The rate of change in attitudes and behaviour during adolescence is parallel to the rate of physical change. During early adolescence when physical changes are rapid, changes in attitude and behaviour are also rapid. As physical changes slow down, attitudinal and behavioural changes also slow down.

Due to the changes there are five kinds of concomitants (circumstances or accompanying) due to the five kinds of manifestation.

1. **i) Heightened emotionality:-** It is more pronounced in early than late adolescence. The intensity of heightened emotionality depends on the rate at which the physical and psychological changes are taking place.

ii) Rapid changes that accompany sexual maturing make young adolescents unsure of themselves of their capacities and interest. They have strong feelings of instability which are intensified by the ambiguous treatment they receive from parents and teachers.

iii) Changes in their bodies, their interests, their roles and in their roles the social group expects them to play create new problems. Unless the problems are solved, they are always preoccupied with these problems.

2. **As interests and behaviour patterns** changes, so do values what was important to them as children seems less important to them now that they are near adolescent.

3. **Most adolescents** are ambivalent (similar values, meanings etc.) about changes. While they want and demand independence, they are laden with responsibilities that go with independence.

4. **Adolescence is a problem Age:**

While every age has its problems, those of adolescence are often difficult for boys and girls to cope with. There are two reasons for it. First, throughout childhood,

their problems were met and solved by parents and teachers by which many adolescents are inexperienced in coping with the problems alone.

Second, because adolescence want to feel that they are independent, they demand the right of coping with their own problems refusing their parents and teachers attempt to help them.

5. Adolescence is a time for search for identity:

Throughout the gang age of late childhood, conformity to group standards is far more important to older children than individuality (i.e. in dress, speech, attitude and behaviour).

In early years of adolescence, conformity to group is still important to boys and girls. Gradually, they begin and crave identity and are no longer satisfied to be like their peers in all respects.

One of the ways adolescents try to establish themselves as individuals is by the age of status symbols in the form of cars, clothes and other material possessions. In this way, they try to attract attention of others, towards themselves to be recognised as individuals.

6. Adolescence is a dreaded age.

Acceptance of the cultural stereotype of teenagers as sloppy, unreliable individuals who are inclined towards destructiveness and antisocial behaviour has led many adults who must guide and supervise the lives of young adolescents to dread these responsibilities and to be unsympathetic in their attitudes and treatment towards normal adolescent behaviour.

The acceptance of this stereotype and the belief that adults have poor opinions of them make the transition into adulthood difficult. By doing so, it leads to much friction with their parents and places a barrier between them and their parents which prevents them from turning to their parents for help in solving their problems.

7. Adolescence is a time of unrealism:

Adolescence have a tendency to look at life through rose-tinted glass. They see themselves and others as they would like them to be rather than as they are. These aspirations are high and they dream many unrealistic things to acquire and enjoy. It makes them to be more angry, hurt, disappointed.

With increased personal and social experiences and with increased ability to think rationally, older adolescents see themselves, their families, friends and like in a more realistic way. As a result, they suffer less from disappointment and disillusionment than they did when they were younger. This is one of the conditions that contributes to the greater happiness of the state of adolescents.

8. Adolescence is the threshold of adulthood:

As adolescents approach legal maturity, they are anxious to shed the stereotype of teenagers and to create the impression that they are near adults. Dressing and acting like adults they discover to be not enough. So they begin to concentrate on behaviour that is associated with adult status- smoking, drinking, using drugs, and engaging in sex. For exam- they believe that this behaviour will create the image they desire.

LESSON-24

PHYSICAL CHANGES DURING ADOLESCENCE

Growth is far from complete when puberty ends, nor is it entirely complete at the end of early adolescence. However, there is a slackening of the pace of growth and there is more marked internal than external development. This cannot be so readily observed or identified. The external changes during Adolescence are as follows:-

1. **Height**-The average girl reaches her mature height between the ages of 17 and 18 and the average boy a year or so later. Boys and girls who were immunized are usually taller than those who were not immunized during childhood. The later ones suffer from more illness and stunted growth.
2. **Weight**:- Weight changes follow a time table similar to that for height changes and weight now distributed over areas of the body where previously there was little or no fat.
3. **Body proportions**:- The various parts of the body gradually come into proportion. For exm.- Trunk broadens and lengthens and thus the limbs no longer seem too long.
4. **Sex organs**:-Both male and female sex organs reach their mature size in late adolescence, but are not mature in function until several years later.
5. **Secondary sex characteristics**:- The major secondary sex characteristics are at a mature level of development by late adolescence.

The internal changes are as follows:-

1. **Digestive system**:-The stomach becomes longer and less tubular, the intestines grow in length and circumference, the muscles in the stomach and intestinal walls become thicker and stronger, the liver increase in weight, and the oesophagus becomes longer.

2. **Circulatory system:-** The heart grows rapidly during adolescence, by the age of seventeen or eighteen, it is twelve times as heavy as it was at birth . The length and thickness of the walls of the blood vessels increase and reach a mature level when the heart does.
3. **Respiratory system:-** The lung capacity of girls is almost at a mature level at age seventeen; boys reach this level several years later.
4. **Endocrine system:-** The increased activity of the gonads at puberty results in a temporary imbalance of the whole endocrine system in early adolescence. The sex glands develop rapidly and become functional, though they did not reach their mature size until late adolescence or early adulthood.
5. **Body tissues:-** The skeleton stops growing at an average age of eighteen. Tissues other than bone continue to develop after the bones have been reached their mature size. This is especially true of muscle tissues.

Variations in physical changes:-

As it is true at all ages, there are individual differences in physical changes. Sex differences are especially apparent. Even though boys start their growth spurt later than girls, their growth continues longer, with the result that, at maturity they are usually taller than girls. Because boys muscles grow larger than girls muscles, at all ages after puberty boys surpass girls in strength, and this superiority increases with age.

Individual differences are also influenced by age of maturing. Late maturer tend to have slightly broader shoulders than those who mature early. The legs of early maturing boys and girls tend to be stocky, those of late matures tend to be slender. Early maturing girls weigh more, are taller, and have greater weight for their height than do late maturing girls.

Effects on physical changes

As physical changes slow down the awkwardness of puberty and early adolescence generally disappear. This is because older adolescence have had time to gain control of their enlarged bodies. They are also motivated to use their

newly acquired strength and this further helps them to overcome any awkwardness that appeared earlier.

Because strength follows growth in muscle size, boys generally show their greatest increase in strength after age fourteen, while girls show improvement up to this age and then lag, owing more to changes in interests than to lack of capacity. Girls generally attain their maximum strength at about seventeen while boys, don't attain their maximum strength until they are twenty-one or twenty-two.

Concerns about physical changes

Few adolescents experience body – Cathexis or satisfaction with their bodies. However, they do experience more dissatisfaction with some parts of their bodies than with other parts. This failure to experience body-cathexis is one of the causes of unfavourable self-concepts and lack of self-esteem during the adolescent years.

According to Dian et al "A person's physical appearance, along with his sexual identity, is the personal characteristic most obvious and accessible to others in social interactions. While clothing and beauty aids can be used to hide the physical features the adolescent dislikes and to enhance those the adolescent regards as attractive, they alone are not enough to guarantee body-cathexis.

Some of the concerns of adolescents are carry-overs of concerns they experience during puberty. Concerns about normalcy, for example:- will persist until the physical changes on the surface of the body have been completed and adolescents can be sure that their bodies conform to the norms for their sex groups. Similarly, concern about sex-appropriateness continues until the primary and secondary sex characteristics have completed their growth and development and this give adolescents an opportunity to see if their bodies conforms to the cultural standard of sex-appropriateness.

Awareness of social reactions to different body builds leads to concern in adolescent whose changing bodies fail to conform to the culturally approved standards. Knowing that social reactions to the endomorphic builds in both boys and

girls are less favourable than automorphic and mesomorphic body builds leads to concern.

For many girls, menstruation is a serious concern. This is because they suffer from physical discomforts such as cramps, weight gain, headaches, backaches, swollen ankles, breast tenderness and experience, emotional changes such as mood swings, depression, restlessness and a tendency to cry without apparent reason. To add this, the knowledge that boys do not experience any such form of physical discomfort also colours girls attitude unfavourably and encouraged them to believe that they are martyrs.

Acne and other body eruptions are a source of concern to both boys and girls. This becomes worse for boys too because they realize that acne mars their chances for physical attractiveness and because they cannot use cosmetics to cover it up as girls can.

The tendency towards obesity that plagues most pubescent boys and girls continues to be a source of concern during the early adolescent years. But with increase in height and with efforts to control their appetites and the eating of “junk food” most adolescents start to slim down and look less obese. In addition, careful selection of clothing helps to create the illusion that they are more slender than they actually are.

Both boys and girls are also concerned about their physical attractions and try to do whatever they can do to improve it.

The reasons for concern come from realization of the role attractiveness plays in social relationships. Adolescents realize, even more than children do, that people treat those who are attractive more favourably than they do those who are less attractive. They are also aware of the important role attractiveness plays in choice of leadership. Consequently, when they feel that they are less attractive than they had hoped to be when their growth was complete, they are concerned about what they can do to improve their looks. Few adolescents escape being “look-conscious” to the point where they spend proportionally more time and thought on how to improve their looks than most adults consider justified.

LESSON-25

EMOTIONALITY DURING ADOLESCENCE

The period of adolescence has been thought as a period of stress and strain- a time of heightened emotional tension resulting from the physical and glandular changes that are taking place. This is evident from nail biting, tension, conflicts, quarrels with parents, siblings and classmates etc. The adolescent is most unstable in his emotions. During this period the individual is possessed by intensity of feeling instability, anxiety, mood swings, fluctuations of feelings, egoism etc.

The adolescents are very sensitive to criticism and too much conscious about sex. In the word of Ross, "The adolescent lives an intensely emotional life, in which we can see once more the rhythm of positive and negative phases of behaviour in his constant alternation between intense excitement and deep depression."

The causes of heightened emotionality are:

- 1. Adjustment in home, school & society:** He cannot be able to deal with the society, family members etc. because adults consider adolescence as children but at the next time they treat them as they are growing.
- 2. Unfavourable relations in Home:** When they see that parents are giving more love to other brothers and sisters that create many emotional problems in him.
- 3. Social expectation:-** Society expects something like good behaviour, certain matured characteristics and adolescent became unable which leads to emotional disturbances.
- 4. Adjustment to the members of opposite sex:-** This is the age when adolescent wants relation with opposite sex. But who do not get the opportunity, he feels inferior and adjustment becomes a problem.

5. **Religious conflicts:-** Adult boys and girls do not accept anything as it is. They want to argue for everything. They are not able to arrive at a solution about what is good and what is bad and there comes a problem.
6. **School failures:-**When an adolescent fails in the class or face any repeated failure in every attempt, he becomes imbalanced. So, there should be variety of opportunity so that they can achieve anything.
7. **Conflicts with friends and family members:-** It may arise due to any problem. Slight conflict with them cause emotional failure.
8. **Vocational problem:-** At this time, they choose future vocations. One has to decide what he will be. Adult is a period of choice. This disturbs the emotional life, if he is not able to choose right vocations. Sometimes adults own mental and physical incompetency causing emotional disturbances.
9. **Physique of individual:-** Emotions very often act as a motivational force. It gives direction to his activities, supply strength and energy.

Factors facilitating emotional development:-

Emotions are very important things in one's life as it makes a life and also breaks a life. If emotions are properly channelized, they will strengthen the activity of the individual. The factors facilitating emotional development are;-

1. The adult should be helped to develop proper emotions and control them.
2. He should try to reduce the mental pressure and conflicts which interfere with the emotional development.
3. Interpersonal relationship should be emphasized in school as well as in home.
4. Activities, in which the adults are interested, should be provided which will develop self confidence.
5. The adult should be helped to critically examine the causes of his failures and frustrations.
6. Proper guidance facilities should be provided in the school.

7. The adult students should be encouraged to express their pent up feelings.
8. Fair treatment, sympathy, cooperation and freedom of action within a reasonable limit should be given to adolescents and unnecessary restriction should not be imposed.

Emotionality during Adolescence

The period of adolescence has been thought as a period of “stress and storm” - a time of heightened emotional tension resulting from the physical and glandular changes that are taking place. While it is true that what growth is taking place is primarily a completion of the pattern already set at puberty.

Adolescents' emotionality can be attributed mainly to the fact that boys and girls come under social pressures and face new conditions for which they receive little if any preparation during childhood.

Most adolescents fall to emotional instability frequently for making new adjustments to new social needs and expectations. For exam.- problems related to romance are very real at this time. While the romance is moving along smoothly, adolescents are happy, when things go wrong they became worry (despondent). Similarly, with the end of their schooling, they begin to worry about their future.

While adolescents emotions are intense, uncontrolled and irrational, there generally an improvement in emotional behaviour with each passing year.

Emotional Patterns in Adolescence

Common emotional patterns like anger, fear, jealousy, curiosity, envy, joy, grief and affection are similar to those of childhood. But these patterns in adolescents differ in the stimuli that give rise to emotions and in the degree of control the individuals exercise over the expression of their emotions.

EMOTIONAL DEVELOPMENT

Definition:- 'P.T.Young' offers the definition of emotion as an emotion is a disturbed state of organism. An emotion includes visceral changes due to increased activity of the autonomous nervous system and an emotion originates within the psychological situation.

'J.B.Watson' defined as "an emotion is an hereditary pattern of reaction involving profound changes of the bodily mechanism as a whole but particularly of the visceral or glandular system.

Heightened Emotionality:-This means a frequency and intensity of emotional experience beyond what is normal. In judging heightened emotionality in a child, one must consider the normal pattern of emotionality for that child. It may come from physical, psychological or environmental conditions. It is readily recognized by the behaviour that accompanies it. Heightened Emotionality is characterized by unpleasant emotions and therefore produces a state of disequilibrium. When the emotions are heightened, the good effects of emotional adjustment tend to become more damaging than beneficial.

LESSON -26

DIFFICULTIES IN SOCIAL TRANSITION

Adolescence is a period in the life span when boys and girls make transition from the dependent life of family to independent life of society. In this process of social transition adolescents face many problems which create difficulties from smooth transition from childhood to adulthood. The difficulties in social transition are:-

1. **Poor home training:** Parents in traditionally oriented society do not prepare the children to face social responsibilities which they are expected to shoulder in life. The problem becomes very acute in culturally deprived areas where majority of parents are illiterate and fail to provide a model to adolescents to whom they may imitate and identify with for a successful life.
2. **Lack of social contact:** The adolescents who are physically and mentally handicapped are not accepted as members of peer groups, the process of social transition is retarded due to lack of proper opportunities for social interaction. Adolescents who belong to SC or ST also face the problems of social interaction with adolescents of higher class in school and colleges.
3. **Lack of confidence:** Adolescents are expected by teachers and parents to automatically acquire necessary social skills to adjust in society. But as a matter of fact they lack confidence to face social problems due to mental immaturity.
4. **Lack of motivation:** Adolescents who derive no satisfaction from social contact as children do not have motivation for social activities and they become introvert adults.
5. **Different social expectations:** India is such a big country that hundreds of groups and sub-groups live here which have different standards of social behaviour. An adolescent is expected to meet different people in different situations with different standards of social behaviour. This task of meeting a variety of social situations becomes very difficult for adolescents.
6. **New kinds of social groups:** As a child enters adolescence, his childhood group ceases to motivate him due to change in his social status. The adolescent associates himself with members of opposite sex and makes new friends which sometime disturbs his mental balance and transition becomes the problem.

Social changes during adolescence

One of the most difficult developmental tasks of adolescence relates to social adjustments. The adjustments must be made to members of opposite sex in a relationship that did not exist before and to adults outside the family and school environment.

To achieve the goal of adult patterns of socialization, the adolescent must make new adjustments, the most important and difficult which are as follows:

1. Increased peer group influence:

Because adolescents spend most of their time outside the home with their peers, it is clear that peers would have a greater influence on the adolescents attitudes, speech, interests, appearance, behaviour etc. for ex- most group is used by them, their chances of acceptance are enhanced. Similarly, if members of the peer group experiment with alcohol, drugs or tobacco, adolescents are likely to do the same thing as now. They do not reject these matters. As adolescence progresses, peer group influence decline. The reasons are:

1. Most adolescents search for their own identity in their own rights.
2. Adolescents choose companions from the peer group and they do not want to stay and recognized in a big group.

2. Changes in social behaviour

The heterosexual relationship is most important in changes in social behaviour. Within a short time, the adolescents shift from disliking members of the opposite sex to preferring to their companion than their own sex. Social activities either with same or opposite sex, usually reach their peak during the high school years.

As a result of broader opportunities for social participation, social insight improves among older adolescents. They are now able to judge members of the opposite sex as well as members of their own sex than they were younger. So they start better adjusting to social environments.

The greater the social participation of adolescence, the greater their social competency, as seen in their ability to dance, to carry on discussion, to play games and sports and to behave correctly in different situations. As a result they gain self-confidence which is expressed in their poise (action).

Whether prejudice and discrimination will increase or decrease during adolescence will be greatly influenced by the environment in which adolescents find themselves and by the attitude and behaviour of their friends and associates. As adolescents are more “choosy” in the selection of associates and friends than earlier, they find adolescents of different racial, religious or socio economic back grounds, less congenial than those with similar backgrounds they also try to ignore those who expresses their superiority instead of treating them as older children do.

3. New social groupings

The social groupings of boys are larger and more loosely knit while those of girls are smaller and more sharply defined. The gangs of childhood gradually break as individual interests shift from the strenuous play activities to more formal social activities of adolescence. The most common social groupings are:

- i. **Close friends:** The adolescents usually 2 or 3 close friends or confidants. They are of same sex and have similar interests and abilities. They have a marked influence on one another, through occasionally they may quarrel.
- ii. **Cliques:** Cliques are usually made up of groups of close friends. At first they consists of members of the same sex, but later include both boys and girls.
- iii. **Crowds:** Crowds, made up of cliques and groups of close friends, develop as interest in parties and dating grows. As crowds are large, these are less congenial among members and thus a great social distance exist between them.
- iv. **Organized Groups:** These are adult-directed youth groups established in schools and community to meet the social needs of adolescents who belong to no cliques or crowds. Many adolescents who join such groups

feel regimented and lose interest in them by the time they are sixteen or seventeen.

- v. **Gangs:** Adolescents who belong to no cliques or crowds and who gain little satisfaction from organized groups may join a gang. Gang members are usually of the same sex and their main interest is to compensate for peer rejection through anti social behaviour.

4. New values in selection of friends

Adolescents want those as friends whose interests and values are similar to theirs, who understand them and make them feel secure and with whom they can discuss most things confidentially which they cannot do with their parents and teachers.

In a study of what adolescents want in their friends, 'Joseph' has pointed out that most adolescents claim they want "someone to be trusted, someone to talk to, someone who is dependable."

Interest in the opposite sex becomes stronger increasingly as adolescence progresses. As a result, by the end of adolescence, there is often a preference for friends of opposite sex though both boys and girls continue to have a few intimate friends of their own sex with whom they associate constantly.

Mostly, the young adolescents are having a large number of friends. As they grow older, the kind of friends they have becomes more important than the number. However, adolescents values regarding the "right" kind of friends tend to change from one year to another depending on the values of the group with which they are identified at that time.

Because, adolescents know what they want in their friends, they insist upon the right to select them without adult influence. This often leads to two consequences that interfere with stability of adolescent friendships.

- i. As a result of their inexperience with members of opposite sex, they may choose friends who may turn out to be less congenial than what they would have thought. Quarrelling often occurs then and friendships are broken.
- ii. Adolescents tend to be unrealistic concerning the standards they set up for their friends. So, they became critical of them if they do not come up to these standards and try to reform them. This again usually leads to quarrelling and break up of friendships. But, in time most adolescents become more realistic about others.

5. New values in social acceptance

That as adolescents have new values concerning their friends, so they have new values concerning acceptable or unacceptable members of different peer group, such as cliques, crowds, or gangs. These values are based largely on peer group values which are used to judge members of the group. Adolescents soon discover that they are judged by the same standards by which they judge others.

No one trait (characteristic pattern) of behaviour will guarantee social acceptance during adolescence. Acceptance depends on behaviour patterns. The acceptance syndrome-all of which add to the prestige of the clique or crowd with which they are indentified.

Acceptance Syndromes

- a) A favourable first impression as a result of attractive appearance and cheerfulness.
- b) A good reputation of sports and making one who is fun to be with.
- c) Appearance that conforms to that of peers.
- d) Social behaviour characterized by cooperativeness, responsibility, resourcefulness, interest in others, tact and good manners.
- e) Maturity, especially in terms of emotional control and willingness to conform to rules and regulations.
- f) Personality traits that contribute to good social adjustments, such as truthfulness, sincerity, unselfishness and extroversion.

- g) A socio-economic status that is equal to or slightly above, that of the other group members and a good relationship with family members.
- h) Geographic proximity to the group which pursues frequent contacts and participation in group activities.

6. New values in selection of leader

There are so many different kinds of group in adolescence –athletic, social, intellectual, religious, community groups etc. The leader of one group will not necessarily have the ability to be the leader of another. Leadership is now a function of the situation as it is in adult life.

Adolescents expect their leaders to have certain qualities.

- i. A good physique gives them prestige and also contributes favourably to their self-concepts.
- ii. The adolescent leader is in excellent health and thus is energetic and eager to do things both of which contribute to the quality of initiative.
- iii. The cloth-conscious adolescents expect leaders to be attractive and well groomed.
- iv. The characteristics leader will also be slightly above average in intelligence, academic achievement and level of maturity.
- v. As a rule, leaders in adolescents social activities come from the families of higher socio-economic status than non-leaders. It not only gives prestige in the eyes of peers, but also makes possible better dressing and grooming, the possession of social know-how, opportunities for entertaining and participation in group activities.
- vi. Because leaders are more active participants in social life than non-leaders, they develop social insight and self-insight. They can judge themselves realistically and can size up the interest and wishes of the members of the groups they lead
- vii. Leaders should not be self-bound.

- viii. The most important single factor that contributes to leadership is personality. Leaders should be more responsible, more extroverted, more energetic, more resourceful and more able to take initiative than non leaders.
- ix. They are emotionally stable, well-adjusted happy individuals with few neurotic tendencies.

Role of parents and teachers in facilitating social development

Adolescence is a period of rapid socialization. Actually, it starts from family and gradually increases as child grow. By the following ways adolescents can be socialized.

1. Self-government system should be introduced in the school. It involves two factors.
 - i. Adolescents boys and girls will be acquainted with various duties and rights of the group.
 - ii. The child will get opportunity for wider socialization.
2. Social activities like scouts, guide, NCC, NSS etc. should be organized in the school which will develop group spirit, self-help and cooperation and parents should encourage their adolescence to be included in these activities.
3. Excursions and outings should be provided in the school.
4. Social interests and socio-economic condition of the individual students should be taken in to consideration for different activities.

Changes in Social Behaviour

1. The adolescents show fewer interest but their interest become deep.
2. There is change in masculine and feminine social role behaviour. They behave in more dignified and controlled way.
3. The heterosexual interest develop in each other.
4. Adolescents identify themselves with small groups of like –interest.
5. Adolescents reflect adult culture; patterns in their behaviour.
6. Loyalty to group is strengthened during adolescence.
7. Adolescents develop insight into social human relations.

8. Adolescents start gaining independence from adult domination in acquiring dependence for decision and behavior.
9. There is intense desire in adolescents for status and approval in the society.
10. They often come into conflict with adults on social problems and tradition of one community.

LESSON 27

CHARACTERISTICS OF EARLY CHILDHOOD

Adults are the individuals who have completed their growth and are ready to assume their status in society along with other adults. With a gradual increase in longevity, adulthood is now the longest period in the total life span.

The sub-divisions of adulthood is as follows:-

1. **Early adulthood:-** It extends from age eighteen to approximately age forty, when the physical and psychological changes accompany the beginning of the loss of reproductive capacity appear.
2. **Middle adulthood:-** It is the middle age which begins at forty and extends to age sixty when both physical and psychological decline become apparent in the average person.
3. **Late adulthood:-** it begins at sixty and extends to death. There is speedy decline of physical and psychological activity. However, modern medical techniques, careful attention to clothings and grooming enable many men and women to look, act and feel younger.

Characteristics of Early Adulthood:

Early adulthood is a period of adjustments to new patterns of life and new social expectations. The young adult is expected to play new roles, such as that of spouse, parent and bread winner and to develop new attitudes, interests, values in keeping with these new roles. These adjustments make early adulthood a distinctive and difficult period in the life span. As adults, they are expected to make these adjustments for themselves. To avoid being considered as “immature”, they hesitate to go to others for advice and help. They find these adjustments too difficult to cope with successfully.

Some of the outstanding characteristics of early adulthood that serve to show why adjustment to adulthood is difficult and therefore many young adults try to prolong their dependency by playing the roles of students long after their age-mates have reduced their dependency on parents and making themselves independent.

1. Early adulthood in the “Settling down Age”

In past generations, when the boys and girls reached the age of legal maturity, they come to settle down and assume the responsibility of adult life. Today it is recognised too early to settle down, because the boys and girls try out different lines of work to see which meets their needs best that will give them lifelong satisfaction. Young women of today take jobs to see if they prefer working to marriage or if they want to combine work with marriage.

Today’s adults start to settle down depend on two factors. (i)How soon they are able to find out a life style that meets their needs throughout life (ii) How soon they assume the responsibilities before doing so. Example:- The man selecting a career in ‘medicine’ certainly cannot settle down in practice until he must complete medical school, college, internship and residency before he becomes a full-fledged doctor for settling down in life.

Once individuals decide upon pattern of life, they develop patterns of behaviour, attitudes, values as their characters throughout their life. Any need to change this pattern in middle age or old age will be difficult and will be emotionally disturbing for them.

2. Early adulthood is the “Reproductive Age”

Parenthood is one of the most important role in the lives of most young adults. Those who were married during late adolescence concentrate on the role of parenthood during their twenties and early thirties.

But for those who marry late for getting a good career after getting required training, education and experience etc., the ‘Reproduction age’ will be late thirties.

3. Early adulthood is a “Problem Age”

The early adult years present many new problems different from the problems experienced in the earlier years of life. It is accepted fact that changing jobs or selecting new vocation after mid thirties is difficult if not impossible. The problems faced by young adults are difficult, time consuming, energy-consuming. It is difficult for men to adjust to their chosen vocations while adjustment with

marriage. Similarly, when parenthood comes within 1st /2nd year of marriage, most men and women find adjustment to the problems assigning changed roles for them.

Three main reasons of adjustment problems are:-

- i. Very few young people have any knowledge to meet the challenge of adjustment. Knowledge during school, college, internship are very limited and face practical difficulties during this age.
- ii. Trying to learn two or more skills simultaneously becomes very difficult at this stage. Adjustment to job, marriage and parenthood at a time is very difficult for young adults.
- iii. Most of the young adults are too proud of their new status to admit that they cannot cope with it. Most parents and teachers having known rebuffing by young adults hesitate to offer advice unless they are specifically asked to do so.

4. Early adulthood is a period of 'Emotional Tension'.

The emotional tension varied as compared to different age groups of early adulthood. The emotional tension becomes more in the late thirties which generally expressed as 'worries'. Their worries may be mainly concentrated on their work. In some cases, the early adults so emotionally disturbed that they make suicides.

5. Early adulthood is a period of "social isolation":

With the end of formal education and entry into adult life pattern of work and association with marriage; opportunity of regular peer groups detached and the members feel isolated now. Those who were most popular during their school days, college days now find adjustment to social isolation in early adulthood. Isolation becomes intensified due to rise in competition and rise to social ladder; as a result they become selfish which contributes to loneliness.

6. Early adulthood is a 'Time of Commitment':

As the young adults change their roles to become independent adults, they establish new patterns of living, assume new responsibilities and make new commitments. They form foundations on which later patterns of living, responsibilities, and commitments will be established.

7. Early adulthood is often a period of dependency

Although it is said that early adulthood begins at the age of eighteen, but it is seen that many young adults are partially or totally dependent on others for varying lengths of time. This dependency may be on parents, educational institution and on others for getting the work done for them. Sometimes prolonged study career or training necessities for a long period of time forcing the young adulthood for dependency.

8. Early adulthood is a time of value change

The young adults who used to consider school, a necessary evil may now recognize the value of education as a stepping stone to social and vocational success and to personal fulfilments. As a result of changed value, many young adults who dropped out from school/college decide to finish their education. Two types of value changes are there:-

- i. Young adults soon discover that most social groups hold conventional values about beliefs and behaviour.
- ii. Young adults who become parents have to be more conservative and give importance to prevailing traditions.

9. Early adulthood in the time of adjustment to new lifestyle:

Instead of traditional courtship which existed in the past, many young adults regard premarital sex as an accepted part of courtship pattern. The use of contraceptives and resort to abortion is wide spread among young adults. The divorce and other family lifestyles have been the changed for adjustments in the society. The young adults face more difficulties in changed life styles because what they studied/obeyed during childhood/adolescence period is now completely changed in early adulthood.

10. Early Adulthood is a 'Creative Age'.

What form of creativity will take in adulthood will depend upon individual interests, abilities, opportunities and activities that give them bitter satisfaction. Young adults choose different hobbies and vocations to show and establish their creativity.

Interests in creative activities start during twenties. During period of early adulthood, both men and women discover creative interest in them and develop their talents as well as their capabilities. As they approach 'Middle age' men and women by this time overcome these obstacles sufficiently to achieve the maximum of which they are capable. As adolescent girls are given more opportunities to be creative than boys, the sex appropriate roles of women are more creative nature than men already established in the society and marked well during early adulthood.

DEVELOPMENTAL TASKS OF EARLY ADULTHOOD

At the stage of early adulthood, social expectations for young adults are clearly defined. They are able to understand what society expects from them.

The developmental task of Early Adulthood include:-

1. Getting started in an occupation.
2. Selecting a mate.
3. Learning to live with a marriage partner.
4. Starting a family.
5. Rearing of children
6. Managing a home
7. Taking on civil responsibility.
8. Finding a congenial social group.

Mastery of these above tasks during early adulthood influences the degree of success which reaches its peak during middle age. Success of mastery of these developmental tasks is generally influenced by their foundations built in them. However, followings are some of the conditions which facilitate mastery of tasks are as follows:-

- i. **Physical Efficiency:-** Physical efficiency is reached maximum in mid-twenties, after which there will be gradual decline into early forties. Since adjustment problems are more during this period, the early adults who are physically efficient can be able to solve the tasks before them.
- ii. **Motor Abilities:-** Young adults reach the peak of their strength during early adulthood with maximum speed of response and declines till they attain

middle age. They are now finding themselves to be able to solve /work for the challenging tasks before them more quickly in comparison to the period of adolescence in which they found it difficult to solve them.

- iii. **Mental Abilities:-** Mental abilities like recalling to previously learned materials, reasoning by analogy, creative thinking etc. are required for learning and for adjusting to new situations during twenties and then slowly declines. Sometimes it is also seen that during the period of early adulthood, some are not able to learn rapidly what they did it during adolescence period.
- iv. **Motivation:-** When adolescents reach the age of legal maturity, they have a strong desire to be regarded by social group as independent adults. It encourages them to master the developmental tasks needed to be so regarded.
- v. **Role Model:-** After finishing their schooling / training etc., the adolescents try to be role models which they imitate from adults. On association with adults, they follow the model of adults and their behaviour, so that they will be dignified or recognized as adults in early adulthood. The early adults follow the patterns of behaviour of adults of middle age and older ones.

Handicaps to Mastery of Developmental Tasks.

- a. A retarded developmental level.
- b. Lack of opportunity to learn the developmental tasks or lack of guidance in their mastery.
- c. Lack of motivation.
- d. Poor health.
- e. Physical defects.
- f. A low intellectual level.

LESSON-28

VOCATIONAL ADJUSTMENTS

It is a fact that happiness depends on satisfactory vocational adjustments. Because of increasing number of women, both married and unmarried work outside the home, they have to make vocational adjustments. Some women adjust to the frustrations and resentments that are bound to occur when occupational doors are opened to them in a selective and limited manner.

Adjustments must be made in a number of areas. The success and failure of individual experiences in these adjustments has a tremendous influence on personal and social adjustments as well as on the degree of life satisfaction. The most common and most important vocational adjustments which the adults have to make are as below:-

1. Selection of Vocation :-

It is seen that some adults have selected vocations earlier as they obtained training for the same where as some others take much time since they had no training earlier. Even thinking for a vocation in the school/college days changes in most of their life period. Selection of a vocation becomes increasingly difficult for each successive generation of young adults.

The factors which make vocational choice difficult are:-

- i) The ever increasing number of different vocations to choose.
- ii) Rapid changes in work skills due to increase of automation.
- iii) Lack of flexibility in working time which is difficult for women.
- iv) Long and costly preparation which makes career shifts impossible.
- v) Sexual stereotype of certain occupations: i.e. nursing, teaching as women's occupation and aviation, engineering jobs as man's domain.
- vi) Unfavorable stereotypes of certain occupations:-Exa. - service sectors
- vii) Lack of security in work place.
- viii) Ignorance of one's capacity due to lack in experience and training.

- ix) Unrealistic vocational aims carried over from adolescence period.
- x) Unrealistic values and expectations concerning to jobs, prestige, reputations etc.

Hoping and trying for a job or vocation goes on during twenties and ever go into thirties. Selection of a vocation depends on certain most important in his liking for the particular kind of work selected, ability to do the work successfully, necessity due to financial and other responsibilities. Many young adults also prefer some different types of vocations what their parents and relatives did. So selection of any vocation by young adults are in a brooder sphere since so many alternatives and works are now available to them which was limited in earlier days.

2. Stability of Vocational Selection:-

The stability of individual is vocational selection depends on three factors. (i) Job experience (ii) personal interest (iii) vocational values. The lesser important is economic necessity which plays a less important role than the past.

Adults having experience can make more satisfactory vocational choices than those having no /less experience. Even jobs on part time basis give them practical experience in earlier period in schools or colleges help them to complete better for good & stable vocations in their life period. These experiences give them insight into features of a job that they will be liking and doing.

Adults' personal interest also take the lead in choice and stability of their permanent vocations. The jobs where their personal interest is there, will give them more satisfaction.

Studies revealed that vocational values are also treated important along with experience and personal interest. It may be a source of prestige and social recognition for some young adults, for some adults the vocation may be an opportunity of social participation, may be a source of enjoyment also.

Both young men and women tend to change their vocational values as a result of experience in their work atmosphere.

As they grow in age, they give importance to value to stability of job and its independence provided to them to do more hard work or for getting higher salaries. The shift of young adults for values realized when they reach middle age.

Factors influencing stability of vocational selection

Stability has been found to increase with age. Those who change jobs or careers in the middle age do so for economic reasons or their changed interests or for prestige sake or for area specific importance or in a state or country where both husband and wife prefer to stay.

Job changes within an occupation are more frequent than occupational changes. Skilled workers find it difficult to change their occupations because it would be difficult to acquire new skills. Women tend to be less stable in their vocational choices than men, because the major labor force is married women and should adapt to their vocational interests to their responsibilities at home or to the changes in their husbands' jobs.

3. Adjustment to work

When the young adults have selected vocations, they must adjust to the work itself i.e. to the hours of work in a day or week, to their co-workers or superiors, to the working environment as well as the restrictions the works effecting their personal lives. It is very difficult for the young adults to work who have less or no experience previously. Similarly the person who avoided his classmates during school days finds it difficult to work with his co-workers.

Common work attitude can be divided into two categories:-

a) Society maintaining work attitude

Workers having mentality with no or little interest in their work and get little satisfaction from it. They regard their jobs as unpleasant burdens and look forward to retirement time.

b) Ego-involving work attitude

In this case they get personal satisfaction from jobs. For some, work is a basis of self respect, gaining prestige, a source of creative expression.

They are very much interested to work hard and are preoccupied and involved too much and they will be only forced to retire with usual benefits.

Conditions that affect the vocational adjustments of men and women differ in many respects. The details are narrated as below:-

Men's Adjustment

- i) If the job or vocation allows them to play the roles, they will be satisfied and adjust well to the work.
- ii) If men feel that they are utilizing their abilities and training, they will be satisfied in their work.
- iii) Adjustment to work is influenced by how men adjust to authority.
- iv) Adjustments to work by men are influenced by rise of pay or lack of them. Adult men expect more pay scale/wages each year than others who started working in a later date.
- v) Sometimes men can progress vocationally if they are willing to move to another community. By doing so, the entire family is uprooted and make adjustments to new patterns of living. It is a question, if they get more satisfaction from vocational adjustments or not.

Women's Adjustments

- i) Women feel frustrated when they are unable to find jobs suited to their abilities, training and their expectations.
- ii) When the women approach the middle age, they do not get works and become frustrated.
- iii) Women have stereotyped occupational aspirations and are having less capacities than male counterparts; so they become soon frustrated.
- iv) Women are denied leadership role in vocations and when they see that importance is going to men, they become regretful and some feel that they have less ability at work place and admit that there is always a bias on women efficiency in the society.
- v) Double workloads at home and at work place adds to adjustment problems in case of women. They get less leisure for home activities.

Appraisal of vocational Adjustment (Criteria)

- a) **Achievement:-**An individual's vocational adjustment is the degree of success achieved in the job. Adults, who have not adjusted satisfactorily, are

not likely to do so as they grow older. Women's fear of success is more often and damages their image and even they lead to the point of social rejection.

- b) Voluntary change of jobs:-**The second criterion is the number of voluntary changes the adult makes in jobs or works. Some job changes are involuntary. Many job changes among women are involuntary. An working wife may give up her job to look after another job when husband's works requires a move to another community. She may have to take a part time job, if she finds her responsibilities demand more time and energy. Sometimes workers give up their jobs voluntarily and look for others. Changing a line of work and taking up for a new career in even more seen in poor vocational adjustments.
- c) Satisfaction:-** It is the third criterion which is the degree of satisfaction derived from work. In early forties, most individuals are glad to have jobs. It gives them independence they want and make marriage possible. Dissatisfaction usually begins during late twenties when young adults have not risen as rapidly as they have hoped and their dissatisfactions increases as they become older. It is a saying that individuals in their thirties like their work but do not love it. Women tend to be less satisfied with their jobs than men.

Conditions influencing vocational satisfaction

- 1) **Opportunity to choose the work:-** Men and women choosing jobs of their interest use best of their training and abilities and are usually satisfied.
- 2) **Work meeting needs and interests:-**Jobs meeting the needs and interests of the workers lead to greater job satisfaction.
- 3) **Vocational Expectation:-** Adults who expected autonomy at a later stage when they do not get it, they are dissatisfied with their jobs or vocations.
- 4) **Stimulation of work-** The more stimulating the work involved in a job, the greater satisfaction the employee derives from it.
- 5) **Degree of career orientation:-** Career oriented workers are willing to work upto their capacities and try to improve their skills.
- 6) **Vocational security:-** A reasonable degree of security in jobs will contribute to the satisfaction of all workers.
- 7) **Level of Education:-** Adults with college degrees are usually better satisfied with their jobs than those having High School Certificates.

- 8) **Opportunities for Advancement:-** Workers who see a possibility of improvement will be very much satisfied in their vocations.
- 9) **Occupational Stress:-** Too much of workload , more responsibility, feeling of unqualified for the jobs tend to work on stress. This weakens their satisfaction on the vocation/ jobs.
- 10) **Working Conditions:-** A reasonable degree of autonomy , chances for making formation of Associations to redress their grievances , lack of discrimination, fair treatment from superiors and fringe benefits etc. add to worker's satisfaction in vocation.
- 11) **Attitude of significant people:-** The workers feel satisfied when they know that their family members are proud of their jobs and are satisfied with the salary they get and when friends as well as relatives regard their jobs favourably.

LESSON-29

ADJUSTMENT TO PARENTHOOD

Parenthood is the most important criterion of individual transition to maturity and adult responsibility. It necessitates major changes in attitudes, roles and values. With the arrival of a child, the family becomes upset temporarily since all the members of the family are under varying degree of stress.

Both husband and wife must make marked adjustments when they become parents. Mothers realize that they have to do maximum for the care of babies for which they were inadequate before. However, men do not change their roles radically when they become parents, some fathers show disenchantment with the parental roles since there is likelihood of economic pressure, becoming less sexually responsive to their wives.

Factors influencing adjustment to Parenthood

- 1. Attitude towards pregnancy:-** The physical and emotional conditions during pregnancy influence woman's attitude towards pregnancy. Moreover, it improves after child is born.
- 2. Attitude towards parenthood:-** Adults adjust better to parenthood when they feel that child is essential to a happy marriage.
- 3. Age of parents:-** Young parents take their responsibilities lightly whereas older parents tend to be more anxious and concerned.
- 4. Sex of children:-** Adult's attitude towards parenthood are more favourable if they have a child or children of the sex they prefer.
- 5. No of children:-** When adults have the no. of children they consider 'ideal', their adjustment to parenthood will be better.
- 6. Parental expectations:-** Parents' dream-child concept' depends on how the child measures up to this ideal.
- 7. Feelings of parental adequacy:-** Conflicts about child rearing methods have an unfavourable effect on the adult's adjustment to parenthood.

8. Attitudes towards changed roles:- Both husband and wife must learn to play family-centered roles. How they react to this changed roles will have great influence on their adjustment to parenthood.

9. The child temperament:- The children who are responsive easy to manage and affectionate make parents feel happy on the efforts they spend on them.

Voluntary childlessness:

In spite of the traditional belief that every woman should be a mother, to be truly feminine, there is an increasing number of married couple today are remaining voluntarily childless, especially in higher and better educated group. Various reasons associated are:-

- i) Engrossing careers
- ii) Unwilling to give up their good and established patterns of life.
- iii) Fear of income which will be insufficient for bringing up their children.

In some cases, the adults voluntarily limit the no. of children. They feel that one child may likely to be less disrupting to the marital relationship than two or more.

Single Parenthood

When one parent died or divorced and the other is left alone to take care of the children, the single parenthood is created in the society. The number of single parent families has increased in these days.

The reasons are:-

- i) Many single parent families are the result of divorce than of death.
- ii) Due to increasing no. of illegitimate babies being looked after by their mothers instead of being made available for adoption as was done in the past.

If mother dies, father does not call relatives to take care of child; instead employs house keepers to take charge of the children. In some cases father does both caring for the children in addition to his job himself.

Variations in adjustment to parenthood:-

Whether in a single or two parent families, there are marked varieties in the adjustment of men and women should make to parenthood. The factors influencing adjustment to parenthood as explained above affect differentially on both man and woman parents in the family.

ADJUSTMENT TO SINGLEHOOD

It is popularly assumed that men and women who do not marry will be lonely, unhappy and affected in their normal desire for sex, parenthood, affection from persons of opposite sex and one deprived from the prestige of married and family life. Most adults want to marry under strong pressure from parents and relatives as well as peers. During twenties, the goal of most unmarried women is marriage. If they do not marry in twenties they shift their goals and values towards new life styles oriented towards work, success and personal pleasures.

'Thirty' has been called as 'critical gap' for an unmarried woman. The reason is that the woman's life is often characterised by stress as she reaches her thirtieth birthday and is still unmarried. This stress decreases as she makes adjustments to new goals and new pattern of living. For many women the desire for marriage and family decreases after thirty as they realise that they are not to achieve their goals. Many are disillusioned also when see unsuccessful married life of their contemporaries.

The women belonging to rural or sub-urban areas feel handicapped by singlehood as compared to women who live in urban areas. Single man does not experience the stress what single woman does. Many men remain single throughout their twenties and even thirties. Because they want to enjoy the freedom of singlehood and for devoting their time and energy to be established in their careers and sometimes have some obligations to parents and even for unpleasant family conditions.

Reasons for singlehood

The reasons for singlehood may be personal and environmental which are described as below:-

1. An unattractive or sex-inappropriate appearance.
2. Physical defect or prolonged illness.
3. Lack of success in search for a mate.
4. Unwillingness to assume the responsibilities of marriage and parenthood.
5. Desire to pursue a career.
6. Imbalanced sex ratio in a community.
7. Lack of opportunities to meet the members of opposite sex.
8. Responsibilities for aging parents or younger siblings.
9. Disillusionment of unhappy consequences of friends and other contemporaries.
10. Sexual availability without marriage.
11. An exciting lifestyle.
12. Opportunity to rise on the vocational ladder.
13. Freedom to change and experiment in work and lifestyle.
14. Social mobility is easier when remaining single.
15. Strong and satisfying friendships with members of same sex.
16. Homosexuality.

A man who remained single during his twenties due to certain problem, may now be in a financially secured position to both carry out to solve his obligations and

also to marry. Similarly, the woman who decided not to marry early because of her intention to rise in her chosen career, may now at a later stage decide to combine marriage with her career and still trying to rise in her vocational ladder.

Effects of singlehood

It is usually easier for a man to adjust to being single than for a woman. A single man can devote much more time in social activities and has little time to feel loneliness. He is able to pursue a pattern of life which he likes. The most difficult problem of an unmarried person is to find a satisfactory outlet for the sex drive. The unmarried man finds sexual gratification either by engaging in autocratic practices or by having intercourse with woman of his acquaintance or with prostitutes.

Similarly, unmarried women engage in autoerotic practices since they have less opportunities for sexual encounters and with the fear that they may face possibility of pregnancy. However, due to improved method of contraceptives and legalisation of abortion now a days, the single woman who does not want to marry the father of the child, can submit to an abortion and can eliminate social stigma of illegitimacy.

Success of Adjustment to Adulthood

The success of adjustment to adulthood can be measured on three criteria i.e.

1. Achievements
2. Satisfaction
3. Personal adjustments.

1. **Achievement:-** Adulthood is a time of achievement. Adults reach their peak of their achievements between thirty and thirty nine years. Age 'thirty five' regarded as 'crisis year' i.e. if the individual does not show or achieve by then, it will be presumed that he may not achieve at all. However, for athletes 'peakage' may be mid twenties. Therefore achievement can be judged on 'crisis age' depending on the area where they will achieve distinction. Adults involved in vocations like music, science, mathematics,

philosophy, writing etc. usually reach their peak during thirties and early forties.

2. **Satisfaction:-** The degree to which adults are successful in adjusting to important problems will determine the degree of their satisfaction. It will affect their happiness.

Young adults are more or less pessimistic about their future during their twenties. However, as they approach the thirties, they become more optimistic and more realistic. Now they are more satisfied with their lives and become happier. It is regarded one of the happiest period of life.

3. **Personal Adjustments:** The successful personal adjustment of adults has an effect on their self concepts and their personalities. Adults become more confident in their approach to problem. By age of 'thirty', most adults are better adjusted and are satisfied and become happier.

Feeling of inadequacy are the usual accompaniments of failures in adjustments. It is prevalent when there is great difference or gap exists between concept and reality. Under such conditions, the adults tend to be dissatisfied and become unhappy; sometimes even precipitates to suicidal tendencies.

By the time women and men reach their adulthood, their personality flavour are well established. It is obvious that the personality pattern influences the kinds of adjustments of man and women making to adult life.

Adults who make good adjustments have integrated personality pattern in which the content is realistic self-concept and stable whereas adults having poor adjustments have poorly integrated personality patterns which are unstable and unrealistic in nature.

LESSON-30

CHARACTERISTICS OF OLD AGE

During the period of life span, the old age is characterized by certain physical and psychological changes. The characteristics of old age are more likely to lead to poor adjustments and unhappiness. The characteristics are summarized as below;

1. Old age is a period of decline:-As compared to early part of life, the latter part of life are mainly regressional which is commonly known as 'aging process'. They affect physical and mental structures and functioning. The physical and mental decline is slow and gradual during old age.

The term 'senility' is used to refer to the period during old age. The older individual who becomes eccentric, careless, absent minded, socially withdrawn and poorly adjusted are called 'senile'. Decline may be due to physical and psychological causes. Physical cause is the change in the body cells due to any specific disease; when psychological cause may be due to unfavourable attitude towards oneself, other people, work and the life as a whole. Individuals after retirement are likely to become depressed and disorganized and may soon die.

Motivation plays a very important role in decline. The aged person who has little motivation to learn new things or update himself in attitudes or patterns of behavior will deteriorate much faster.

2. There are individual differences in the effects of aging

It is recognized that aging affects different people differently. People age differently because they have different hereditary endowments, different socio-economic and educational backgrounds and different living standards. These differences are apparent among members of same sex but they are even more apparent when men and women were compared. These differences in aging increase with age. Exa:-Some people think of retirement as a blessing to them while others treat it as a curse to them. However, the physical aging precedes mental aging although sometimes the reverse is true.

3. Old Age is judged by different criteria:-

The younger children judge old age in terms of physical appearance and activities. Old people have white hairs and no longer go to work everyday. Adolescents judge old age as done by adults i.e. in terms of present appearance and what the old man can do or can not do. However, many old people try to hide their age by wearing younger cloths/T shirts which is an attempt to create the illusion i.e. not reaching old age so quickly and not yet old.

4. There are many stereotypes of old people:-

The four most stereotypes and traditional beliefs sources are:-

- i)* Folklore and fairy tales handed down from generation to generation depict the aged unfavourably. They think the old people as wicked and cruel especially the old women.
- ii)* In poetry, elder people are depicted negatively. However, fiction for children has been portraying the aged in a negative way.
- iii)* Jokes and humor contribute to the unfavourable stereotypes rather than the wisdom of the aged persons.
- iv)* Stereotypes have been reinforced by scientific studies of the aged.

The common stereotype is that men and women who are worn out physically and mentally, who are unproductive, accident-prone and hard to live with should be pushed aside to make way for younger people. Some say “Young is Beautiful and old is ugly”.

5. Social attitudes towards old age:-

Stereotypes about old age have a significance on social attitude also. The unfavourable social attitude towards elderly make them feel that they are no longer useful to the society and not social assets. However, this is not true for all societies/ social groups. People who come from societies where elderly are treated as fortunes to their families respect the aged men and women and treat them as opinion leaders during crisis.

6. The Elderly have a Minor Group Status:-

Old people occupy a minority status in the society. It excludes them from interaction with other groups in the population which gives them little or no power. This minority status is due to unfavourable social attitudes by the society towards them.

7. Aging requires role changes:-

The elderly and aged people cannot compete with young people in strength, speed, efficiency, physical attractions and therefore regarded as useless. However, it is expected that the old people will play a less active role in social and community affairs as well as in professional fields. As a result, there is a marked reduction in the number of roles, the elderly person is able to play and there are changes in some of the remaining roles. Few rewards are associated with old age roles. It does not matter how successfully roles carried out. Feeling useless and unwanted, the elderly people develop feeling of inferiority and resentment which are not favourable for personal and social adjustments.

8. Poor adjustment is characteristic of old age:-

Elderly people develop unfavourable self-concepts. Elderly people tend to be more maladjusted than those who are younger to them in age. This poor adjustment is due to increased loss of status in the society dominated by young people, a desire to protect their finances for their wives and a desire to escape partial helplessness or pain.

9. The desire for rejuvenation is widespread in old age:-

Because of the minority status given to older people in the society, the desire is there among them to rejuvenate and remain young as long as possible. Now-a-days medicines are taken to ward off old age. Because a deficiency in sex-hormones plays an important role in aging, trials are being made to rejuvenate aging people by means of sex-hormone therapy. However, administration of hormones can built up ageing person's health and vigour and can slow down the process of aging.

Developmental Tasks of Old Age

Developmental tasks of old age include mainly the followings:-

1. Adjusting to decreasing physical strength and health.
2. Adjusting to retirement and reduced income.
3. Adjusting to death of spouse.
4. Establishing an explicit affiliation with members of one's age group.
5. Establishing satisfactory physical living arrangements.
6. Adapting to social roles in a flexible way.

The developmental tasks of old age mostly relate to individual's personal life. Old people are expected to adjust to decreasing strength and failing health. They have to play different roles at home and outside. They are expected to find activities to replace the work that consumed lot of their time when they were younger.

Many older people find it difficult to meet social obligations; since their income is reduced after retirement. Failing health requires new arrangements in living conditions which is radically different from those of earlier years.

Sooner or later, most old people are to adjust to the death of spouses. It is more a problem for women than for men. Death of a spouse means reduced income along with hazards associated with living spouse. It may require special living arrangements.

Since young children become busy in their own vocational and family affairs; the older people find very less time for their companionships. Therefore, they should try to establish relationships with other members of same age group to avoid their loneliness. After retirement they gradually reduce their social contacts with community organizations. It becomes very difficult for the older groups to change their life styles. The older individuals now must know that he will have to be associated with a group which has been rejected by the society.

Certain problems of adjustment resulting from these developmental tasks are unique in old age. The most common are:-

1. Physical helplessness which necessitates dependency on others.
2. Economic insecurity in severe enough which requires a change in the patterns of living.
3. Establishing living conditions in accordance with changes in physical and economic conditions.
4. Making new friends to replace those who have died or invalidated.
5. Learning to treat grown up children as adults.
6. Becoming involved in community activities planned for elder people.
7. Deriving enjoyment from the activities suited to the elderly and willingness to substantiate them for activities previously enjoyed but now become too difficult.
8. Being 'victimized' or taken advantage of by criminals because they are unable to defend themselves.

LESSONS-31

ADJUSTMENT DURING OLD AGE

The two most difficult developmental tasks of old age for all adults are 'work and family life'. Not only they must adjust to the working conditions but they must also adjust to their usefulness to their employers even though they are going after. After old age set in, they have the problems of adjustment due to retirements.

In the family, the older people should adjust on each other for companionship. Unmarried elderly people face serious adjustment problems than the married ones or those who lost a spouse.

Vocational and family adjustments in old age are also very complicated by economic factors than they faced in earlier days. However, the old age benefits like pension, medical aid and social security and other retirement benefits do not fully solve the full requirements of old aged people and there lies economic constraints for maintenance of old people in the family.

(A) Vocational Adjustments:-

Old men are more interested for steady work. They are more satisfied with their jobs than younger men. If they enjoy their work what they are doing, the shock of retirement they do not feel; these are typical of their job satisfactions in old age.

However, the older women are less satisfied with the jobs they have and are less disturbed compared to the less available opportunities in older age than the old men.

a) Attitude towards work:-

Attitude towards work during old age affect not only the quality of work performed but also affect attitude towards coming retirement.

- i) Society maintaining work attitude:-**Workers have less interest in work.
- ii) Ego-involving work attitude:-** Workers get more satisfaction. Here work is a basis of self respect and a sense of worth to them.

For work oriented older men having jobs that give them status and make them feel useful is very essential to good mental health. Remuneration work is

essential for good adjustments than any voluntary work as it is regarded as un-masculine.

(b) Conditions limiting vocational/employment opportunities for older workers.

- i) Compulsory retirement** of workers.
- ii) Hiring policies:-** Younger people are hired in place of older workers.
- iii) Pension plans:-** It is fixed for employees reaching age 60 to 65 years.
- iv) Social attitudes:-** Retaining older workers who are work prone to accidents.
- v) Fluctuation in Business/industry:-** When business is slow, older workers retrenched.
- vi) Kind of work:-** Skilled, Semiskilled and ordinary worker's strength decrease with increase in their age.
- vii) Sex:-** Women workers find it difficult to get alternate jobs than the men when they grow older. Only part time work In offices or stores and domestic work are among the few vocational opportunities open to older women.

During middle age of both men and women, the vocational opportunities decreased rapidly. Getting a new job for older worker is very difficult for older people and moreover they do not find it satisfactory. Only the worst jobs are usually available for older workers, i.e. the older workers are over represented at the bottom of the pay scale and unrepresented at the top. The attitude of the older workers when they reach their retirement age becomes negative and they feel that they are of less value to the employers irrespective of their adjustments to vocations.

(B) Adjustment to Retirement:

Retirement may be termination of a pattern of life or a transition to a new pattern of life. It involves role changes, changes in interests and values including changes in whole pattern of the individual's life.

Retirement may be voluntary or compulsory, regular or early. Some people retire voluntarily before their normal retirement age because of health problem or a desire to spend the remaining years and doing some meaningful works with their

family members. For many others, retirement is obtained at the age fixed by the organizations whether they want it or not.

Sometimes management wants to make some changes in the organisation's business and therefore giving early retirement to older people with retirement package so that new young workforce is taken up for progress and profit of the organization. The people taking retirement have no other options only to plead for a higher or better retirement benefits.

How well workers adjust to compulsory regular retirement depends on how well prepared they are for this.

Attitude towards Retirement:

Now retirement has been one of the major social problems of our culture, since the length of retirement period grows longer and longer for more people. For the younger person whose days were crowded with duties and responsibilities, the years of retirement seem to him the golden period of life. After retirement the older people find that their pensions are insufficient to enable them to live. There are two categories of retired people on the basis of their attitudes. They are:-

- i) Transformers:** Those who are able and willing to change their lifestyle by reducing their activities by choice and by creating for themselves new and enjoyable lifestyles. They do not relax but instead they develop hobbies, travel plans and become active in community life.

- ii) Maintainers:-** Those who hold on to work by pursuing part-time assignments after retirement and by supplementing this with other activities to fill their time. They do or try to do continuation of what they have done for years and they do some form of work for which they have been paid.

Conditions affecting adjustment to Retirement:-

- 1) Workers retiring voluntarily adjust better to retirement.
- 2) Poor health of the retirement time facilitates adjustment.
- 3) Pre-retirement counseling and planning help adjustment.
- 4) Retired workers finding substitute activities which are meaningful to them are better adjusted.

- 5) Social contacts for the aged persons good for adjustment. Retired people staying at own home or with their relatives usually cuts retired people from their social contacts.
- 6) The less change in the pattern of living retirement necessities, the better is social adjustment.
- 7) A good economic status with enjoyable recreations is essential for good adjustment.
- 8) A happy marital status aids better retirement adjustments.
- 9) More the workers like their works after retirement, the poorer their adjustment to retirement. Work satisfaction and retirement satisfaction are inversely proportional.
- 10) The attitudes of the family members towards retirement have a big effect on employee's attitude. This is especially true of the attitudes of spouses.
- 11) The more the community offers for companionship and activities for the elderly the better they will adjust to retirement.

Sex Differences in Adjustment to Retirement

Women adjust to retirement better than men. The reasons are:-

- i) Women always played the domestic role whether they were married or single throughout their working years in addition to their working roles.
- ii) Retirement for them is less traumatic since they were getting fewer psychological benefits and social sports while on doing jobs.
- iii) Few women who occupied higher job positions also do not feel that they have suddenly lost all their power and prestige.
- iv) Unmarried women also adjust better than housewives after retirement, because they have more time to share and give time for social groupings.

However, for men the retirement is more traumatic and they cannot adjust better to the real changes they have to play after retirement.

Adjustment to changes in Family life in old age:-

Adjustment to the changes in family life is more pronounced by retirement due to reduced income or due to death of a spouse in old age.

Out of many adjustments in family life, the five most important ones which the elderly persons should make have been listed as below:-

1. Relationships with spouse.
2. Changes in sexual behavior.
3. Relationship with offspring's.
4. Parental dependency
5. Relationship with grand children.

1. Relationships with Spouse:-

With the role changes from worker to retiree, most men spend most of their time at home than they never did before. If the relationships with their wives are good, this will contribute to their happiness of both. If their relationships are strained anger and quarrel increased due to frequent contacts.

Retired persons feel that they tend to be depressed and unhappy. They may show their feelings by being critical, irritable nature due to maltreatment of their wives. The relations between retired couples will be sweeter depending on how many interests they have in common. The middle and upper class adults spend more of their leisure with their spouse and have recreational interests in common with them than those of lower class groups.

2. Changes in sexual behavior:

Elderly people must make changes in sexual behavior. Lack of interest in sex is a natural phenomenon due to aging. Sexual behavior of elderly people have revealed that men and women in their sixties and even seventies have continued sexual activities those not so frequently as they did in their earlier years. Some often terminate sexual activity in old age because of physical illness of one or both the spouses.

Sexual activity has a marked influence on marital adjustments. When an elderly woman finds that coitus does not erect her sexual needs, she may seek substitute

sources of satisfaction in masturbation or erotic dreams which may affect her attitude unfavourably.

3. Relationship with the offspring.

The relationships of elderly people with their offspring are less satisfactory. When parents shift their attitudes to suit their children's age and their developmental level, the chances are there that parent-child relationship will be a better one. As the years go on, the elderly people will get much more satisfaction in the companionship of son and daughters. Parents who cannot adjust their attitudes after retirement are likely to face a lonely time in old age.

However, the elderly women are more absorbed in their relationships with their children than elderly men. Women have closer relationship that started from birth of the child. If parent-child relationship remains positive up age of 50 years, there is unlikely that adjustment will be strained after that age.

4. Parental dependency:

The elderly people when they depend on their children for financial support or companionship are unable to deny their role of authority over their children. Grown up children resent to parental authority in old age especially when they support their parents taking their care of social and physical needs. Financial dependency on their children is a bitter pill for most parents to swallow. This is mostly true for men who have played the role of provider for the major parts of their lives.

5. Relationship with grandchildren

Roles played by grandparents are:-

- i) Formal role:-** They follow "hands-off" policy towards care and discipline are concerned.
- ii) Fun-seeking role:-** They enjoy informal, playful relationships with grandchildren.
- iii) Surrogate parent role:-** They play role of surrogate parents in the event of divorce or death of a parent.
- iv) The "Reservoir of Family Wisdom Role:-** They advocate and advice on the special knowledge, certain skills to their grand children. The grandfather is more active in playing this role.

v) Distant Figure role:- When the grandparents remaining away, they are unable to meet their grand children frequently and meet them only on special occasions.

As a result of rapidly changing values and attitudes, the grand parents find a gap between them and their grand children. They disapprove their grand children and the grandchildren regard their grand fathers as old fashioned. Further, grandfathers have fewer or more remote contacts with grand children than the grandmothers do and they (grandfather) are less likely to be called on for help in an emergency. The grandmothers are really absorbed in the lives of grandchildren.

Assessment of Adjustment changes in Family Life:

People feeling happy and leading happy married life find that marriage has been most satisfying to them as they grow older. With passing of time and sharing of mutual interests developed, the partners became close to each other. Retirement or illness on the part of the husband may make the wife feel useful again, as she did when the children were young.

Satisfaction of older couple increased when their children are successful and happily married and if they have good relationships with their grand children irrespective of types and frequency of contact with grand children.

Most of the elderly couple feel that they have to adjust to their circumstances to family, to society and community as a whole. They mostly feel that their marriages have been very satisfactory their lives are calmer now after retirement, their parental, responsibilities are over and they have now got a new freedom to do whatever they like and enjoy it.

LESSON-32

ADJUSTMENT TO LOSS OF A SPOUSE IN OLD AGE

One of the major adjustments of elderly people is for loss of a spouse. Loss of a spouse may be due to death or divorce. It is seen that women marry men of their age or older to them. Therefore, due to death of men earlier, widowhood has been common in old age. It has been estimated that 50% of 60 year old women are widows while 85% of women of age 85 (eighty five) are widows. Some of the problems arising during widowhood can be summarized as below:-

- 1) **Economic Problems:-** Unless a man has built up sizeable wealth and has carried out large life insurance policies, the widow finds herself in great risk.
- 2) **Social problems:-** Widow soon finds herself that there is no space for her between married couples. She is unable to participate in so many social functions.
- 3) **Family problems:-** A widow will have to play the role of father and mother if there are children. Sometimes there are problems from the members of husband's family if there has been a strained relations existed earlier.
- 4) **Practical problems:-** Widow has to depend on his children and others for carrying out some problems in the family; otherwise she will be forced to pay for outside help.
- 5) **Sexual problems:-** Because the sex drive is far from dormant during middle age, widows who enjoyed a satisfactory sexual life during their married years now feel frustrated and deprived. Some go for remarriage also or keep some affairs with single or married men or engage in autoerotic sexual devices.
- 6) **Residential problems:-** Many widows are forced to give up their homes due to economic constraints. They move to smaller accommodation or live with married children. In some cases, if her health does not allow her to live along, she moves to an old age home or lives with a married child if situation favours her.

However all of these adjustments are more difficult in old age. Adjustment problems due to loss of a spouse in old age is different for men and women.

Adjustment problems for men:

When men lose their wives shortly after retirement it greatly increases their difficulties in adjusting to retirement because they have to adjust to widowhood. The adjustment problems of men are broadly divided into three major types as below:-

Firstly, old age is a period during which interests narrow. Elderly men find it difficult to compensate for their loneliness by developing new interests as did in younger years. By remaining alone for long hours, loneliness increases which create adjustment problems during retirement.

Secondly, widowers remember their wives for providing physical companionships, taking care of their physical needs and to manage their homes. Some widowers are prepared to live as singles and manage their lives as single do.

Thirdly, Men as a group are reluctant than women to become dependent on their grown up children and live in their homes unless it is very necessary. They also resist to go to “homes for the aged” because there is no independence and do not want to be surrounded by the aged people who remind about their advancing age. Therefore they decide to solve problems of loneliness and dependency problems by remarriage.

Adjustment problems for women:- The major adjustment problems widows face are influenced by income. The reduced or no income of widow creates a havoc in the family.

First: Circumstances of giving up different interests for widows to be accommodated. Going to functions, movies, lectures, places of recreation, marriage and social gatherings often have to be given up by widows.

Second: a decreased income affects the widow’s social life also, cost of dress and other entertainments can not be compared with their other friends in the society.

Third: due to decrease in income, widows shift to smaller accommodation i.e. going to stay with married child or living in an institution. This change in patterns of living by widows further complicates their adjustments in new environments.

Chances of remarriage are very limited for widows than the widowers. Some widows spend their time with pets like dogs, cats etc., of course, it is not a permanent solution. Women adjust less well to the loss of their spouses than do the men. The long term effects of widowhood come more from socio-economic deprivation than from widowhood itself.

Remarriage in old age:- Remarriage in old age is a way to solve the problems of loneliness and sexual deprivation brought on by the loss of a spouse. Because of increased life span of elderly people, social attitudes towards remarriage in old age are more favourable.

Adjustment problems of remarriage:-

The common problems of adjustments of elderly people to remarriage include adjusting to new spouse, to the new set of relatives, to a new home in the same community etc. There may be discouragement of family members, of children and grand children not going for such remarriage of either man or woman partner to such alliance. However, remarriage in late period in life has been reported successful.

Conditions constituting to adjustment to remarriage in old age:

1. A happy first marriage
2. Knowing what behavior patterns to look for in a potential mate.
3. A desire to marry for love and companionship.
4. An interest to continue sexual behavior.
5. Similarity in educational and social background.
6. Adequate income
7. Approval of marriage by off springs and friends.
8. Reasonability of good health conditions of both spouses.

Adjustment to Singlehood in Old Age

An old person who has never been married may not face adjustment problems due to loneliness in old age, because the single man has the long experience to develop interests and involved in activities to compensate for lack of companionship of his family members. As a result, he may not face any problem of loneliness in old age. But, the married man whose interests centered around his home and family members now may find himself without wife and children.

The older woman builds up a life of her own like man. Therefore, she remains happy and occupied in old age. Even though she is retired, she has to get her pension and savings to enable her to live and does much what she likes since she has not to devote her time for family and develops many types of interests that may keep her busy in post retirement life.

Living Arrangements for the Elderly

5 (Five) patterns of living arrangements for the elderly people have mostly been identified. These are:-

- i) A married couple living alone.
- ii) A person living alone in his or her own house.
- iii) Two or more members of the same generation living together like brothers and sisters or friends.
- iv) A widow or widower living with a married child or grand children.
- v) An elderly person living in a home for the aged.

Conditions influencing choice of living arrangements for the elderly.

1. Economic Status:-If financially able having good economic status, the elderly people stay in their houses. If their economic conditions have been deteriorated, they may be forced to move into less desirable and small accommodations.

2. **Marital Status:-** When both elderly couples alive, their living arrangements determined by their economic status. But widows or the widowers as a rule live with their family members and friends or in retirement homes.
3. **Health:-** When health conditions deteriorates for the elderly couples, situation forces them to stay with their children or in a retirement home.
4. **Ease of caring for:-** Sometimes, elderly people are forced to move to apartments if their health condition deteriorates to take care of their own homes.
5. **Sex:-** Widows usually live with their children and grand children where as the widowers move to stay in clubs, hotels or institution for elderly.
6. **Children:-**Elderly people live with their children. Widows who are childless and elderly singles like in institutions if they are unable to maintain themselves.
7. **Desire for companionship:-** Elderly people in good health needing companionship either move to their new home of their own near a married child or relative where they can get social contact.
8. **Climate:-** Sometimes old people cannot sustain cold climate and move to live with their family members and relatives than living in warmer climate. The warmer climate also sometimes cures some of physical discomforts like arthritis, asthma diseases.

Physical ad Psychological needs in living Arrangements for Elderly

(A) Physical needs:

1. The house temperature should be comparatively even for the elderly.
2. They need large windows for sunlight due to poor vision.
3. Safety arrangements like climbing only few steps, unwaxed floorings, lighting of danger areas to be taken care of.
4. Enough space should be created for recreation indoors and outdoors.
5. There should not be any noise especially during night time. Sleeping room of elderly can be selected as quiet part of the house.

6. Elderly people should have labor saving devices for cooking, washing of utensils, cleaning of clothes etc.
7. Living quarters should be located in one floor only.

(B) Psychological needs

1. Elderly people should have at least one room for privacy.
2. Place for sedentary recreation like reading, watching TV & listening radio to be created.
3. There should be provision of cherished possessions of the elderly persons.
4. They should live close to stores and community organizations so that they can be independent in their activities.
5. They should be nearer to their relatives and friends, so that, they can keep frequent contacts; it keeps them psychologically fit.
6. Provisions for recreation, amusement especially in winter months be made.
7. Transportation to shopping complexes, places of amusement, saloon, place of worship, hospital etc. should be made.

Major emphasis is given on features of living arrangements for elderly which will ensure safety of elderly persons, opportunities for companionship with persons of similar backgrounds, facilities for recreations, holiday celebrations, large library for reading of books and newspapers, watching movies and watching Televisions and with giving religious services for elder people.

Institutional Living for the Elderly:-

Where health, economic conditions, and other socio-psychological problems make the elderly ones impossible to continue living in their own houses and if non-cooperation of family members persists, they take up residence in an institution for the aged. These are either retirement homes or nursing homes. Adjustments to institutional living depends on 4 (four) major conditions which are:-

1. When men and women enter institution voluntarily, they will be happier and have a stronger motivation to adjust in the institution.

2. The more they involve in shared activities of the institutions, more they will enjoy social contact and recreational activities.
3. If the institution is located nearer to their old houses, they will keep their social contacts with their family members easily and there will be better adjustments.
4. Feeling of the elderly people living in the institution that they still becoming a part of their own families and not cut off from their family is more important. Even if their friends die during institutional living they may return to their family members to live in during rest of their period.

Advantages of Institutional living:-

- a) Maintenance and repair are provided by institution.
- b) Provision made for suitable recreation and holiday celebrations.
- c) Contacts with contemporaries of similar interests can be assured.
- d) There is good chance of acceptance by the contemporaries.
- e) Eliminates loneliness because people are available for companionship.
- f) All meals are available at reasonable cost.
- g) There is opportunity for prestige based on past accomplishments/ achievements.

Disadvantages of Institutional living

- a) It is more expensive than living in one's own home.
- b) Institutional food is standardized/ average type; less appealing than home-cooked food.
- c) Choice of food is limited.
- d) Close and repeated contacts with same people may be uncongenial.
- e) Sometimes location of the institutions is quite away from market, medicine shops, community centers.
- f) Location may be far away from location of family, peer groups and relatives.
- g) Living quarters tend to be considerably smaller than compare to own homes. The elderly aged people to adjust there in small accommodations along with other inmates.