Certificate Course in
COMMUNITY HEALTH

2

Maternal & Child Health Care

CONTENT

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COMMUNITY HEALTH

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Maternal & Child Health Care

(Course Code – 450)

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NATIONAL INSTITUTE OF OPEN SCHOOLING

Certificate Course in Community Health

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FROM THE DESK OF CHAIRMAN

Dear Learner,

Welcome to the National Institute of Open Schooling!

By enrolling with this institution, you have become a part of the family of the world's largest Open Schooling System. As a learner of the National Institute of Open Schooling's (NIOS) Vocational Programme, I am confident that you will enjoy studying and will benefit from this very unique School and method of training.

Before your begin reading your lessons and start your training, there are few words of advice that I would like to share with you. We, at the NIOS, are well aware that you are different from other learners. We realize that there are many of you who may have rich life experiences; you may have prior knowledge about trades and crafts that are a part of your family's legacy; you may have a sharp business sense that will make you fine entrepreneur one day. Most importantly, you have that drive and motivation that has made you enroll with this institution, which believes in the spirit of freedom. Yes, we are aware that you have many positive aspects to your personality, which we respect and relate to them.

During the course of your study, NIOS will treat you as the manager of your own learning. This is why your course material has been developed keeping in mind the fact that there is no teacher to teach you. You are your own teacher. Of course, if you have a problem, we have provided for a teacher at your Accredited Vocational Institution (AVI). I would advice you that you should always be in touch with your AVI for collection of study material, examination schedules etc. You should also always attend the Personal Contact Programmes and practical/Training sessions held at your study centres. These will give you the necessary hands on training that is very essential to master a vocational course.

Studying for a vocational course is different from any other academic course. Here, while the marks obtained in the examination will indicate your grasp on your subject knowledge, your real achievement will be when you are able to apply your vocational skills in the market. I hope that this skill-based learning will help you perform your tasks better. NIOS has introduced a Certificate Course in Community Health. This course will provide you the platform to gain the Practical Knowledge & Training regarding Health, Hygiene, Nutrition, Maternal & Child Health Care, First Aid, Prevention and Management of Diseases & Emergency. We hope that you will find it useful. *On behalf of NIOS, I wish you the very best for a bright and successful future.*

M C Pant

Chairman, National Institute of Open Schooling

FROM THE DESK OF DIRECTOR

Dear Learner,

In the fast expanding world of work, learning new skills has become a necessity. Learning and re-learning has become essential for all. In such an environment, vocational education has assumed great importance. Vocational education, as a stream of education promotes the skill development, and training of youth and directs them towards meaningful employment.

In the formal education system, Secondary and Senior Secondary are important terminal stages because at these stages options are exercised to enter higher education or vocational education or world of work.

In keeping with the needs of the Learners, the NIOS introduced Vocational Education through distance mode in 1991-1992. NIOS provides quality education for all learners particularly for disadvantaged sections of society.

NIOS has now developed a course in the area of Health namely ***Certificate Course in Community Health****. This course is being offered through open learning mode of education.*

Prime objective of this programme is particularly to train the candidates and prepare skilled Health Workers in the community. These trained persons are supposed to work in the community not only as a health worker but also as a facilitator for creating health awareness, knowledge of healthy environment, Health & Hygiene and will be capable enough to provide appropriate treatment in emergent situations i.e. First Aid. *We are confident that this course will prove to be beneficial to you.*

We wish you all the best in your future career.

A. S. Mathur

Director, National Institute of Open Schooling

A WORD WITH YOU

Dear Learner,

"Welcome to the Open Vocational Education Programme on Certificate Course in Community Health"

Even after many years of independence two third of population in India live in rural areas and have no access to proper health care facilities Therefore, Government declared the ***Health For All*** *as the national goal and priority of the nation and launched much appreciated scheme, Jan Swasthya Rakshak (Community Health Worker) to train 5,80,000 health workers on the recommendation of Srivastava Committee in 1977.*

This scheme was renamed as village health guide by the volunteers in 1980 but due the population explosion, poverty, illiteracy etc our the national goal of ***Health For All*** *couldn't reach to it's target level. This problem gets further aggravated due to lack of medical facilities in rural areas and unavailability of doctors in proportion to the density of population.*

It was persistently felt that the potential learners needs to be formally trained, who can assist & provide the appropriate care or service to the community in the Rural Sectors, Hospitals, Nursing Homes, and Health Clubs etc and act as facilitators for creating Health awareness, Knowledge of Healthy Environment, Health & Hygiene, First Aid, Prevention of diseases Moreover they get capable enough to provide-appropriate treatment in emergency situations.

This programme is divided into three subjects which covers the 'Human Anatomy & Physiology', ' Health & Hygiene', Nutrition, Yog, Maternal &Child Health Care including family welfare, National Health Programmes, First Aid Prevention, and 'Management of Diseases & Emergency' and 'Duties of Health Workers'.

Learner friendly approach has been adopted throughout the Self-instructional Material. Each lesson is written in very simple and chronological order. The in text questions are included in the text matter to analyze the learner's understanding of the lesson. The suggested activities are provided that to beyond classroom.

We hope that this programme will help you to carve a niche in your career and play an important role in the society as a multipurpose skilled Health Worker.

With best compliments

(Dr. Pawan Kr. Chauhan)
Executive Officer, NIOS

Course Curriculum

Course Title : Certificate Course in Community Health

Level of the Course: Certificate

Introduction of the Course/Programme

Two third population of India lives in rural area and have no access to proper health care. The Alma Ata declaration of 1978 declared health, as a fundamental right and that the attainment of highest possible level of health, a most important worldwide social goal, whose realization requires the action of many other social & economic sectors, in addition to the health sector. Health for all is the National Goal & Priority. There is urgent need to provide Para-professional health workers selected among the community itself, to provide simple, preventive and curative health services including family planning, under the community workers scheme. **The Govt. launched Jan Swasthya Rakshak (Community Health Worker) scheme to train 5,80,000 Health Worker on recommendation of Srivastava Committee in 1977.** This Health Worker Scheme (1977) labeled -as Community Health Volunteer s in 1980, which relabeled as village Health Guide in 1981. But due to population explosion poverty, illiteracy and many other causes the National Goal of Health for All has not reached up to its target level. Since there are so many areas/sectors, not only in rural but also in urban where–

- There are no medical facilities fully developed.
- There are no doctors in sufficient number, according to population density.
- No facility is available during the emergency at Night even knowledgeable person who could guide or refer the case to city hospitals.
- There is no person, who could guide the community for Family Planning Prevention of diseases Health & Hygiene,

Health Environment, Polio Prevention, and AIDS etc.

Therefore there is an immediate need to prepare workforce, who can assist/provide the appropriate care/service to the Community in the Rural Sectors, Hospitals, Nursing Homes, and Health Clubs etc. These skilled personnel at least one from each village/mohalla will be trained through this Vocational Training Programe: Community Health. These trained persons will work in the community as a Multipurpose Health worker and also act as a facilitator for creating Health awareness, Knowledge of Healthy Environment, Health & Hygiene and First aid prevention of diseases. They would also be capable enough to provide - appropriate treatment in emergency situations. Thus, it is expected, that all these gaps can be covered up through the Health workers under this Programme.

Objectives:

After completion of this Programme, a trainee should have -

- Basic knowledge on Human anatomy and Physiology
- Understanding on health, hygiene and nutrition
- Knowledge on communicable, diseases, life style diseases and common non-communicable diseases including emergency measures and Prevention of diseases
- Practical knowledge on First Aid, Pharmacy and drug reaction
- Ability to provide the guidance on maternal and child health care, including family planning and immunization

Eligibility Criteria : 10th Class Pass

Job Opportunities:

It is expected that this programme will be able to train and prepare skilled Health workers. These trained persons will work in the community as a Health worker and they will work as facilitators for creating Health awareness, Knowledge of Healthy Environment Health & Hygiene, and First aid and assist in getting appropriate treatment in emergency situations.

After passing through this course, the trainees will have job opportunities as an assistant/health worker in the Community or Hospital settings such as in Hospitals, Nursing Homes, and Health Clubs etc.

Course Duration : 1 Year

Scheme of Study:

	Theory	Practical/Training
Weightage	40%	60%

Programme	Duration	Essential Contact Hrs.	Total Study Hrs.
Certificate Course In Community Health	One Year	Essential Contact Hrs for Practical including related theoretical instructions/ demonstration	400

Course Content:

Subject - 1 Basic Life Sciences

Subject - 2 Maternal and Child Health Care (including family Welfare and immunization)

Subject - 3 Prevention and Management of Diseases & Emergency

DETAILED SYLLABUS

Subject - 1 Basic Life Sciences

Lesson 1 Anatomy & Physiology - A (Dr. S.C. Sharma)

Introduction of Anatomy & Physiology, Cell, Tissue, Organs, Organisation of Human body, All Systems in brief.

Lesson 2 **Anatomy & Physiology - B** **(Dr. S.C. Sharma)**

Fluid & electrolytes
Dehydration & its effect on systems
Blood, Blood groups
Digestion/ Absorption of nutrients etc.

Lesson 3 **Natural Health and Hygiene** **(Dr. Khan)**

Meaning of Health
Natural Health,
Hygiene &
Health Promotion
Home Care + Hygiene etc.

Lesson 4 **Home Care and Childhood ailments**

(Dr. Tabassum Fatima)

Soothing the throat
Apply GV to Umbilical Infection/Skin infection /Throats (Gention Violet)
Apply Eye ointment
Drying the Ear (Pus)
Keeping the room warm for neonate
Bathing the new born (Cleaning)
Personal Hygiene
Pain Abdomen Emergency measures etc.

Lesson 5 **Nutrition** **(Dr. Mamta Srivastava)**

Nutrition, Types of Nutrition – nutrition of mother
Carbohydrates
Protein
Fats, Vitamin
Minerals
Nutritional Requirements for different age groups
Nutritional Deficiency
Protein
Calorie
Vitamins – food chart
Anaemia, dietary management etc.

Lesson 6 Yoga and Exercises (Dr. Tabassum Fatima)

Introduction of Yoga, Yoga Exercises including Asans and Pranayama or Breathing Exercises

Practicals:

Use models/charts for anatomy
Identify bones
Difference of artery/Veins
Slides demonstrating RBC/WBC
Identification of nutritious food cereal/pulses etc
Problem solving exercises of different situation
Photographs of severe malnutrition i.e. Kwashiorkor etc.

Subject - 2 Maternal and Child Health Care

Lesson 1 Care of Women during Pregnancy (Dr. Santosh Mehta)

Age of menarche and normal causes of delayed menstruation
Age of marriage - dangers of early marriage and pregnancy below 18 years Sources of STD and Aids through sexual contact
Anaemia and its relation with menstruation
Safe a period

Lesson 2 Care of Women during Intranatal postnatal period

Detection of Anaemia and management with Iron and folic acid
Prevention of Tetanus
High-risk pregnancy
Nutrition in Pregnancy
Antenatal cheek up /visits to antenatal clinics
Preparation of safe delivery
Detection of complications of pregnancy (Eclamsia Antipartum and Post Partum Haemarage, Retained Placenta)

Resuccication of newborn if the baby does not cry
Prevention of Hypothermia (Kangaroo case /bathing & cleaning of the child
Breast-feeding
Nutrition of child (6-12 months), (12-18 months), (18 months - 2 year)
Normal growth of baby, weight at birth, monthly monitoring of weight Care of the nipple and care of cracked nipple.
Positioning of baby during feeding and taking out of air from Stomach

Lesson 3 Breast Feeding (Dr. V.K. Sood)

Breast-feeding
Absolute breast-feeding
Supplementary feeds
Nutrition of baby 6 months – 12 months
Nutrition in Pregnancy and Severe malnutrition (12 month – 18 months)
Common Cereal/foods & their nutritional value (18 month – 24 months)

Lesson 4 National Health Programmes

(Dr. B.K. Chatterjee)

Lesson 5 Importance and Needs of Family Welfare Programmes (Dr. K Ashok Kumar)

Methods of Family Planning
Barrier Contraception
Hormonal Contraception
Intrauterine devices
Post-Coital Contraceptive
Ideas of birth rate and Infant mortality rate
Spacing of births
Council ling, MTP and Act of MTP
(MTP Facilities and Guidance to Couples)

Practicals:

Identification of:
Nirodh (Condome)
Copper T

Oral Pills, Saheli
Council ling of Couples

Lesson 6 Duties of Health Worker (According to WHO)

(Dr. M.M. Bhattacharjee)

Subject - 3 Prevention & Management of Diseases & Emergency

Lesson 1 Communicable Disease - A
(Dr. Lalit Mohan Yadav)
(Definition, modes of spread, concept of host, agent, (environment reservoir of infections) Water borne, Airborne, Food borne and vectors borne diseases, contact (skin) & parasitic infestations

Lesson 2 Communicable Diseases - B
(Dr. Lalit Mohan Yadav)

Lesson 3 Preventive Measures (All 5 Steps)
(Dr. Lalit Mohan Yadav)
Specific protection (to be emphasized)
Rehabilitation
Primary prevention
Personal Hygiene
Quarantine measures
Notifiable Diseases

Table of Organisms, Symptoms and Prevention measures

Lesson 4 First Aid (Dr. M.M. Bhattacharjee)

Definition of Blood Pressure, Temperature, height and

weight measurement
Identification of arterial and Venus haemarrage
Height and weight measurement
Bleeding from Nose
Constriction Bandage
Internal Haemarrage - Signs + Symptoms and emergency measures
Shock - Identification and emergency measure, Electric Shock Emergency
Asphyxia - types; Signs an Symptoms emergency measure

Lesson 5 Life style diseases (Mrs. Kalpna Shukla)

Hypertension, Diabetes, Obesity, Cancer etc.

Lesson 6 Pharmacies and Drug Reaction

(Dr. M.M. Bhattacharjee)

Introduction of Pharmacies, Drugs, Drug Reaction, Emergency due to Drug Reaction

Lesson 7 Management and emergency

(Dr. M.M. Bhattacharjee)

Management and emergency, measures of drowning cases and
Artificial Respiration
Management of fainting cases
Dog Bite, Snake Bite, Insect Bite and Its emergency & first Aid, Burn - Emergency Measure - Rescue of patients from burning room and water treatment, fracture and transport of fracture patients, care of Paralysis Patients
Emergency measure of unconscious patients
Control of Hyper Pyrexia, Control of Heat stroke – Sun Stroke, Foreign body in Air passage, Dressing of wounds, Use of triangular bandage and roller bandages
Bleeding and Pain in the Ear, Dispensing of Drugs (Especially ointments, Nasal Drop, Eye Drops
Identification of sites of Insulin Injection, Reaction Local, Systemic Pain Abdomen Emergency – First Aid

Evaluation & Examination Scheme:

Paper	Theory			Practical			Total
	External		Internal Assess-ment	External		Internal Assess-ment	
	Max. Marks	Time	Max. Marks	Max. Marks	Time	Max. Marks	Max. Marks
Paper I Basic Life Sciences	70	3hrs	10	100	4hrs	20	200
Paper II Maternal & Child Health Care	70	3hrs	10	100	4hrs	20	200
Paper III Prevention & Management of Diseases & Emergency	70	3hrs	10	100	4hrs	20	200

Passing Criteria

S No.	Subject for the trade test	Max. Marks in Theory	Minimum % for pass	Minimum Marks required for pass
1.	Theory including Internal Assessment	(70 + 10) x3 = 240 (Written Test Paper – 210) (Internal Assessment – 30)	40%	96
2.	Practical including Internal Assessment	(100 + 20) x3 = 360 (Practical Test –300) (Internal Assessment – 60)	60%	216

Note: In theory a trainee should secure 40 % marks in aggregate in theory including Internal Assessment.

In Practicals a trainee, should secure 60 % marks in aggregate in Practical Test including Internal Assessment.

Procedure for Internal continuous Assessment

Theory:

3 Tests of 10 marks each to be conducted after every 45 days

Total Marks = 30

Practical/Training (Internal Assignments):

Assessment will be done by maintaining progress card of each candidate, indicating assessment of each Practical/experiments.

Total Marks= 60

Course Fee : Rs. 5000/-

(NIOS Share - Rs. 1000/- and AVIs Share Rs. 4000/-)

1

Pregnancy and care of women during pregnancy

1.1 INTRODUCTION

Pregnancy and child birth are important phases of woman's life. Almost every women goes through these natural experiences. Women who are experiencing pregnancy, child birth require help and guidence during these phases of life. Maternal and infant mortality can be reduced to a large extent if maternal and child health services are provided to mothers during pregnancy. In this lesson we will discuss the changes during pregnancy and care of women during pregnancy.

1.2 OBJECTIVES

After going through this lesson you will be able to understand:

- Physiological changes during puberty in females;
- Normal physiological changes during pregnancy;
- How to identify minor disorders of pregnancy;

- Recognize signs and symptoms of pregnancy;
- Maternal care during pregnancy;
- Advises to be given during pregnancy.

1.3 PHYSIOLOGICAL CHANGES DURING ADOLESCENCE IN GIRLS (PUBERTY IN FEMALES)

During childhood the reproductive system undergoes gradual changes along with other parts of body and becomes mature with other parts of body during adolescence (Puberty). About the age of 9 to 11 years reproductive organs begin to undergo rapid development. Some changes, which are observed in girls are :-

- 12-13 years is the average age for onset of menstruation (sexual Development).
- After 13 years physical changes takes place like growth of bony pelvis and widening of hips.
- Changes in breast size and shape.
- Growth of pubic hair, axillary hair and changes in external genitalia
- First menstrual period is termed as menarche. Menarche appears between nine to 17 years.
- Ovulation usually begins one to two years following menarche.
- After ability to reproduce has been attained the reproductive organs of female go through a series of cyclic changes each month throughout childbearing period like menstruation.

During pregnancy there is no menstruation and during menopause which is mostly after 45 years of age the menstruation stops and is called menopause.

- Ovarian cycle consist of series of changes in an ovary that are repeated at monthly intervals. Main phase of cycle includes the development of grafiou follicles, ovulation and formation of corpus luteum. Grafian follicles are present in the ovary at birth and with the help of follicle stimulating

hormone the immature follicles which are present in the ovary become mature. This mature follicle reaches the surface of ovary and ovum is discharged and reaches the fallopian tube is called ovulation. Ovulation is a midperiod of the menstrual cycle. The time of ovulatin is 10 days before the end of a cycle.

Some indications that ovulation has taken place

- mid cycle abdominal pain
- change in basal body temperature which may be higher in post ovulatory phase. To know the time of ovulation a woman may take her temperature after awakening and before getting out of bed when there is slight rise in temperature will indicate ovulation period.
- Premenstrual phase starts after ovulation. During this period a thick soft vascular membrane is prepared for the reception of fertilized overm. When fertilization does not take place ovum dies and this membrane disintegrates and menstrual bleeding starts.

Menstrual phase is characterized by vaginal bleeding for 3 to 4 days which is after every 28 to 30 days from puberty to menopause. Certain signs and symptoms appear a few days before onset of menstruation, common signs are abdominal distension, headache, backache, breastfulness, bladder irritability constipation and premenstrual tension. These signs and symptoms should be considered normal. It is believed that if menstruation is accepted as normal physiological process it reduces the discomfort of menstruation (dysmenorrshoea).

INTEXT QUESTION 1.1

(1) Menarche is starting of first.....

Ovulation usually begins .....years after menarche ovulation.....period of menstrual cycle. Premenstruation phase.....ovulation.

(2) List the signs and symptoms of pre-menstrual phase.

(i) _____ (ii) _____

(iii) _____ (iv) _____

1.3 PREGNANCY AND PHYSIOLOGICAL CHANGES DURING PREGNANCY

Normally, when a woman who is between 15 to 45 years old loses blood through vagina every month, it is called menstruation. Normally it is called as period. When women does not have period for more than six weeks she may be pregnant and baby will be born after about nine months from the date of last period. Some changes take place in maternal body during pregnancy. Emotional and psychological changes also take place during pregnancy . Pregnancy is divided into three trimesters 1st upto 12 weeks, 2nd trimester 12th to 28th weeks and 3rd trimester from 28 to 40 weeks. Normal changes which take place are:

- Change in body weight – weight gain during pregnancy 11 to 12 kg. Maximum weight gain in 2nd trimester or 3rd trimester.
- Changes in reproductive organs- uterus increases in size, shape and position as baby grows. Ovulation does not occur in pregnancy. Vaginal secretion increases and it become thick. Perineum (vulva) and external genitalia also show changes like increases blood flow and oedema.
- Changes in breast – Marked changes take place in breast during pregnancy
- Enlargement of breast
- Feeling of tenderness, tingling and heaviness
- Nipple and surrounding area becomes large and more pigmented (dark).

There are some changes in all systems like.

Hormone production increases which help in growth of feotus and placenta.

- Since blood volume increase there may be increased blood flow to heart. Pulse rate also increases.
- Venous pressure in the legs may show sings of blood stagnation in veins which may be seen at back of legs.
- To have oxygen supply for baby maternal requirement increases. Respiration rate also increases.
- Kidney function may be also altered and may lead to presence of glucose or protein in urine.
- Nausea and vomiting are common symptoms of early pregnancy.
- Heartburn is caused by frequent regurgitation of acidic gastric content in the food pipe.
- Constipation appears due to bowel relaxation.
- Striae gravidarum (tiny scars on abdomen) thighs breast develop due to streching and effect of hormone of pregnancy.
- Nipple and around area of breast becomes dark.
- Dark circles and pigmentation on face is common.

INTEXT QUESTION 1.2

(1) Body weight during pregnancy is increased.....

(2) Maximum weight gain is during ..... and .....trimester.

(3) Breast size enlarge and there is feeling of ..... in the breast.

(4) Glucose or protein may be found in the urine of the pregnant women because of .....kidney function.

1.4 SIGNS AND SYMPTOMS OF PREGNANCY

We should first try to confirm pregnancy. We can confirm by identifying signs and symptoms of pregnancy. These may be divided in three types—

A. Presumptive symptoms – These are reported by mother

- Amenorrhoea (No Periods)
- Changes in breast
- Morning sickness
- Frequency of micturation
- quicking –Ist Foetal movement felt by the mother.
- Fatigue

B. Probable sings – Which are observed by you and history given by mother.

- Enlargement of abdomen
- Pregnancy test – These days ready kits are available which can be used by mother also. A positive test indicates pregnancy

C. Positive sings

- Hearing of feotal heart
- active movement of foetus
- Ultrasonography (U.S.G.)

Once we have confirmed pregnancy we need to calculate expected date of delivery. The expected date of delivery is calculated by adding seven days to first day of last menstrual period and counting forward nine months.

Other methods which you can use are

- palpating the fundus(abdomen)
- Estimating duration of pregnancy by counting forward 20-22 weeks from the day mother first feels foetal movement.

All these will help you to confirm pregnancy and plan for care of woman during pregnancy.

INTEXT QUESTION 1.3

(1) List the presumptive signs of pregnancy.

(2) Positive signs help us to confirm pregnancy. These are–

(3) List the methods of calculation of expected date of delivery.

Maternal Care During pregnancy

Ante natal period is from conception till onset of labor. A women requires special attention for promotion of her health and that of her foetus. During pregnancy mother has special needs.

During pregnancy we should identify her problems and needs by taking health history, physical examination and lab investigations.

During health history we should find out about menstrual history, obstetrical history, medical history and social history.

Menstrual history includes

- Age at menarche.
- Regular, interval of cycle and flow.

- Dysmenorrhoea or other complications.
- Date of first day of last menstrual period.

Obstetrical history

Previous pregnancy

- Date and type of pregnancy, labour and postnatal period, any history of abortions.
- any complications in previous pregnancy or during delivery like Hypertension diabetes etc.
- sex and birth weight of baby.
- present condition of child.

Present pregnancy

- planned or unplanned.
- any abnormal signs and symptoms or problems

Medical history

- Family and personal
- any history of chronic illness like Hypertension or Diabetes.

Social history

- Education, occupation and
- General health habits
- Life style

Physical Examination

1. **General examination**
   - Weight, height
   - Blood pressure
   - Temperature pulse, respiration

- Head to foot examination for any abnormalities

2. Obstetrical examination

- examination of breast
- abdominal palpation

Abdominal examination is done to

- observe signs of pregnancy
- assess feotal size and growth, presentation, position
- assess feotal health.

Steps of abdominal examination

Inspection	-	Size of abdomen
	-	Stretch marks or any scar of previous operation.
Palpation	-	Uterus fundus is palpated during each checkup and normal size should be as follows.
14th week	-	2.5 cum above sym physis pubis.
18th week	-	4 cm below umbilicus
24th week	-	at the level of umbilicus.
28th week	-	1/3rd distance between umbilicus and xifi sternum
32 weeks	-	2/3rd distance between umbilicus and xifi sternum
36 weeks	-	reaches below sub coastal arch.
Full term	-	lightening takes place and fundus of Uterus comes below and is between 32 and 36 weeks of pregnancy level.

The Ist step is fundal palpation is done by out streching the left plam.

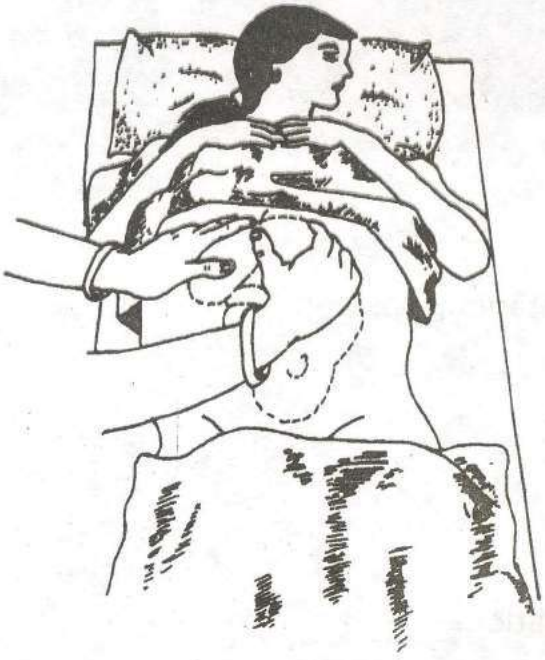


Fig.1.1 : Measurement of fundal height

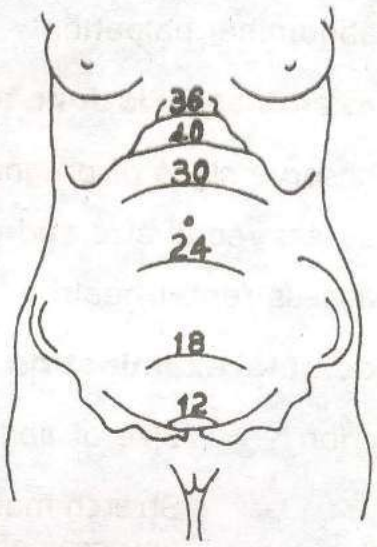


Fig.1.2 : Fundal palpation

You will come to know how to palpatle in your practical but in theory you will know steps of **abdominal palpation**.

First Step- Fundal palpation – Palpation of height of fundus by outstretched left palm

Second Step – Fundal grip – Midwife faces the woman's face. Uterine fundus is palpated by both palms to determine soft pole of foetus or hard foetal head is felt

Third Step – Lateral grip – Uterus is felt to determine foetal back on one side and irregular limbs on the other in vertex and breech presentation.

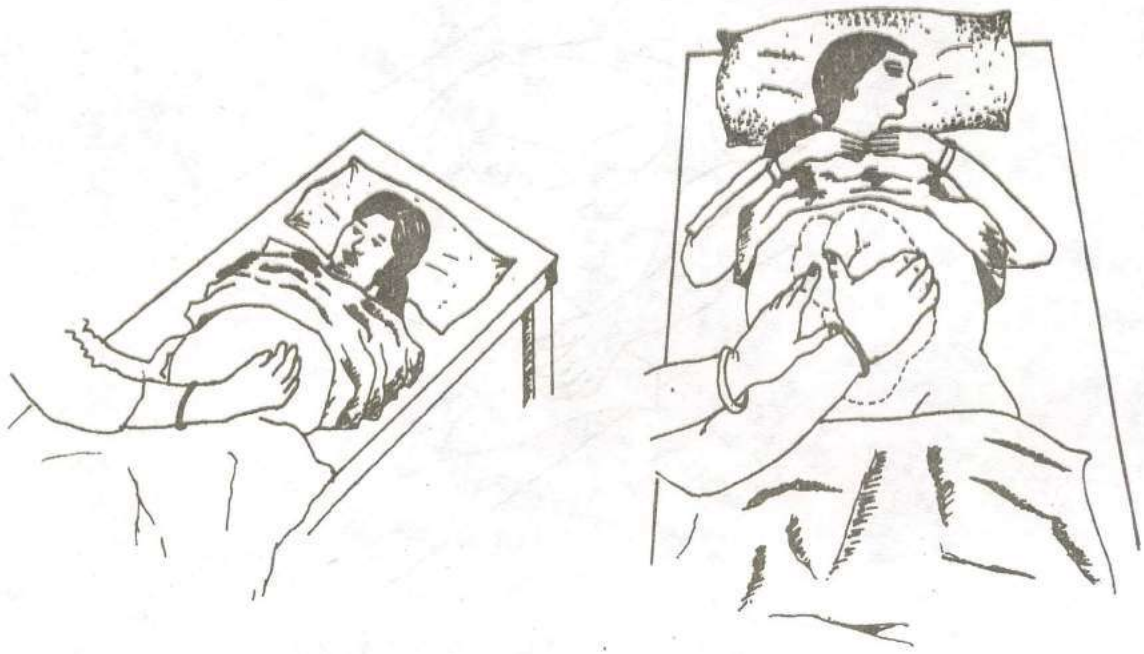


Fig.1.3 : Lateral palpation

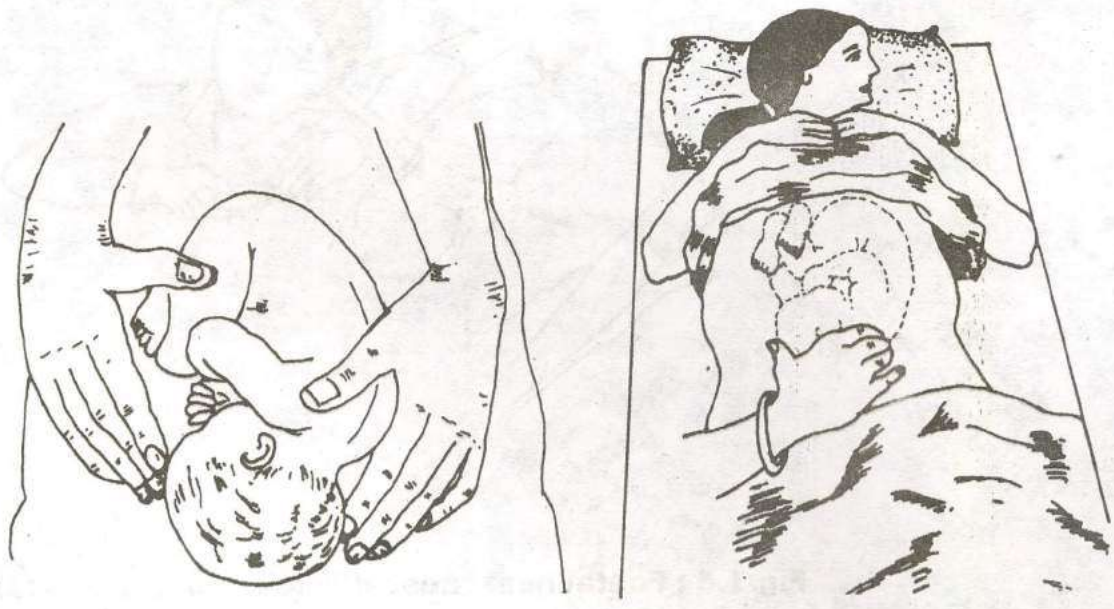


Fig.1.4: Pelvic palpation, Deep pelvic Grip

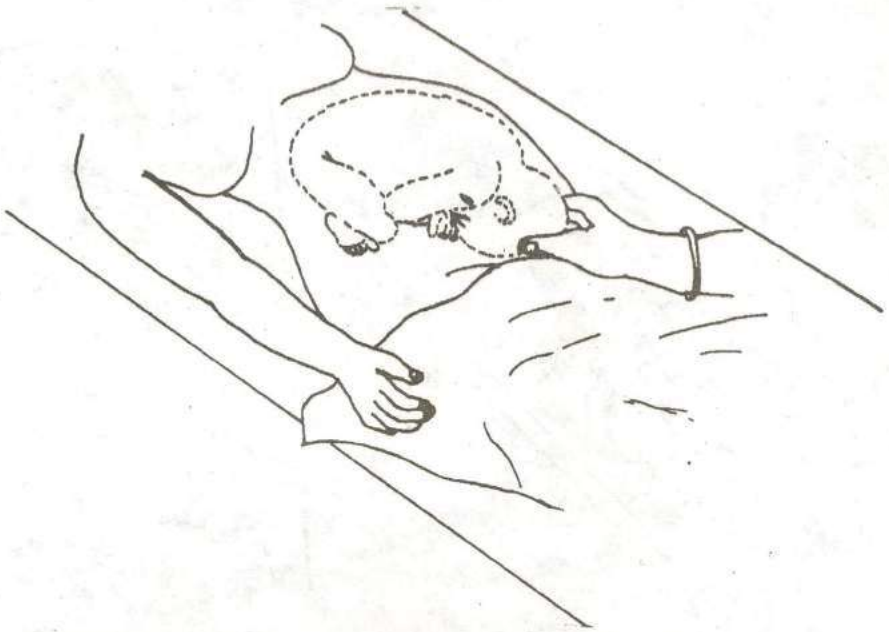


Fig.1.5: Pawlik grip

Fig.1.6 : Foetal heart auscultation using foetoscope

2nd Step

Fundal grip – By facing women, uterine fundus is palpated by both palms and feel for head of foetus.

Lateral grip – uterus is felt to determine foetal back or head

Pawlik's grip	–	foetal head is gripped at lower part of pregnant uterus.
Hearing of feotal heart	–	foetal heart is heard with help of stethoscope or foets scope. Normal heart sound should be between 120-140 per minute.

Any abnormalities or not sure of findings we should refer to health center or hospital.

Lab Investigation –

Normally every women should have some lab tests like.

Hemoglobin	–	which helps us to detect level of anemia.
Blood grouping	–	if any need of hospital delivery or surgery we should know about blood group. If it is Rh negative, should refer to hospital.
Urine test for	–	Sugar and albumin.

Assessment of high health risk-

Every women should be assessed for high health risk so that she can be refereed to hospital for special care. Factors which contribute to high risk are:-

- Age – Under 15 years or above 30 years
- Multigravida
- Short height (below 140 cm). and weight less than 40 Kg
- Malpresentation and multiple pregnancy
- Anaemia (Hb below 10 gm.)
- Pre Eclampsia or Eclampsia (Hypertention and Oedenia)
- Antepartum hemorrhage (APH)
- previous still birth, Intrauterine death or premature delivery
- history of post dated delivery

Antental check up to monitor the mother and foetal physiological status.

- Once in a month for 1st 28 weeks
- Every two weeks till 36 weeks
- Every week till delivery.
- Minimum three visits during Ante Natal Period.

Advises to be given to mother during pregnancy

We should aim at helping a women to maintain good health and early detection of abnormalities and undergo pleasant child bearing experience with adequate preparation. Give birth to healthy baby at the end of pregnancy.

Nutrition during pregnancy – Malnutrition during pregnancy which is common because of lack of nutrition among girls. Pregnancy further deplete the maternal source of nutrition. We should ensure adequate intake of protein, vitamins and minerals to meet the needs of growing foetus. Good sources of protein are liver meat, eggs, fish, pulses or mixed pulses chicken cheese and milk. Green leafy vegetables are good sources of mineral and salts. These also help in prevention of anaemia and constipation.

Antenatal exercises, rest and work

Adequate rest and sleep are important for good health. A pregnant woman should sleep for six to eight hours in well ventilated room. A woman should take rest in the afternoon in comfortable position. She should do light work and not lift heavy things. Exercise and recreation is also very important during pregnancy. She should avoid long journey. Any type of fear or anxiety should be avoided. Moderate exercise in fresh air is beneficial.

Personal Hygiene

Daily bath and skin care keeps pregnant women fresh and active. She should clean her teeth daily. She should wear comfortable cloth, Breast care and breast hygiene is important to prepare for breast feeding. Should wear comfortable and clean undergarment. Women should be instructed to report immediately if she experiences any of these symptoms.

- Vaginal bleeding
- Puffiness of face or tightness of rings.
- Severe and continuous headache.
- Blurring and dimness of vision.
- Acute abdominal pain
- Persistent vomiting
- Chills and fever
- Dysuria.

Regular Check up

Advise regular checkups to detect high risk pregnancy or any abnormality or complication.

Routine blood check and tetanus immunizations. (Two doses of Inj. Tetanus toxoid at internal of one month)

Psychological care in pregnancy

Both the parents should be guided to learn about the baby and care of baby. Try to solve or answer their questions and discuss their problems. Reassure and guide about labor postnatal period. Try to prepare the family to receive new baby in family.

1.5 WHAT HAVE YOU LEARNT

In this lesson we have learnt about normal pregnancy and care of women during pregnancy. Effective management of pregnancy leads to healthy pueparium (postnatal period) also help in preventing complications. We have learnt high risk factors which will help in reducing complication and healthy mother and baby.

1.6 TERMINAL QUESTIONS

1. Write a note on sign & symptoms of pregnancy.
2. What are the normal physiological changes during pregnancy?
3. How will you identify the minor disorders of pregnancy?
4. Write a short note on Maternal Care during Pregnancy.

1.7 ANSWER TO INTEXT/TERMINAL QUESTIONS

1.1 1. Menstruation
Two, mid, after

2. - adominal destension
- backache
- Fullness in breast
- bladder irritability

1.2 1. 10-16kg
2. 2nd and 3rd trimester
3. fullness
4. impaired

1.3 1) Presumptive Sign
- amenorrhoea
- changes in breast
- morning sickness
- Frequency in micturation
- Quicking
- Fatigue

2) hearing of foetal heart
– active movement of feotus
– ultrasound graphy

3) adding seven days to last-menstrual period and count nine month
– abdominal palpation

1.8 SUGGESTED ACTIVITIES

1. Do Obstetrical examination dummy.
2. Practice Hemoglobin estimation on each other.

2

Care of Woman During Intra natal and Post natal period

2.1 INTRODUCTION

During labour or delivery, woman should be given utmost Care and sympathy to go through the most difficult period in her life. During first pregnancy and delivery there are chances of complications. So she has to be repeatedly checked to correct any problems like anaunia toximia of pregnancy, vomiting, high blood pressure and diabeties. Continous monitoring can help in preventing complications during pregnancy and labour. In this lesson you will learn about the dangers signs in pregnancy and labour specially during pregnancy and the ways to detect and rectify the complications.

2.2 OBJECTIVES

After reading this lesson you will be able to:

- Recognize difference between true or false labour pains
- Assess woman before delivery.

- In emergency assist women to delivery safely
- Plan and give care to mother and baby after delivery.
- Advise woman after delivery about her own and baby's care.

2.3

The intrapartum period is a difficult time for both pregnant women and foetus as they go through pains of delivery process. We have the key role to play in providing necessary care, emotional support and care, during labour, to ensure successful outcome for both mother and baby. Reassuring women during labour means enabling her to believe in herself and her ability to cope up the strains delivery process.

As far as possible every pregnant women should be encouraged to have an institutional delivery or delivery by a trained person. This is because all pregnant women are at risk of complications which may threaten the life of both mother and baby. It is essential to establish good rapport with pregnant women so that pregnant woman will cooperate in the process of delivery. You may do this by greeting her caring and making her comfortable. Listen carefully, talk nicely and reassure her during the process of physical examination. If the woman is an unregistered case, take detailed history related to present pregnancy, past obstetrical history, family history and any other complaints. If the women is already coming for antenatal checkup ask for antenatal card for regular monitoring.

Find out about the time of onset of labor, show and rupture of bag of membranes (which contains amniotic fluid). This helps to assess onset and progress of labour. Show means any discharge though vagina which is thick mucoid and mixed with blood. Bag of membrane contains a liquid called amniotic fluid and the foetus floats in the fluid surounded by the bag of membrane. As it ruptures, it may initate labour pains.

Find out about the progress of contractions or labour intensity frequency and duration. You may keep hand over the abdomen of the woman to assess intensity, frequency and duration of contractions. If membrane is ruptured check pad to observe for

quantity and color of leaking and listen to foetal heart sound and count foetal heart rate.

Encourage women to have bath at the beginning of labour and wear clean clothes, use of clean pad and change whenever necessary. Clean and sterilize all equipments. Wash hands before any procedure during labour.

Normal labour is process of expulsion of foetus, placenta and membrane per vagina without any complications. The process of labour starts 2 to 3 weeks before on-set of labour in first pregnancy and 2 to 3 days before in multi gravida or duing 2nd and subsequent pregnancy. During this period uterus comes down and the head of foetus sinks into the pelvis which is also called lightening. The cervix starts getting thinner and shortened and gradually dilated. This gives time to women and her family to seek assistance of trained person to ensure safe and clean delivery. One should ensure the woman has correct knowledge about true and false labour pains. So that she can inform all about true and false labour pains or contact health team members.

2.4 DIFFERENCE BETWEEN TRUE AND FALSE LABOUR PAIN

True labour pains

- Regular painful intensive contractions
- It gradually increase in duration
- Its frequency and intensity gradually increases
- It is associated with cervical dilatation
- Show is present (thick discharge from vagina)
- Not relived by any spasmodic

False labour pain

- Irregular painful uterine contractions which do not increase in duration, frequency and intensity and are not associated with cervical dilatation.

- Show absent (Thick mucoid discharge)
- Relieved by antispasmodic.

INTEXT QUESTIONS 2.1

State True or False

1. Show is an indication of onset of labour
2. First Pregnancy is the pregnancy to be cared maximum.
3. Progress of labour can be determined by keeping a hand over abdomen.

2.5 ASSESSMENT OF WOMAN AS SHE PRESENT HERSELF IN THE LABOUR ROOM

We should ask woman about nature of uterine contractions which should include time of starting pain, duration of pain, intensity and frequency.

- General observation and checking temperature, pulse respiration.
- Foetal condition – F.H.S. (Foetal heart Sound)
- Count of Foetal Heart sounds. If foetal heart sound is less than 100 and more than 160 per minute suspect foetal distress and report or refer.
- Do abdominal palpation and observe for lie presentation, position and decent of foetus.
- Observe or take history for rupture of membrane If brownish colour discharge, observe for liquid which means meconium stained, refer the case to health center or hospital
- Do vaginal examination with strict aseptic technique for cervical dilatation and presentation.
- Confirming the starting of labour

- Observation of pains
- Presence of blood stained mucoid discharge
- Progressive shortening and thinning of cervix.
- Sudden gush of water when membrane ruptures.

Assess for stages of labour

Ist stage of labour (duration 10 hrs in Primi and in Multipara it may vary from 4 to 6 hours)

- Contraction modulate 2 to 3 in 10 minutes.
- Cervix dilated less than 4 cms or more than 4 cms
- Cervix further dilates at the rate of 1 cm per hour
- Decent of foetus begins

2nd stage of labour (duration 1-2 hrs in Ist pregnancy less than an hour in subsequent pregnancy)

- Contractions get strong 3 to 4 per 10 minutes
- Cervix fully dialated to 10 Cms or more
- Foetal decent continues
- Expulsive contractions with urge to push
- Presenting part of foetus reaches the pelvic floor and bulging of perineum.

Some times the mother may have abnormal contractions which can delay the process of labour or result in complications. We may refer in such situations.

Any sudden decrease or increase in pains or contractions with incomplete dialated cervix or non progress of labour may be reported.

At the end of IIrd stage of labour. Duration 10-15 minutes. During this stage the baby comes out with head presentation.

INTEXT QUESTION 2.1

1. What is the duration of Ist stage of labour in primal.

2.6 ASSESSMENT OF MATERNAL AND FOETAL CONDITION IN LABOUR

Maternal Condition

Vital signs- such as temperature, pulse, respiration are observed to detect any changes from normal values. Any increase in temperature, pulse, respiration may indicate infection, maternal distress, dehydration and may lead to complications.

Blood pressure- increase in blood pressure may be associated with preeclampsia and any fall in blood pressure may indicate hemorrhage or shock.

Assess mother's ability to cope with labour adequate support should be provided by family members and care provider.

Foetal Condition

During Ist stage of labour observe every 30 minutes once labour is established and contraction are strong observe every 15 minutes.

During 2nd stage of labour check FHS regularly FHS below or less than 100 and more than 160 require immediate referral.

During 2nd stage of labour mother should be encouraged and guided to bear down that is to push the baby with each contraction and relax in between the contractions.

INTEXT QUESTIONS 2.2

Fill up Blanks

(i) Vital Signs to be checked during Ist Stage of Labour are _____.

(ii) Foetal heart sounds changes _____ indicates foetal dishress.

2.7 PREPARE THE WOMAN FOR DELIVERY

- Explain the procedure of delivery and labour to the woman
- Provide privacy and drape the woman for vaginal examination
- Give extra pillows to raise the head and place mackintosh under the buttocks.
- Ask the woman to flex the knees

Collect articles for delivery

For mother

- Mackintosh
- 2 Bowls
- Kidney tray
- Artery Forcep-2
- Dissecting Forceps
- Scissors
- Cotton
- Antiseptic lotion
- Thermometer
- Clean linen

For baby

- Cloth for receiving the baby
- Cotton swab
- Cord tie thread or rubber band
- Baby clothes
- Warm water

Hand wash articles, good light and clean environment

Steps of procedure

- Wash hands thoroughly and wear gloves.
- Pour water with antiseptic lotion over the perineum by squeezing the swab to clean discharge over perineum.
- Clean perineum using boiled swabs using above to downward direction.
- Use one swab for one stroke.
- Clean perineum from the midline outward.
- Ensure that perineal area and anal area is cleaned.
- Separate the labia minora with the left hand wet two gloved fingers of the right hand and insert into vagina to assess effacement and dialatation of cervix.
- Feel the presenting part and level. Observe or feel for condition of membrane. Do not remove till the examination is complete. Observe the adequacy of pelvis moving fingers round the brim and observe for any abnormalities.

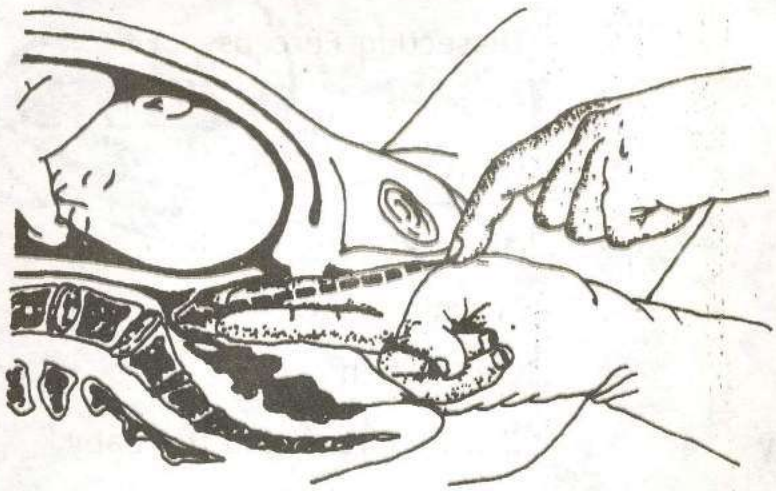


Fig. 2.1 : Diagonal Conjugate

Assessment of progress in labour by vaginal examination

Level of feotal head in pelvis is judged while doing vaginal examination. Descent of foetal head is also assessed during

abdominal examination. In normal labour feotal head should gradually go down.

We should remember that

- Descent should take place throughout labour
- A full bladder and rectum prevent decent or delay
- A large caput formed on foetal head due to early bearing down may mislead the level of decent of foetus.

Once the cervix is fully dialated till the birth of the baby is called the 2nd stage of labour . This lasts for one to two hours and may be less for multigravida women. Some signs which are observed during this stage are:-

- Strong frequent contractions
- Ponting of anus and gaping of vagina during contractions
- Strong urge to bear down
- Formation of bag of membrane and bulging of perineum during contractions

2.8 PREPARATION OF DELIVERY

Clean environment by cleaning surface and surrounding where mother will deliver and baby is kept. The room should be warm. Privacy for woman. One person of her choice should be allowed to stay with woman during delivery.

All articles to be used for delivery should be cleaned and articles (equipment) used for delivery should be boiled or sterilized to avoid contamination, wash hands with soap and water. In case of Home delivery 5 cleans are used

1. Clean Surface
2. Clean hands
3. Clean Blade
4. Clean Cordtie & Cord Stump
5. Clean linen

Steps of Management during 2nd stage of labour

- Ensure the woman is not left alone in labour
- Ensure woman has had bath or cleaned herself.
- Wash hand thoroughly. Ensure you do not have long finger nails.
- Allow woman to adapt to comfortable position.
- Encourage woman to bear down when foetal head is seen. If cervix is not fully dialated bearing down is harmful. Ensure cervix is fully dialated by per vaginal examination while encouraging to bear down.
- Listen to foetal heart after each contraction.
- Avoid over stretching of perineum.
- Support perineum and cover the anus with sterile pad all through out the contraction to prevent infection
- Allow delivery of head slowly, preferably between contractions. Give flexion to prevent sudden extension of head which may result in perineal fear.
- Instruct woman to take short breaths and not to push as the head is delivering or deliver the head between the contractions.

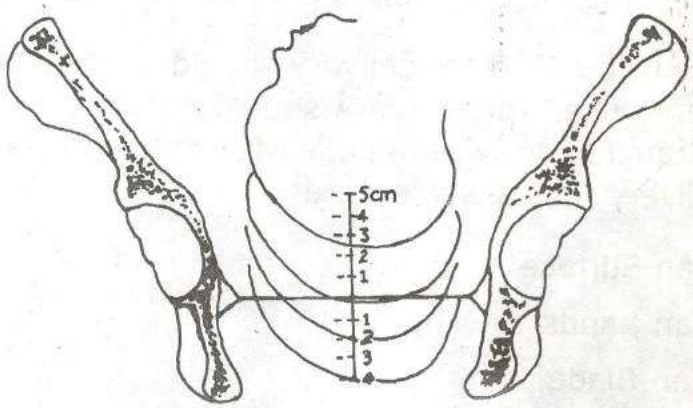
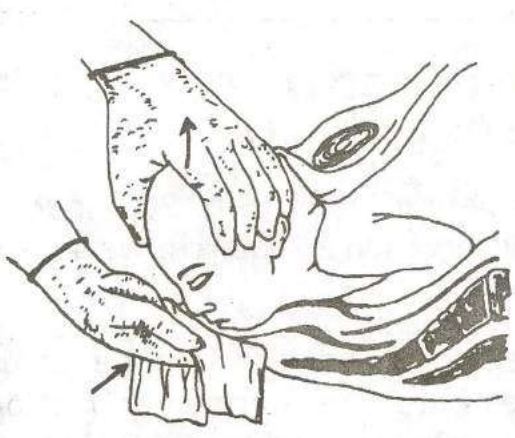
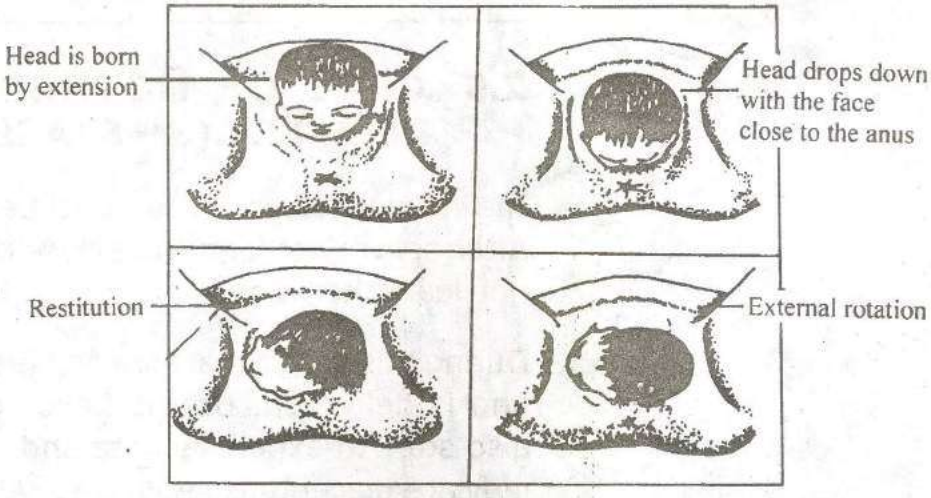


Fig. 2.2 : Level of Foetal Head Descent

- After delivery of head wait for spontaneous rotation of the shoulder.
- Feels for the cord around neck with two fingers and when located try to loosen and slip it over the head.
- If cord is around the neck tight, hold the cord over two fingers and clamp with artery forcep at two places 4 Cms apart.
- Cut the cord between two forceps, keeping two fingers in middle of both forceps so that neck of head of foetus is protected from the injury.
- Take two to three minutes for delivery of trunk after the head is out
- Take baby's head in both hands, assist the delivery of upper shoulder first and lower shoulder followed by delivery of baby.



(a)



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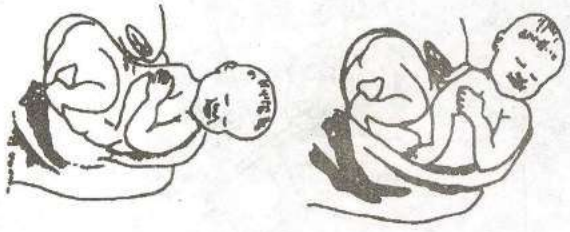


(c)

Fig. 2.3 : (a) Controlled Delivery of the Head, (b) Spontaneous Rotation of the Head, (c) Delivery of the Shoulders

- Immediately after baby is born, note the time and receive the baby in pre-warmed cloth.
- Check clear airway and immediate cry of baby.
- ligate the cord twice at 5 cm and 10 cm from the umblicus.
- Use sterile blade or scissors to cut the cord between the ligatures and separate the baby.
- Ensure the cord stump is not bleeding.

INTEXT QUESTIONS 2.3

1. What are the preparations of Perineum required to conduct a delivery?
2. If the cord is round the neck how you will deliver the baby?

2.9 CARE OF MOTHER IMMEDIATELY AFTER DELIVERY.(3RD STAGE OF LABOUR)

In first delivery or 2nd or 3 rd delivery it takes 15 to 20 minutes. After delivery of foetus the close observation is required. We should not leave her alone.

During this period placenta and membrane separate from the uterus and is delivered. Uterus becomes hard and uterine contraction also start to expel placenta and membrane. Sudden flow of blood indicate placenta is separated. Ask mother to bear down and wait for placenta delivery. Do not pull the cord.

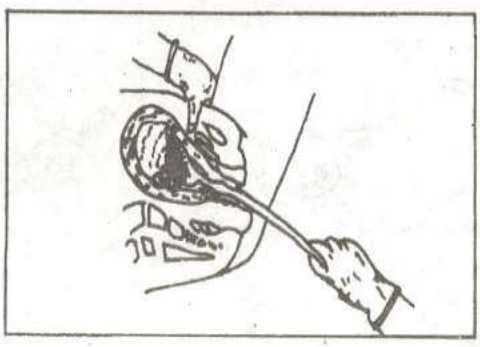


Fig. 2.4 : Controlled Cord Traction

Observe for completeness of placenta and membrane so the no parts are left, clean the perineum with clean boiled cooled water Clean the mother and change her clothes and make her comfortable. Observe for any extra bleeding

- Give hot drink.
- Check for general condition, check temperature pulse respiration.
- Check if uterus is well contracted
- Check for bleeding

Any abnormality report and refer to hospital. Visit woman twice a day till 3 days after delivery and once daily till both mother and baby are all right.

- After delivery keep the baby and mother warm and under observation.

2.10 IMMEDIATE CARE OF NEW BORN

Immediately after birth quickly dry baby and make assessment.

- Advise mother to immediately breastfeed the baby
- Encourage mother to observe if any abnormality
- Take weight – average Indian baby body weight is 2.5 Kg
- After 3 days baby losses some weight – but regains by 10th day.
- Take length with tape measure average height 47 to 50 cms.
- Any congenital abnormality. Report it.
- Observe head to foot skin, mouth chest, cord, abdomen and genital organs.
- Observe if baby has passed urine and stool.
- Observe for the cry of the baby, weak and feeble cry may be reported and refer to hospital

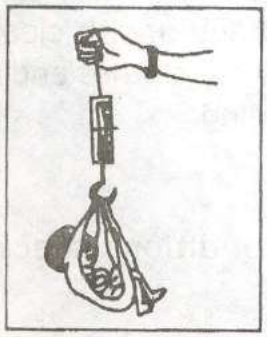


Fig. 2.5 : Weighing a Newborn

Remember some important points or danger signs

- When baby does not suck milk, too much cry or weak cry
- If baby has jerky movements or fits
- If cord is red, wet or smells bad
- If baby is cold or has fever
- If baby has not gained weight even after two weeks.
- If baby vomits if vomitus is green or greenish.
- If baby's lips and face are blue.
- Prevent hypothermia and clean the baby and
- Give bath to baby only after 12 to 24 hours.
- Wear seasonal clothing
- Clean eyes with soft clean cloth
- Cord care to prevent infection and do dressing till cord is off.
- Immunize baby as per schedule.
- Advise breastfeeding and importance of breastfeeding
- Demonstrate how to breast feed

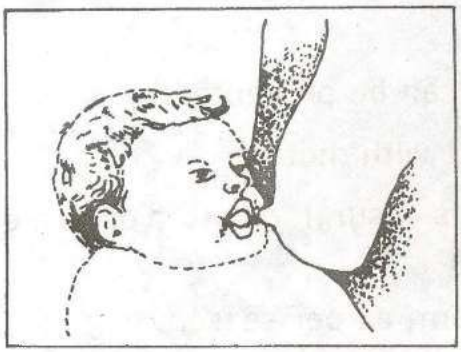


Fig. 2.6 : Rooting Reflex

Fig. 2.7 : Proper position of the Baby

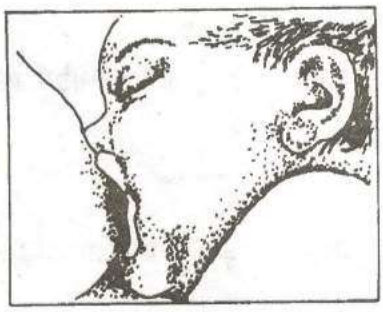


Fig. 2.8 : Correct Method

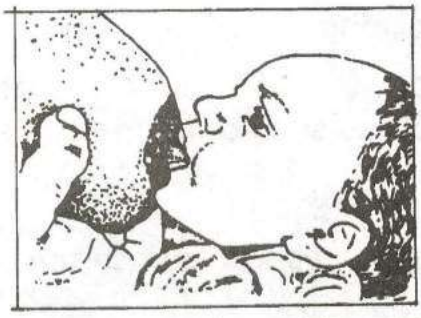


Fig. 2.9 : Incorrect Method

INTEXT QUESTIONS 2.4

1. Duration of third stage of Labour is
   (a) 10 minutes (b) 5 minutes (c) 15 minutes (d) one hem
2. Signs of impending placental seperation are
   (a) Pain (b) Bleeding Sudduls (c) water per vagine
3. Signs of Resp Dissress in
   (a) Baby Crying (b) Lips and face becoming blue
   (c) Respiration becomes fast (d) Baby coughs continously

2.12 CARE OF THE NEW BORN

Prevention of hypothermia (loss of heat) after coming out of vagina

New born is at risk of hypothermia can be prevented by

- Keep newborn in close contact with mother
- Wrapping the newborn in layers of surgical cotton or woolen clothing depending on season.
- Keep the room adequately warm as per season.

Bath

Immediate bathing of newborn can lead to hypothermia. Delay bath till 12 to 24 hours. If baby is low birth weight delay it further more.

Clothing

Cloth the baby in soft, cotton, washed clothes as per seasons. Clothes should be dried in sun.

Eye care

Clean eyes with soft cotton cloth or swab from inner to outer side.

Cord care

Any bleedings from cord refer the child to hospital immediately, keep the baby dry and clean. Do not apply medication. Cord usually falls within week.

Advise to give exclusive breastfeeding. Do not give any water or bottle-feed.

Immunization – Do not refuse immunization if the child has mild sickness.

Advise mother to give immunization as per schedule as advised by health center's

Immunization Schedule according to the National Immunization Schedule

Table

AGE	VACCINE	DOSE	ROUTE OF ADMINISTRATION
At birth	B.C.G.	Single 0.1ml. dose	Intradermally
1½ months	D.P.T. –1st dose O.P.V. –1st dose	0.5 ml. 2 drops	Deep I/M Orally
2½ months	D.P.T. – 2nt dose O.P.V. – 2nt dose	0.5 ml. 2 drops	Deep I/M Orally
3½ months	D.P.T. – 3rd dose O.P.V. – 3rd dose	0.5 ml. 2 drops	Deep I/M Orally
9-12 months	Measles	0.5 ml. Single dose	Subcutaneous
15 months	MMR	0.5 ml Single dose	Deep I/m
15-24 months	D.P.T. (Booster) O.P.V. (Booster)	0.5 ml 2 drops	Subcutaneous Orally
5-6 Years	D.T. Injection	0.5 ml.	Deep I/M
10-16 years	T.T. Injection	0.5 ml.	Deep I/M

2.13 BREAST-FEEDING

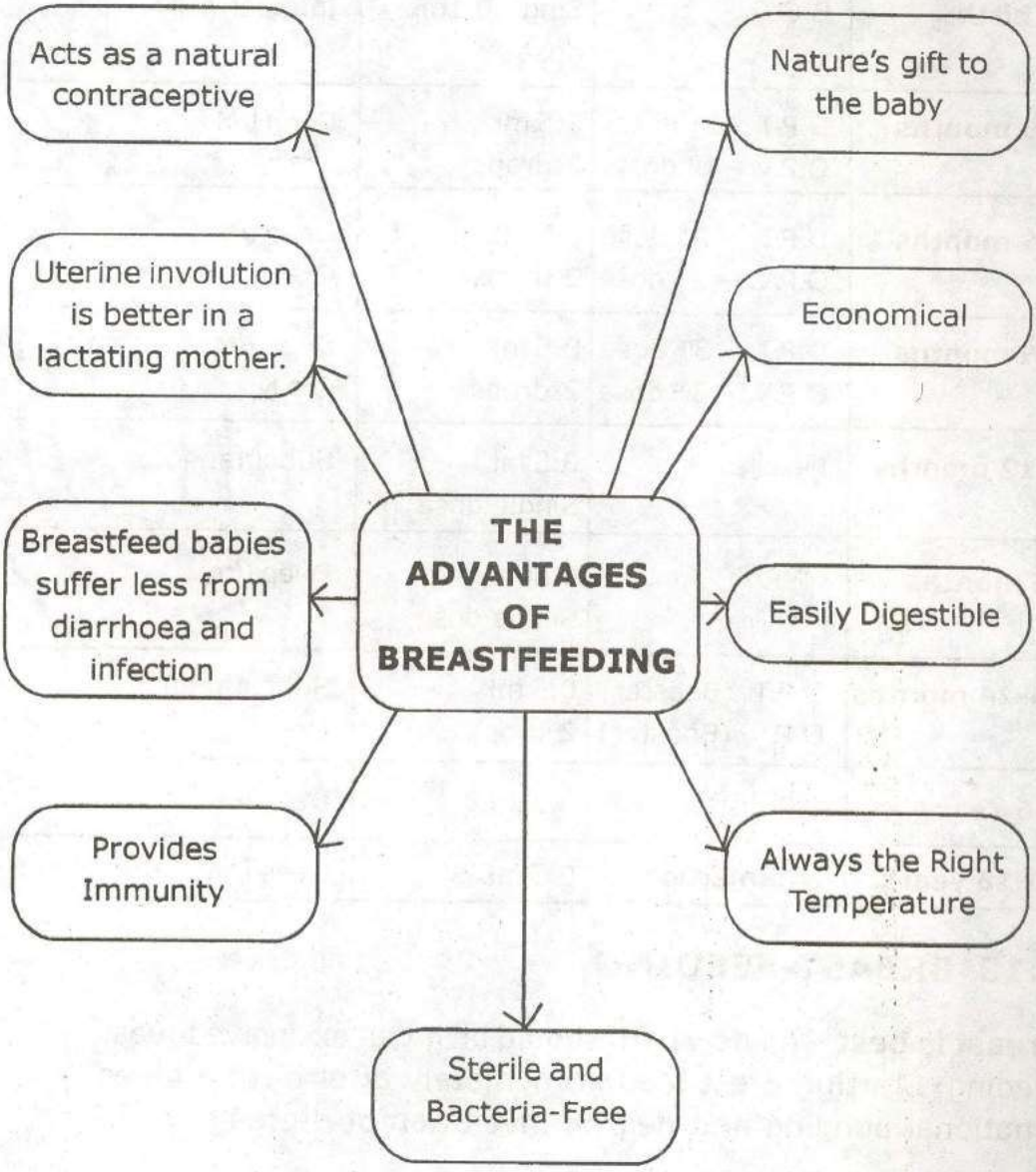
Breast is best – All new born should be given exclusive breast feeding. Starting Brest feed immediately after birth – gives emotional bonding and help in involution of uterus

- Do not give any glucose, honey, ghee etc.
- No water is to be given to child for 6 months
- Thick yellowish milk produced in first few days after birth is rich in vitamin, antibodies and prevents against infections is called colostrum and should be given to baby.

Fig. 2.10 : Burping Technique

- Advice burping after breast feed. (by putting the child on the shoulder and patting at the back)

Advantages of Breast feeding.



2.14 POST NATAL CARE OF MOTHER

First few hours and days of postnatal period are crucial . Assessment of mother to identify problem and refer as soon as possible if any problem or any abnormal sign observed.

- Observe general condition and facial expression to find out any discomfort due to pain or bleeding or exhaustion.
- Sleep and rest – Give hot drink to let her feel relaxed and let her sleep adqueately.
- Help her to develop emotional bonding towards child by keeping baby skin to skin contact and start breast feeding.
- Check fundal height and consistency of uterus which provide assessment about PPH and tonicity of uterus. Uterus should be firm and well contracted If soft, there are chances of Post partum hemorrhage.
- Lochia- which is called vaginal discharge after delivery – observe for fresh bleeding or discharge with in 6 to 10 days red color discharge turns to pink and then stops. Individual women may vary in duration.
- Observe perineum for any discharge or swelling or any infection.
- Observe vital signs temperature pulse, respiration and blood pressure – any change refer to health center.
- Observe breast for any firmness, engorgement of milk secretion or any abnormalities.
- If any milk is collected over nipple or around area crust will form and may start bleeding. Clean the nipple with soft cloth gently. Before putting baby to breast clean with warm clean water.

Personal hygiene

Mother should take daily bath with soap and water and should wear clean clothes.

- Wash breast well and keep clean.
- Clean perineum as often as possible to prevent infection.

Nutrition

The mother should eat more than usual diet.

- Should include locally available seasonal food, fruits, vegetables and milk in her diet.
- Drink plenty of fluids.

Family planning – Advise to adopt family planning method as per size of family or choice of the couple temporary or permanent methods.

Fig. 2.11 : Nutrition for a Postnatal Mother

Post natal follow up – Advise mother to come for post natal follow up after 40 days of delivery and visit well baby clinic for child

2.15 WHAT HAVE YOU LEARNT

In emergency you may need to assist or conduct the delivery. In cases where there is unavoidable delay of the women to go to hospital or in the arrival of trained person. Safe handling of mother and baby is our prime concern. In this lesson we have learnt care of women during labour from the time she starts with labour pain. We should be able to differentiate between true and false labour pains and prepare women for delivery. If there is any delay or the woman has to be assisted for delivery brief guidelines are given. Women needs care immediately after delivery which can help in preventing further complications. Since new born requires immediate attention we have discussed about immediate care, danger signs to be kept in mind and care of new born. Post natal mother after home delivery or hospital delivery will require special attention, which is our prime concern.

2.16 TERMINAL QUESTIONS

1. What are the cases, where home delivery is not preferred.
2. What are 5 cleans used in home delivery.
3. Water is not given to child. New born till what age.

2.17 ANSWERS TO INTEXT QUESTIONS

2.1 1. True 2. True 3. True

2.2 1. Pulse respiration and heart rate

2. below 100/minute or above 160/minute

2.3 1. Wash the perinel area with savlon swab

2. Feel the cord at the child's neck, introduce two fingers under the cord and cut it with a scissors after abstracting the cord with two arteress forceps before the finger.

2.18 SUGGESTED ACTIVITIES

1. Practice a mock delivery on dummy.

2. Practice cord tying on ropes and cord cutting

3

Breast Feeding

3.1 INTRODUCTION

When a baby is born, the most important part is to maintain his/her health. The milk provided by the mother is the best food for the infants as it is available in sterile conditions containing all essential nutrients required by the baby. It also provides readymade immune bodies from the mother to the infants and protect it from most of the diseases. In this lesson your will learn about the advantages of breast milk, technique of giving breast milk, problems associated with breast feeding and its remedies.

3.2 OBJECTIVES

After reading this lesson you will be able to:

- learn importance of breast milk in infant life.
- create awareness in the public about the importance of colostrum.
- recognize proper techniques of giving breast milk to the infant
- identify various problems that may arise during breast feeding and remedial measure to be taken.

3.3 EARLY INITIATION OF BREAST FEEDING

Ideally, the baby should receive the first breast feed as soon as possible and within half an hour of birth.

Colostrum (Mother's first milk)

The milk secreted after the child birth for the first few days is called Colostrum. It is highly nutritious, yellow in colour and sticky.

Colostrum is basically the first protection which a child receives from mother.

- Never discard the first milk or colostrum
- Begin breast feeding as early as possible immediately after birth of child

Late initiation of breast feeding causes engorgement of breasts which hampers establishment of successful lactation

Educate the mother and communities about the value of Colostrum. Don't give any food like honey, gur, ghutti to a new born child.

Exclusive Breast Feeding means that babies are given only breast milk and nothing else for six months.

IMPORTANCE OF COLOSTRUM

- contain antibodies – protects against infection and allergies
- Lactoferrin – prevents the growth of harmful bacteria, help in iron absorption
- Growth factors – helps intestine to mature, prevents allergy & milk intolerance
- Rich in Vitamin A – reduces severity of infection, prevents eye infection

Addition of even a single feed of animal or powder milk or even a drop of water depresses lactation and increases the chances of infections.

Message

1) Breast milk has all the nutrients that a baby needs for the first four to six months of life.

2) Colostrum is highly nutritious and protective for the baby.

3) Exclusive breast feeding means that babies are given only breast milk and nothing else during the first four to six months.

   Do not give any other fluids to baby.

Important

Mothers should be persuaded to start breast feeding as early as possible after the birth of the child.

INTEXT QUESTIONS 3.1

State whether following statements are "True" or "False"

(i) Colostrum or first milk should not be discarded.

(ii) Breast feeding should be started from 4-5 days after the birth of the child.

(iii) Infant should be given honey, gur, ghuti immediately after the birth.

(iv) Colostrum contain antibodies which protect the infant against infection and allergies.

(v) Babies should be given only breast milk and nothing else during the first four to six months.

3.4 BENEFITS OF BREAST FEEDING & DANGER OF BOTTLE FEEDING

Benefits of Breast Feeding	Dangers of Bottle feeding
Contain all nutrients and is a complete food	Does not contain all nutrient
Easily digestible and is at right temperature	Not easily digested in all new borns.

Protects the baby against infections and allergy	Causes more diarrhoea and respiratory infections
Develops better bonding between baby & mother	Does not develop as other member of family may also give bottle feeding
Helps in delaying next pregnancy	Does not help in delaying next pregnancy
Rich in Antibody, protects from diseases	crease risk of anaemia, ovarian nd breast cancer
Rich in vitamin A and other vitamins	Malnutrition, Vitamin A deficiency
Cost less than artificial feeding (free of cost)	It is expensive and costs more.
It reduces post partum bleeding and enhances postpartum charges	Mother may become pregnant sooner
Protects mother's health It helps to regain health of mother	Nil
It has a protective effect against breast cancer and ovarian cancer	Increase risk of ovarian and breast cancer
Helps in proper growth and development	Because of infections affects growth and development

3.5 BREAST FEEDING IN SPECIAL CONDITIONS

Disease	Advice
Cancer	Breast feeding should be avoided
Epilepsy	Continue breast feeding, monitor baby for drowsiness
Jaundice	Continue breast feeding and monitor baby for jaundice
ORAL Contraceptive	Use alternative drugs (may decrease milk supply)

Mild fever	Safe
High fever	Breast feeding should be stopped
Malaria, TB	Breast feeding must be continued
Diabetes	Breast feeding must be continued

Breast feeding may be continue in disease can dite an also.

"WHEN TO START SUPPLEMENTARY FOOD ALONG WITH BREAST MILK

After the baby becomes six month's old, supplementary food should be given. You can start with liquid (mixed, soup, vegetable soup) then gradually shift to semi solid such as (mashed banana, mashed potato & other vegetables Dalia, Khichri etc.) along with breast feeding.

IMPORTANT POINTS TO NOTE

- Production of breast milk is not dependent on size of breast
- More suckling produces more milk
- More prelacteal is produced at night, so night feeding should be encouraged.
- Keep the mother near baby (kangaroo care), skin to skin contact.
- Counselling to pregnant mother is very important for explaining the importance of breast feeding.
- Prelacteal feeds such as honey, water, milk or infant formula inhibit the desire for breast feeding in babies.
- Offer the baby the whole breast not just nipple.
- Never offer bottle feeding to babies before breast feeding.
- Start breast feeding immediately after birth.

INTEXT QUESTIONS 3.2

Fill in the blanks

(i) Breast milk has protective effect against _____ cancer and _____cancer.

(ii) Breast milk develops _____ between baby and mother.

(iii) Bottle feeding may cause _____ and _____ in babies.

(iv) Breast fed babies have _____ IQ whereas bottle fed babies have _____ IQ.

(v) If mother is having cancer breast feeding should be _____.

(vi) _____ produces more milk.

(vii) _____ should be given along with the breast feeding after the baby becomes six month's old.

3.6 SIGNS WHEN BABY IS NOT BREAST FEED PROPERLY

- Cries often, retarded growth, baby not gaining weight
- Wants frequent breast feeds again and again
- Has hard, dry, green stools
- Has infrequent small stools

3.7 HOW TO BREAST FEED BABIES

Correct Techniques of Breast Feeding

Mother should wash the nipples and the breasts before and after feeding.

- Let the mother sit or find a comfortable position for herself.
- Let her hold the baby in her arms so that baby (she) faces the breast and her stomach is against the mother's. The baby's entire body should face towards the breast.
- Make sure that the mother holds and offers her whole breast, and not just the nipple or areola.
- Make the mother touch the baby's cheek or the side of her mouth with the nipple to stimulate the rooting reflex.

- An incorrect sucking position may lead to sore nipples, refusal to feed and the feeling that there is not enough milk. This may lead to engorged breasts. Many mothers prefer to breastfeed while lying down. As long as the baby has easy access to the breast, she can be fed satisfactorily in any position.
- Remind the mother to start feeding the child on a different breast each time to help both breasts produce the maximum amount of milk (Fig. 6.8).

Cleaning of Breast

Mother should take daily bath and maintain good personal hygiene to keep the breast clean. Breast should be washed with soap and water, to keep the nipple clean once or twice a day. Mother should wear clean clothes and well fitted garment.

Fig. 3.1: Cleaning of Breast

Signs of adequate breast feeding

- Baby falls asleep after a full feed.
- Baby has normal stools.
- Baby urinates six times or more in a day.
- Baby has normal weight gain.

Common Breast Problems and their prevention

1. Engorgement

If the extra milk from the breast is not removed the breast become engorged and painful.

Causes

- Delayed infrequent breast feeding
- Baby's inability to suck because of some congenital problems or other problems
- Pre-lacteal feeds
- Improper feeding technique or positioning. Mother psychologically not ready to feed

Prevention

- Mothers should feed the baby frequently during the day & night.
- Proper explanation and guidence to mother to start breast feeding.
- If the baby is not able to suck properly, mother should express the milk frequently.
- Pre-lacteal feeds should be avoided as this can also cause infection.
- A warm compresses on the breast relieves the pain.

- Counselling and guidence about breast feeding during antenatal period.

Sore nipples - means painful nipples

Causes

- Poor Personal hygiene and proper clothing.
- Baby sucking from a bad position.
- Frequent washing of nipples with soap.
- Abrupt pulling from the breast while the baby is still feeding.

Prevention

- Mothers should be advised to help the baby to suck in the correct way.
    - Nipples should be washed only once or twice a day.
    - Mother should wait until the baby releases the nipple, while taking the baby off from the breast.

Blocked Duct

The tissues in the breast is arranged in sections and duct lead out from each section. When the duct is blocked a painful lump forms in the breast.

Causes

- Infrequent breast feeding.
- Incorrect position.
- Lack of nipple hygiene or personal hygiene.

Prevention

- Mother should feed the baby frequently.
- Correct position during breast feed should be encouraged.
- Breast should be gently massage toward the nipple before

and during breastfeed.

- Nipple should be gently cleaned.

Cracked Nipples

It refers to damaged nipple skin and a fissure or cack in the nipples.

Causes

- Baby suck from a bad position.

Prevention

- The nipple should be exposed frequently to the sun and air.
- Malai should be applied on damaged or cracked nipples.

INTEXT QUESTIONS 3.3

(A) Match the following

	A		B
(a)	Adequate breast feeding	(1)	Baby should be fed frequently during the day and night
(b)	Engorgement	(2)	Nipple should not be exposed frequently to the sun & air
(c)	Sore nipples	(3)	Baby has normal weight gain
(d)	Cracked nipples	(4)	Nipple should be washed only once or twice a day.

3.8 WHAT HAVE YOU LEARNT

In this lesson we have learnt the advantages and importance of breast feeding. Disadvantages of bottle feeding, supplementary foods along with breast feeding and the importance of breast feeding in special condition are discussed in greath length. Lesson also describes the problem, causes and preventive measures for the various problems associated with breast feeding.

3.9 TERMINAL QUESTIONS

1. Write four advantages of breast feeding.
2. Discuss four disadvantages of bottle feeding.
3. Mention two disease condition in which breast feeding should be stopped.
4. Write two preventive measures for blocked duct and cracked nipple.
5. Mention two causes of engorgement.

3.10 ANSWER TO INTEXT QUESTIONS

3.1 (i) T (ii) F (iii) F (iv) T (v) T

3.2 (i) breast, ovarian

(ii) better bonding

(iii) malnutrition, vitamin A deficiency

(iv) Good or better, less

(v) avoided

(vi) More suckling

(v) Supplementary food

3.3 (a) 3 (b) 1 (c) 4 (d) 2

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4

National Health Programmes

4.1 INTRODUCTION

Certain diseases have widespread distribution in India both in epidemic and endemic form. These diseases like Tuberculosis, leprosy, Cholera, Polio, Diarrhoea, AIDS etc. requires constant attention for their control. To combat these diseases, national health programmes are made in which planning and funding is made by Central Govt. and implementation is made by State Govt. Monitoring of these programmes is done by Central Govt.

4.2 OBJECTIVES

After reading this lesson you will be able to :

- know the implementation of different National Health Programmes.
- learn to control, prevent and rehabilitate the patients.
- understand the delivery of all these programmes through PHC Health workers and voluntary agencies.

- know how easily it is available free of cost through PHC.
- create the awareness in the community to the diseases, their prevention facilities incorporated in all National Health Programmes.

The National Health Programmes are as following

1. National Malaria Eradication and Filaria Control Programme
2. National Tuberculosis Programme
3. National Leprosy Eradication Programme
4. National Diarrhoea Control Programme
5. National S.T.D Control Programme
6. National Programme for Controlling Blindness
7. National Iodine Deficiency Programme
8. National Reproductive and Child Health Programme
9. National Family Welfare Programme
10. National Water Supply and Sanitation Programme
11. National Diabetes Control Programme
12. National AIDS Control Programme
13. Minimum Needs Programme
14. National Polio Eradication Programme

If you join any of these Programmes, you should be very much sincere, dutiful and dedicated, then only Programme will be successful.

The detailed discussions of the various Health Programme in India are as:

1. National Malaria Eradication and Filaria Control Programmes

(a) National Malaria Control Programme (NMCP) launched in April 1953.

Malaria is caused by the bite of "Female Anopheles Mosquito". It is a deadly disease which causes disability due to repeated attacks as well as loss of life in certain type of Malaria. In India, mainly 3 types of Malarial parasites are found - Plasmodium vivax, Plasmodium falciparum, Plasmodium ovale. Cerebral Malaria is highly dangerous and can causes death within few hours. Malarial attack on brain is a fatal disease.

The main purpose of control Programme is both containment and control. Under the National Programme the following are carried out by:

- Spraying insecticides, by which anopheles mosquitoes which carry the disease are controlled.
- Killing larvae (baby mosquito), so that the number of mosquitoes are reduced.
- Using the drug 'Chloroquine' so that the debility and deaths are reduced.
- Regular intake of 'Chloroquine' twice a week in endemic area helps in preventing the disease.
- Drawing slides in malaria clinics of all fever cases, due to which hidden cases are detected and the numbers of patients are reduced.
- Providing Drug Distribution Centre (D.D.C) and Fever Treatment Depot (F.T.D) which are helpful to control and eradicate the diseases.

(b) National Filaria Control Programme (NFCP)

Filaria is also dreadful disease caused by the **bite of 'Culex mosquito'**. It is also very dangerous disease. **Swelling of limbs or any other organs, blocking of Lymph Channels, scrotum, breast etc. in the body are the examples of micro and macro Filaria in the blood**. Filarial disease is prevalent in Andhra Pradesh, Orissa, Tamil Nadu, Uttar Pradesh, Wesh Bengal, Bihar etc.

Thus, D.E.C tablets have been distributed door to door. The treatment, control, prevention and eradication can be done only if the people take anti mosquito measures and by regular intake of **Diethyl Carbamazine Citrate (D.E.C)**. The major message is to control larval breeding, take anti mosquito measures, health education and preventive measures to follow. If N.F.C.P is followed religiously then eradication will be done in no time.

The control in urban areas through recurrent anti malarial measures and recurrent use of D.E.C in highly Filaria prevalent areas, has helped to reduce the disease and also eradicate them to a certain extent. The severe patients are treated by surgical or rehabilitation programmes. This programme has been amalgamated with the National Malaria Eradication Programme.

2. National Tuberculosis Control Programme

Tuberculosis is very dangerous communicable disease. It is caused by **'Mycobacterium Tuberculosis'**. National Tuberclosis Programme is in operation since 1962.

It is a difficult task to stop, control, prevent and eradicate the disease. All should work hard for early detection of cases. Those who are suffering from cough and expectoration since 3 weeks or more should go for a thorough check up. Blood in the sputum is the symptom of advance TB infection. Such patients should contact the District TB centre and the laboratory technicians and follow the strict preventive and control measures that are prescribed by the centre. They should use masks to protect the germs from entering their mouth and nose and they should also keep their hands clean for avoiding any kind of infection. Detection of early case of TB is essential as it stops the disease from spreading and deteriorating further. TB drugs should be regularly taken after detection of infection. Regular sputum, blood and chest check-ups (X-Ray) should be done in TB Clinics.

BCG vaccination should be done for all children after birth. At National level there is **Revised National TB Control Programme (R.N.T.C.P)** and there is **Direct Observation and Treatments (DOTs)** (Short term treatment) that help in the eradication of such diseases. There are different categories of intensive care :-

Category	Duration Intensive		With drugs continued	
	Time Period	Doses	Time Period	Doses
Category -1	8 weeks	24	18 weeks	54
Category-2	12 weeks	36	22 weeks	66
Category-3	8 weeks	24	18 weeks	54

DOT means direct observation and treatment under supervision. The patients in the outdoor are asked to take medicines twice a week in front of the doctor or health worker under supervision of doctor. This type of treatment has prevented dropouts and developing resistant cases. Duration intensive 8 weeks, 24 doses in a week followed by 18 weeks, 54 doses.

If any body is suffering from fever and cough for 3 weeks or more then that, sputum examination should be done at Health Centres. These tests are done free of cost at Government Health Centres. Medicines should be taken regularly. There should be no gap in the treatment. Regularity in the intake of medicine of TB should be done without failure to prevent relapse of the dose. Thus the treatment of TB becomes easier and is fully cured by taking the required measures.

Fig. 4.1

So the Indian Government and WHO has jointly taken steps to prevent, control and eradicate this disease from India. It is also to be noted that TB control and Eradication Programme has to be seriously and sincerely followed with no lapses in medication and treatment.

TB is a curable disease by early detection and regular treatment and following the preventive measures. The common drugs used for the treatment of TB are **'Streptomycin, I.N.H., Rifampicin and Ethambutol'** There is a National TB institute at Bangalore and research centre at Chennai.

3. National Leprosy Eradication Programme

National Leprosy Eradication Programme was launched in 1983 as 100% Centrally sponsored scheme to remove and eradicate the Leprosy caused by Mycobacterium Leprae. India has 67% of the total recorded cases at the global level. As per programme 5/ 1000 population strategy is adopted in which Horizontal Level Services are provided. Under this free detection, treatment and medicine is provided by PHC in rural and also in urban areas, by Health centres, Hospitals and Clinics. Early detection and correct treatment is the only way of curing it. Any family history of the disease is to be seriously considered. 'Skin Lepra Patch Test' and 'Bacteriological Exam. are to be done if such family history is known. These tests are to be done at certain interval till the disease is fully cured. Health Education with proper and regular treatment is essential for eradication of the disease. The disease rate has come down to 1 per 1000. So it is taken as eradicated.

The disease in the process of eradication an the case no. has come down to 1/1000 population. It has been declared eradicated by WHO after the introduction of muiltiple drug therapy (MDT).

4. National Diarrhoea Disease Control Programme

It was started during 6th National Plan to reduce the mortality due to diarrhoea through Oral Rehydration Treatment (O.R.T). It

is basically seen in children that diarrhoea produces dehydration, due to which at times the mortality (death rate) and morbidity (disease rate) is increased. The children become very weak in diarrhoea due to dehydration undergone by them. ORT is done in the hospital without any admission. The patient should be regularly monitored with ORT/medicinal treatment, as the case may be then with improvement and cure is sent back home. Early detection of dehydration treatment with ORS can cure diarrhoea. Along with diarrhoea prevention, should nutrition also be maintained to keep the child's growth unhampered. So mothers milk should not be stopped.

5. National S.T.D. Control Programme

National Sexually Transmitted Diseases (S.T.D.) Control Programme was launched in 4th Five years plan by Government of India. It is one of the factors contributing to spread of HIV (Human Immuno deficiency virus) infection. S.T. Diseases are 'Syphilis' & 'Gonorrhoea'. S.T.D.s along with HIV infection is tracked with AIDS control programme as switched on by W.H.O. and strictly followed in India. Unsafe sex triggers AIDS (Aquired immuno deficiency syndrome) & HIV infection. Health Education and Proper usage of condoms contributes towards the control of S.T.D. Periodical check ups of sex workers, education and awareness about the treatment and prevention of S.T.D is essential to promote AIDS & HIV Control Programme. S.T.D. clinics are in operation at all district and sub-division hospitals.

6. National Programme for Controlling Blindness

National Programme for Controlling Blindness was carried out to prevent blindness for 1.4% to 0.3% to promote comprehensive eye care. One must take care of eyes from infancy, childhood to the adult stage to prevent blindness. Health Education plays an important role in prevention of blindness. Avoiding the direct glare of the sun rays by wearing spectacles helps in the protection of eyes from injury while working in harmful circumstances and protection from dust is essential for the eyes.

The programme consists of following components–

1. Correction of vitamin A deficiency in early childhood by giving

one lakh international unit of vitamin A along with measles and doses are repeated (after every six months 2 lakhs units) till the child attain the age of 5 yrs.

2. Treatment of trachoma and correction of refractive error in school going children.

3. Early detection and operation of cataract in the elderly population.

Proper nutrition is to be maintained so that the body gets sufficient amounts of vitamin A & D to promote good eye sight vitamin A rich food stuffs like Green leafy vegetables, Mango, Pumpkin, Tomatoes, Carrot etc. should be eaten to prevent the deficiency. Early detection of any eye complaint or eye disease should be taken care of at the first hand to prevent further complications. In India cataract is a great problem which is being recently treated by the laser technique. Operative procedure returns the eye sight by removing the opacity of the eye lens (I.O.L). In certain cases blindness can be cured by changing the eye lenses.

One should always take proper care of the eyes as this is a very important sense organ which provides vision.

7. National Iodine Deficiency Programme

Iodine deficiency in the endemic areas causes 'Goitre'. The thyroid gland is situated in the neck region which swells up due to the deficiency of iodine. It can be prevented by providing the correct health education to the masses. The use of Iodine also prevents the birth of mute/Mentally retarded children. The common people should use Iodized salt to prevent the disease. The Government of India in the 8th plan has stressed upon the usage of Iodized salt in place of the common non-iodized salt. Iodized salt is compulsory to prevent these diseases.

INTEXT QUESTIONS 4.1

1. What do you mean by National Health Programme? Give examples.

   .....

2. What is the relationship between S.T.D. and AIDS control

programme?

.....

3. What are the causes of T.B.? How is D.O.T.S. related to it?

.....

4. How to prevent Malaria? Which mosquito bite causes Malaria?

.....

5. How would you control Filaria at National level?

.....

8. National Reproductive Child Health Programme (NRCH)

This programme relates to child survival and safe motherhood, which are two important components of life. These two are, interrelated. One is related to sexually transmitted diseases and the other to Reproductive Tract Infections (R.T.I.) of the mother, which can also affect the child especially in rural areas. Health Education and prevention of these are necessary. Under this programme a girl child is cared from her birth to death and male children up to 10 years of age. Treatment and prevention of these infections on the priority basis serves the purpose of this programme.

Essential Components of R.C.H programme

- prevention and management of unwanted pregnancy.
- Maternal case including antenatal natal and postnatal case.
- Child survival services for newborns and infants.
- Management of reproductive tract infections and sexually transmitted diseases.

Reproductive health component

- Responsible and healthy social behavior
- Intervention for safe mothers-hood.
- prevention of unwanted pregnancies

- Safe abortion
- Pregnancy and delivery services.
- Management of RTI/S.T.D
- Referral facilities
- Reproductive health services for adolescents.
- Screening and treatment of infertility and other gynecological problems

Child health components

- Essential newborn care
- Prevention and control of vaccine preventable diseases.
- Cold chain system
- Urban measles programme
- Neonatal tetanus elimination
- Polio eradication by pulse polio programme
- ARI control programme
- prevention and control of vitamin A deficiency
- Baby friendly hospital initiative.

All these components aim to achieve the goals of R.C.H programme and reducing the maternal and infant mortality and improve the overall health status and improve, children and reproductive age group. Health workers at peripheral level participate in activities of this programme.

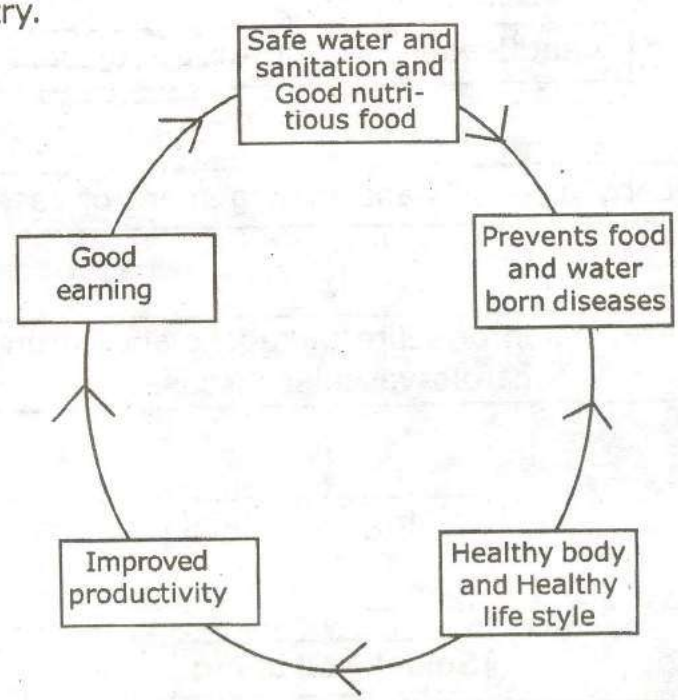
9. National Family Welfare Programme

National Family Welfare Programme was launched in 1952. It was established through scientific study. Research on fertility resulted in the conclusion that adoption of small family norm is not just using contraceptives but also an education process, which shows the proper way of life. Thus the norm of 'Small Family' was established. The famous slogan of "Hum Do Humare Do" fits in well with this programme. This programme is very helpful to the social as well as to the economic aspects of the society, and the country on the whóle. Then only the country can flourish and

improvements in the modernization of the country can be done. Its objectives are reducing birth rate to less than 21/1 000 poupulation; achieving eligible couple protection rate of 60% and reducing national growth rate to 1% per annum. Essential literacy of male and female and the family on the whole helps to remove the problems of over population. Counseling, Health Education and Family Planning are few steps that should be taken to promote this programme. In 1976 Indian Government had implemented compulsory family planning which had a disastrous effect on the society. Recently 'No TARGET' method is adopted by Government of India. Now, family planning is' target free and people are conscious for their family planning. This programme is integrated with other programme, is part of Reproductive child health programme.

10. National Water Supply and Sanitation Programme

National Water Supply and Sanitation Programme is to provide potable water supply to the people, which is the call of the day. It also promotes good and pollution free environment which ultimately leads to good health of the people. Good sanitation process leads to fewer incidents of diseases in the community. This helps to promote good economy and good health of the people of the country.



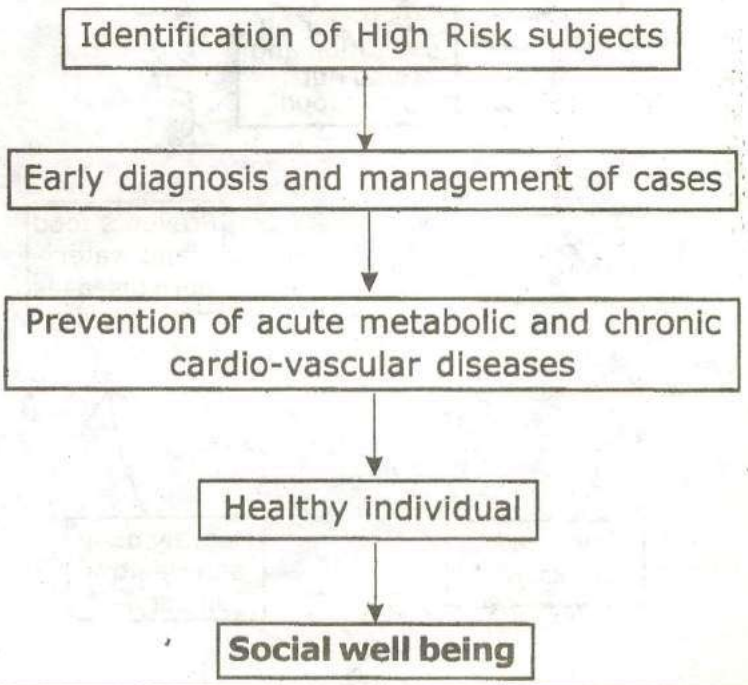
Safe water and sanitation will help in prevention of food and water born diseases which results in healthy people and better living status and producitivity which will also help in better life style.

11. National Diabetes Control Programme

Diabetes is a chronic disease caused due to deficiency in production of insulin by pancreas. As a result there is increased concentration of glucose in the blood. Insulin is essential for life as it helps in metabolism of glucose. World wide prevalence of diabetes has increased in recent Tmees specially in India. Diabetes is a chronic condition and requires life long treatment and causes economic burden on family. The important aspect of this disease is the complication. Based on the extent of problem and it's alarming situation govt. of India launched National diabetes control programme in 1987.

Objectives of this programme were

- Prevention of diabetes through identification of high risk cases and early intervention
- Early diagnosis and treatment
- Prevention of acute and chronic complication
- Rehabilitation of those affected by diabetic complication.



The programme will be successful only if people maintain healthy life style. It focuses on balanced nutritious diet. Regular brisk walk assists the body in keeping fit. Health education against junk food and carbonated drinks is essential. Periodical checkups are useful in detecting diabetes and people at risk. Anxiety, tension, Alcohol and cigrette smoking are the risk factors for Diabetes. Programme aims at creating awareness about diseases.

12. National AIDS Control Programme

Government of India has launched this programme for increasing the awareness of HIV (Human Immuno Deficiency Virus) and AIDS (Acquired Immuno Deficiency Syndrome) by **free blood check ups** and by providing education against the unsafe sex and its disadvantages. The Health Education provides measures that are to be taken in prevention and case of people suffering from disease.

Awareness especially in the youth is essential. Awareness against the use of non-disposable syringe and needle to ensure the safety of blood transfusion or blood donation, contamination through injected body fluids when another person has cuts and wound.

Even though if a person is suffering from AIDS he or she should not be socially boycotted from the society because transmission only occurs through body fluids.

13. Minimum Needs Programme

It was established during the first five year plan that provided to the basic needs of the people i.e. food, clothing and shelter and thereby improving the standard of living. It is also in a way the expression of the country particularly of the unprivileged and underprivileged.

INTEXT QUESTIONS 4.2

1. What is O.R.S.? How is it related to National Diarrhoea Disease?

   .....

2. How is Iodine deficiency realted to Goitre problem?

.....

3. Fill in the blanks:

a) _____ drug is used for the treatment of Malaria.

b) O.R.S. is related with _____

c) D.O.T. is related with _____

e) If no family planning is done then the _____ increases.

f) Name two Sexually transmitted diseases:- _____ & _____.

g) Eye injury may lead to _____

h) T.B. is caused by the micro-organism_____

i) AIDS is caused by _____.

14. National Polio Eradication & Pulse Polio Programme

National Polio Eradication Programme was included in extended programme of Immunization in 1978. Under this programme Polio Drops are given with routine immunization - zero dose at birth, is also given. Ist dose at 6 weeks, 2nd dose at 10 weeks, 3rd dose at the 14 weeks & Booster dose at 18 months and at the age of 5 yrs. In addition, under the pulse polio programme an additional dose is also given to abolish wild virus during pulse polio day.

Poliomyelitis is an acute viral infection caused by R.N.A Virus. This pulse polio Programme was launched on 9th December, 1995 and 21st January, 1996. The first PPI targeted for immunization of all the children 3 years of age. But W.H.O targeted for immunization of all the children aged between 0-5 year of age. Male children have more danger of being affected than female. It is primarily an infection of human alementary tract but the virus may infect the central nervous system also. Route of transmission of this disease is merely through faeco-oral route or directly through hand fingers

and indirectly through the articles which are used daily.

Good environment, good personal hygiene, safe potable drinking water, food hygiene will help to prevent this dreadful disease. Immunization of children in time with regularity and no lapses is the key for its eradication. Early detection is the best preventive and curative measure. When children have fever or pain in the limbs and abnormality in tonicity of the muscles of the limbs, must be immediately noted and a physician must be consulted. After detection regular medication and treatment can help in prevention of further complications. In the extreme cases this disease results in paralysis of limbs and disability, which is painful to the patients and family.

The pulse polio is given to the children in rhythmic manner through out the year as preventive measure. This is done at different intervals to sensitize against the wild polio viruses for the complete prevention and eradication of the diseases.

Thus to make the country disease free, every one of us have to join hands and come forward in this fight against poliomyelitis.

INTEXT QUESTION 4.3

1. When was the Pulse Polio Programme was launched.

   .....

2. Fill in the Blanks

   (a) Ist dose of Polio is given _____

   (b) Chloroquine is the drug of _____

   (c) Modern treatment of tuberculosis is _____

   (d) AIDS is spread by contaminated _____ & _____

15. National Mental Health Programme

Govt. of India launched national mental health programme in 1982 keeping in mind heavy burden of mental illness in the community

and due to inadequate infrastructure for mental health. The programme envisages a primary health case. Community based approach is rural areas supported by professional psychiatric supervision from the district level and referral services by mental hospitals.

AIMS

- Prevention and treatment of mental disorder
- Application of mental health principles to improve quality of life and genial health care services.

Objective

- to ensure availability and accessibility of mental health services
- to encourage application of mental health knowledge in general health services.
- to ensure community participation in mental health services and community acting as guide.

Main activities of National mental health programme.

- Streamlining mental health services and hospital services.
- Upgrading department of psychiatry in hospital
- Research and training in the field of community mental health, substance abuse, child/adolescent psychiatric clinics.

The programme has given emphysis on preventive, promotive, curative and rehabilitative services.

National Rural Health Mission

National rural health mission aims to provide effective health care to rural population throughout country with special focus on weak public health indicators and infrastructure.

Mission is to help government to increase spending on health and to enable health system to effectively use the increased allocation to health.

It has a main component of provision of a female health activist in each village. A village health plan prepared through a local team headed by the health and sanitation committee of Panchayat, strengthening of the rural hospital for effective curative care thus strengthening delivery of primary health care.

It seeks to revitalize the local health traditions. It also aims at effective integration of health concerns with determinants of health like sanitation, hygiene, nutrition and safe drinking water through district plan for health.

Programme also aims to improve access of rural people especially poor women and children to equitable, affordable and effective primary health care.

Aims of the Mission are

- Reduce infant and maternal mortality safe.
- Universal access to public health services
- Prevention and control of communicable diseases non-communicable diseases and locally endemic diseases
- Population stabilization and promotion of healthy life style.

Strategies

Train and enhance capacity of panchayati Raj. Institution to be able to control and manage public health services.

Promote access to improved health care at house hold level through female health activist (ASHA).

Health plan for each village through village health committee of the village.

Proportion and implementation of intersectional collaboration with health system.

Strengthening data collection, assessment and review for evidence based planning monitoring and supervision.

Promote non-profit sectors particularly in under served areas.

Plan of Action

Every village or habitat will have a female Accredited social health activist (ASHA) chosen by and accountable to panchayat.

ASHA would act as bridge between the ANM and village and be accountable to panchayat .

She will be an honrary volunteer and receive performance based compensation for promoting universal immunization, referral and escort services for RCH, construction of household toilets and other health care delivery programme.

She will facilitate prepation and implementation of village health plan-along with Anganwadi worker, ANM and other functionaries of government and self help group. She will be given drug kit containing common drugs for minor or common ailments and replaced time to time.

Induction training of ASHA would be for 23 days spread over 12 months.

Regulation of private sector in clouding informal rural practioners to ensure availability of quality services to citizens at reasonable cost.

- Mainstreaming AYUSH (Ayurvedic, Unaus and Sidha System) and revitalizing local health systems.
- Recommendation of medical education to support rural health services.
- Strengthing of Primary health centers and sub centers and other rural health services and out reach services.

4.3 WHAT HAVE YOU LEARNT

In this lesson you learnt about various National Health Programmes which are started by central Govt. to eradicate/control danger of diseases from the community. You must have also learnt causes, symptoms and control of various diseases and how Govt. is launching various programmes to prevent and control these health problems which are of national importance.

4.4 TERMINAL QUESTIONS

1. What is the Pulse Polio Programme? When this programme was started by Govt. of India. Write the main objectives of this programme.

2. Name all the National Health Programmes, explain 2 of them in detail?

4.5 ANSWER TO INTEXT QUESTION

4.1

1. The National Health Programmes are planned for the control and eradication of widespread epidemics which affect the health of the nation adversely.

   For example National Tuberculosis Control Programme, National Malaria Eradication and Filaria Control programme.

2. STD and AIDS control programme are inter-related. AIDS also is a sexually transmitted disease. A person suffering from Sexually Transmitted Diseases (STD) is prone to develop AIDS as well.

3. Tuberculosis is a communicable disease caused by Mycobacterium Tuberculosis

   DOTS is "Directly observed Treatment" short chemo therapy.

   The duration of treatment has been reduced to six months which earlier used to be one and half years. Multiple drugs are given under supervision of Medical officer and the treatment is free at the DOTS centre.

4. Malaria is caused by the bite of Female Anopheles Mosquito.

   Malaria is controlled by early detection and treatment of Malaria case. Preventive measures also include control of Mosquito by preventing mosquito breeding by spraying insecticides, and by preventing the water collection around your house.

5. Filaria is controlled at the national level by anti-Mosquito measures are applicable in Malaria.

   Filaria is caused by the bite of culex mosquito.

   Early detection of a case of Filaria and its treatment with DEC (Diethyl Carbamazine Citrate) to prevent larval breeding by anti-larval measures.

4.2

1. ORS is oral dehydration salt. It is related to the national diarrhoeal control programme. Diarrhoea causes dehydration which leads to extreme weakness and many lead to the death of the child. Dehydration is prevented by the use of ORS which is freely available at all the government health centres & sub centres. A packet of ORS dissolved in 1 litre of water and child is encouraged to take sips of water and the solution should be consumed ont he same day. If needed fresh solution is used for the next day.

2. The deficiency of Iodine in the diet causes increase in the size of Thyroid gland due to which it swells up. The condition is called Goitre. To prevent goitre, Iodine is added to the salt and the use of Iodized salt is recommended.

3. (a) Chloroquine
   (b) Diarrhoea
   (c) Tuberculosis
   (d) Goitre
   (e) Population
   (f) Gonorrhoea, syphilis
   (g) Blindness
   (h) Mycobacterium Tuberculosis
   (i) Human Immuno Deficiency Virus (HIV)

4.3

1. Pulse Polio Programme was started on the 9th December, 1995 aiming at eradication of poliomyelitis from India. WHO targeted all the children upto 5 yrs., who are administered two drops of oral polio vaccine on the PPI day. This dose is an additional dose. The routine immunization of infants and children should strictly followed. Repeated PPI will eliminate the wild virus and thus Poliomyelitis will be eradication.

2. (a) 6 weeks

   (b) Malaria

   (c) DOTS

   (d) Needles and syringes

4.6 SUGGESTED ACTIVITIES

1. Arrange a visit for the students to attend the Pulse-Polio immunization camp and ask them to administer polio dose.

2. Participate in activities of national health programmes like family welfare, Tubercolons, Diarrhoea control which are through primary health centres or urban health centres.

5

Importance, Need and Methods of Family Welfare Programmes

5.1 INTRODUCTION

Enormous and rapid growth of population is a matter of serious concern. On 11th May, 2000 INDIA crossed "ONE BILLION MARK" of population and is second largest populated country in the world next to CHINA. If current trend of population growth continues INDIA may take over CHINA in near future and become the most populated country in the world.

Family Welfare provides ways and means to regulate fertility. It also provides various methods for birth spacing and birth control. It also helps to improve maternal and child health and also treatment of infertility.

Family Welfare Programme encourages responsible and Planned Parenthood by independent choice of contraception.

5.2 OBJECTIVES

After reading this lesson you will be able to:

- understand the importance and need of Family Welfare Programme.
- deliver the various packages/ services under family welfare programme to community.
- enlist methods of family planning.
- help the couples to understand the importance of birth spacing.
- advise/guide the couples to choose the best-suited family planning method to meet their need.
- educate and create awareness about Family Welfare Services in community.

5.3 IMPORTANCE OF FAMILY WELFARE PROGRAMME

With each Pregnancy woman faces increased risk of death due to anemia, post-partum hoemmanage and multiple child births. Sepsis due to poor hygiene during delivery and untreated reproductive tract infection account for high maternal mortality rate (number of maternal deaths per thousand live births per year).

High blood pressure (hypertension) during pregnancy, eclampsia & pre-eclampia results in high risk of maternal deaths; Illegal unsafe abortions, septic abortions and unsafe deliveries mostly by untrained birth attendents (Dais) are leading causes of high maternal mortality. The right age of bearing a child is 20 to 30 years, Child birth earlier than 20 yrs makes women susceptable to risk of complications.

Induced abortions of unwanted pregancies explains the need of contraceptives.

Most of infant deaths are due to some harmful birth practices, poor immunization status, lack of information about immunization, diarrhoea diseases and acute respiratory infection (ARI)/pneumonia

etc. which can be prevented by good family welfare services.

Most of the deaths of mothers and infants are due to pregnancy related causes, can be prevented with good quality Family Welfare Services i.e. Ante natal, natal, post-natal care and by avoiding some of harmful birth practices.

Family Welfare Programme is aimed at improving quality of life of people. Family Planning Limits the number of children in a family to desired Small family norms (two child).

Family welfare Programme also emphasis on improvement in literacy level and standard of living of the family rather than only bearing less number of children.

It includes the following: -

- Avoid unwanted birth
- Bring desired births
- Regulates interval between two pregnancies.
- Decide number of children in family.

During 1992, the Family Welfare Programme was integrated in Child Survival and Safe Mother-hood (CSSM), having two important parts:

- Universal immunization Programme (UIP) Plus Package
- Safe Mother-hood.

U.I.P. Package aimed at reduction of mortality among infants and children due to vaccine preventable diseases and prevention of Malnutrition & Diarrhoea.

Diarrhoea was among leading causes of death among children and Infants. So oral rehydration therapy was started to combat dehydration.

It provides other facilities for prevention and treatment of ARI/ Pneumonia.

Change over approach of Family Welfare Programme to target free Family Planning and Maternal Child Health Services demanded good quality and client centered Services with focus on

- Reducing unmet needs
- Increasing Services Coverage
- Quality Services and Coverage

Reproductive Tract Infection (RTI) is main cause of illness in women, so need was felt to combine women health with family Welfare. This led to launch and implementation of unified Reproductive and Child health Programme (RCH) with following packages of services.

1. FOR MOTHERS:

- Immunization (TT) – Tetanus Toxoid – Two doses at the intervel of one month.
- Care of mother during pregnancy (Antenatal Care) and identification of high risk mothers like short statured, Eclampsia Pre-Eclampsia, Twin Pregnancy and pregnancy Below 18 years or more than 32 yrs etc.
- Safe and clean delivery services by trained personnels (T.B.A.).
- Promotion of hospital deliveries
- Keeping a gap between two children (Birth spacing)

2. FOR CHILDREN

- Essential Newborn Care (Care immediatly after birth)
- Immunization against vaccine Preventable diseases.
- Management of ARI (Acute respiratory infections/ diarrhoea).
- Breast feeding and exclusive breastfeeding, weaning (Gradual replacement of mother's milk with semi solids & solid food at age 4-6 months)

3. FOR ELIGIBLE COUPLES

- Prevention of unwanted pregnancy
- Legal and Safe Medical Termination of Pregnancy (MTP)
- Provision of family planning methods

4. REPRODUCTIVE TRACT INFECTION/Sexually Transmitted diseases (RTI/STD):

- Prevention and Management of RTI/STD.

The importance of Family Welfare Programme focuses on main issue of:

Reduction in Birth rate and regulating fertility which means.

- Women should go through pregnancy and child birth safely.
- Outcome of pregnancy is fruitful in terms of maternal and infant survival and well-being.
- The couple should have sexual relation without fear of pregnancy and getting diseases.
- The pregnancy is uneventful and mother and child are safe and well at the end of pregnancy.
- The child should come by choice and not by chance.
- Promotion of women and child health.
- Prevention and Management of infertility and other reproductive diseases

INTEXT QUESTIONS 5.1

1. List two common causes of maternal mortality.
2. List packages of services under RCH.
3. Mention the services provided for children under RCH package.
4. Family Welfare Programme is aimed at .....
5. Right age to bear child is .....

NEED OF FAMILY WELFARE PROGRAMME

Family Welfare Programme is essential in present situation when country is in state of population explosion and where resources are depleting fast.

Family Welfare Programme is the most important way to control birth and restrict population growth, so Family Welfare Programme is an urgent need to combat the threat posed by population growth and for conservation of the resources.

Why family planning programme

- Reduce Fertility rate
- Control Population Growth
- Improve the Quality of life
- To check unwanted Births
- To Reduce Maternal Mortaility Rate and Infant Mortility rate
- To Promote the health of Mother and Child

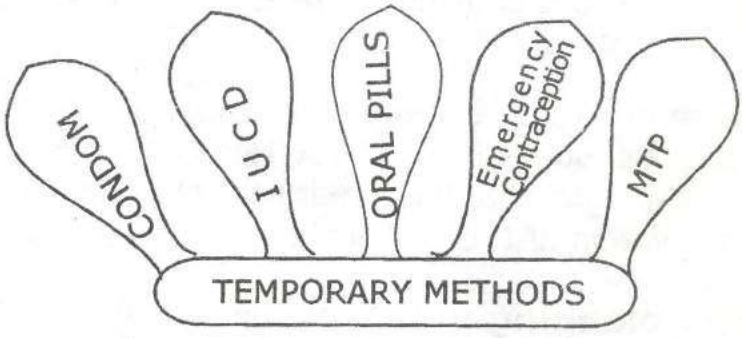
INTEXT QUESTIONS 5.2

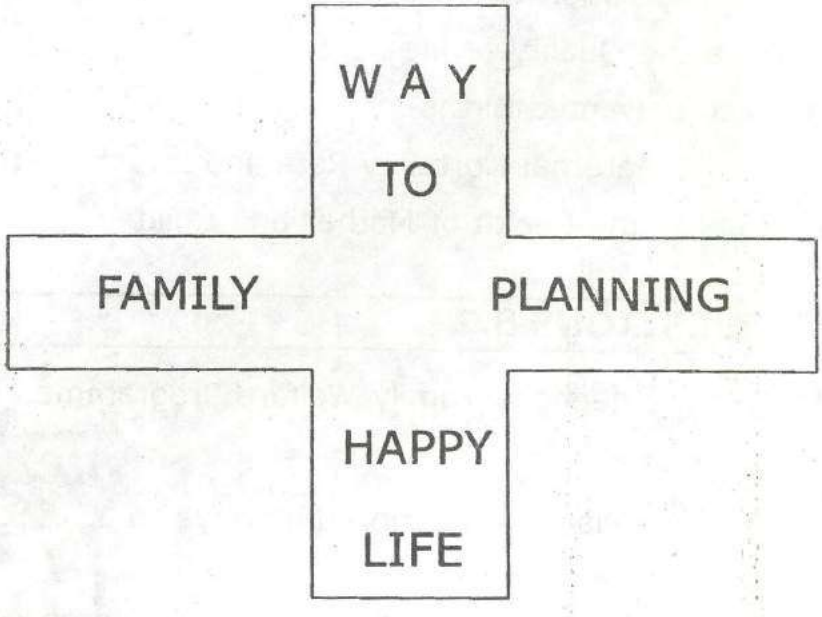
1. Mention the needs of Family Welfare Programme
2. Fill in the blanks:
   1. Family Planning is important ways to .....and .....
   2. Family Planning limits the number of children in a family to .....
   3. Family Welfare Programme helps to promote the health of .....and.....
   4. Family Welfare Programme is urgent need to combat the threat posed by.....

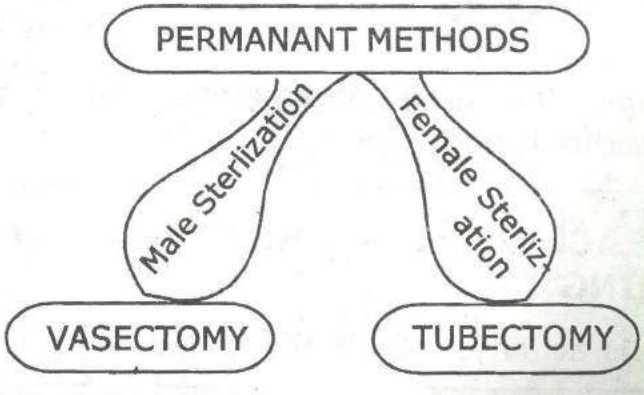
5.4 CONTRACEPTIVE METHODS WAY TO FAMILY PLANNING

Contraceptive is action by which the couple is able to prevent

conceptions. Need based family planning contraceptive methods and MTP services are available to control births and unwanted pregnancies.







TEMPORARY METHODS:

1. Barrier Methods:

Physical Barriers

- Male condoms
- Female condoms
- Diaphragms
- Vaginal sponge

Chemical Barriers

- Creams
- Foam
- Suppositories

Combined
- Spermicidal condoms
- Spermicidal diaphragms

2. Intera Uterine Devices:

Ist Generation IUD - LIPPIE'S LOOP

IInd Generation IUD - CuT (Copper T)

3rd Generation IUD - HORMONE Realising

A. HARMONAL METHODS:

A Oral Pills

- Combined pills
- Mini Pills

B Depot Formulations

- Injectable
- Sub dermal– Implant

B. PERMANENT METHODS (TERMINAL METHODS)

1. Male sterilization:
   - Vasectomy

- Non scalpel vasectomy

2. Female sterilization:
   - Open technique
   - Laproscopy

Barrier Contraceptive Methods

Physical barrier methods: prevent semen from depositing in vagina.

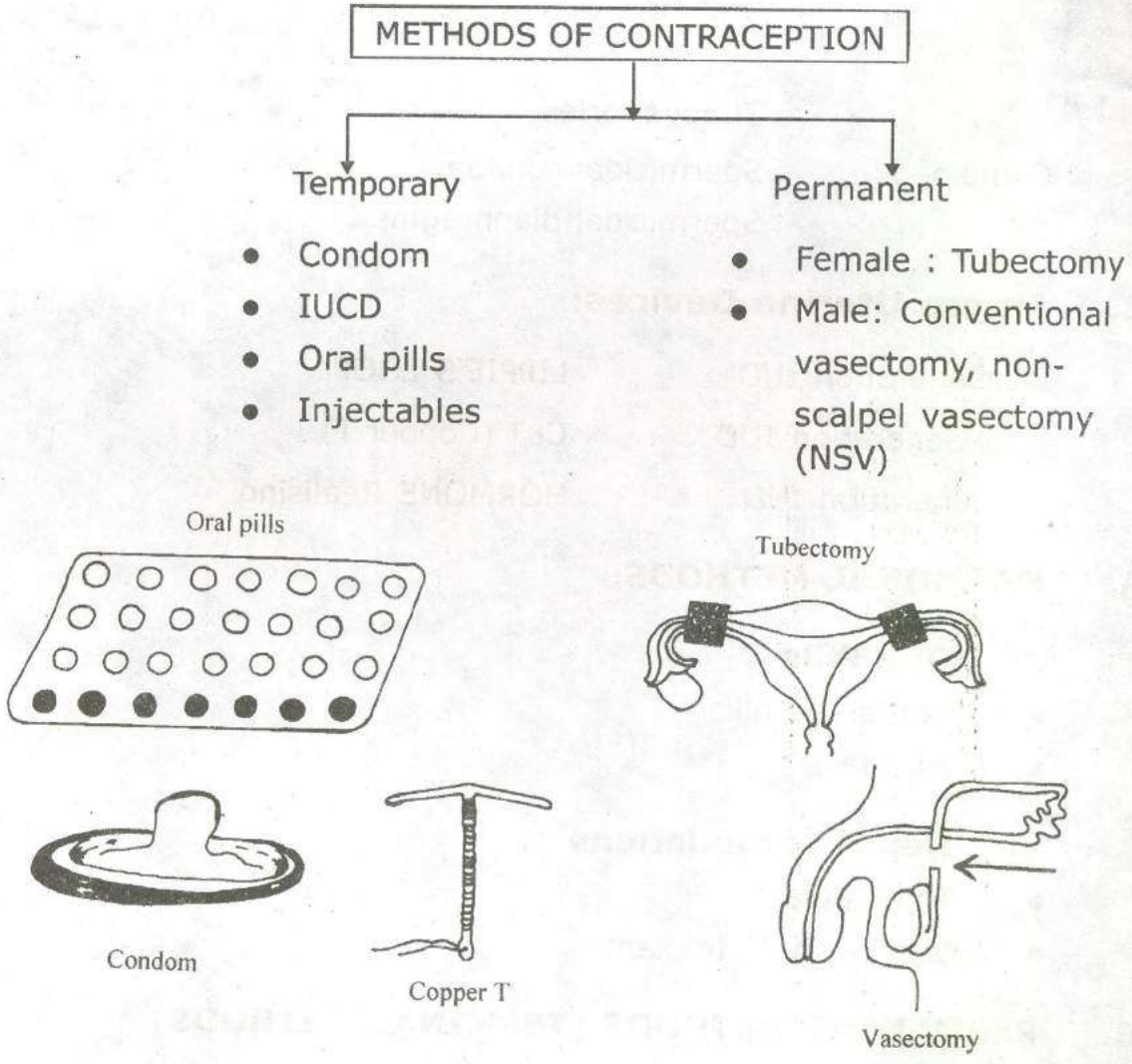


Fig. 5.1 : Contraceptive Methods

a) **Male condoms**: Physical barrier contraceptive widely used by males.

Available in market by brand names NIRODH, BLLSs, MASTI, etc.

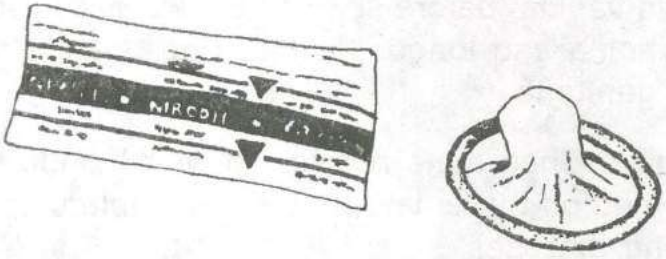


Fig. 5.2 : Condom

It is cylindrical sheath made up of Latex rubber (Very thin) used during intercourse, designed to be fitted on erect penis.

It prevents semen from being deposited in vagina.

It is to be discarded after each use or sexual act and disposed off.

Effectiveness: Very effective on using correctly in preventing conception & Sexualy Transmitted diseases.

Precaution: To prevent spilling of semen withdraw it with care.

Available freely as dry or lubricated with water based lubricant.

Advantage:

- Cheep, easily affordable
- Prevents risk of A.I.D.S./HIV/STD
- Helps to reduce erosion cervix or infection.
- Convenient to use and can be used in combination with other methods or foam lablet.

Disadvantage: -

- Some couple feel reduce sex pleasure

- Failure due to improper use or leakage due to learing of condom.

b) Female Condom"

It is mechanical barrier made up of thin sheath of polyurethane inserted in vagina before sex. It has two rings, one end is placed high in vagina and longer flexible ring outside vagina to cover external genitalia.

Advantage : When male refuses to wear condom, it is best self initiated method by female to prevent unplanned pregnancy and contracting diseases.

Disadvantage :-

- High cost
- Confusion over method usage.

B. Diaphragms: -

A vaginal barrier made up of synthetic rubber or plastic (5 to 10 cm diameter) fitted into vagina before sexual act. It hold sperms from entering the uterus and can be used in combination with spermicidal felly.

Disadvantage: - Repeated infections and high failure rate

- Cannot be kept for long in vagina.

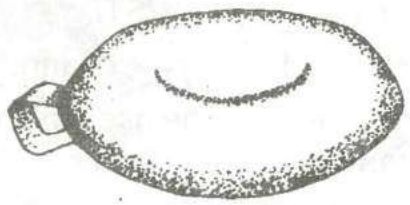


Fig.5.3: Vaginal Spenge

C. Vaginal Sponge : (Available as 'TODAY')

Umbrella shaped, polyurethane disposable sponge placed high in vagina, can be removed with help of loop attached. Simple to use

- Blocks access of sperms to cervix.
- Spermicidal and absorb the ejaculated semen.

Disadvantage:

- Expensive
- Not recommended in young female
- Need to learn the proper use otherwise may lead to failure.

INTRA UTRINE DEVICE (I.U.D):

Intra uterine device are polyethylene flexible small devices introduced in womb per vagina acts as foreign body controlling and preventing pregnancy.

They are popular for their effectiveness combined with long duration of action. They are non-medicated or Medicated bearing copper or Hormone releasing coated with barium sulphate, widely accepted and used.

Copper T being safe, most reliable, very effective and reversible long time contraception for women.

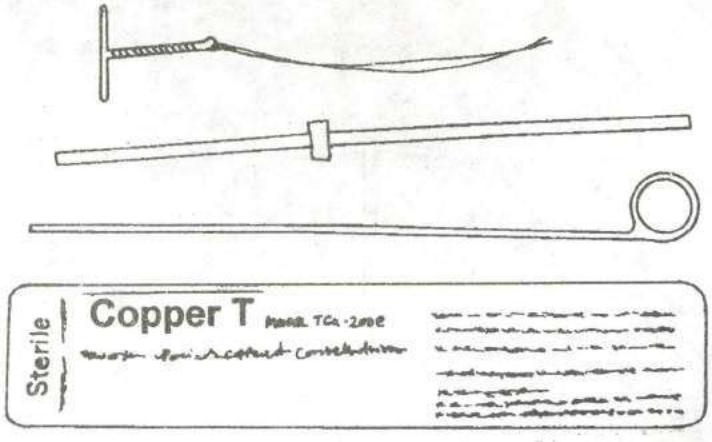


Fig. 5.4 : CuT (Copper T)

Ist Generation :- Non-medicated, kept in womb as long as desired, not used now as more effective IInd Generation IUD are available.

2nd Generation IUD :- Medicated, have copper added to IUD, various types of Copper T are available i.e. CuT 200, CuT 220, CuT 250 Multiload CuT 375 (Number indicate Surface area of copper per mm^2) Copper increases effectiveness and inhibits implantation of ovum. It decreases motality of sperm and its survival.

Advantage: Easy to fit, better tolerance, lesser side effects pain and bleeding, lower expulsion rate and non-interference with sex

CuT has long life of 3 years and multiload 5 years.

Disadvantage: can lead to painful bleeding, irregular menses ectopic pregnancy in some cases.

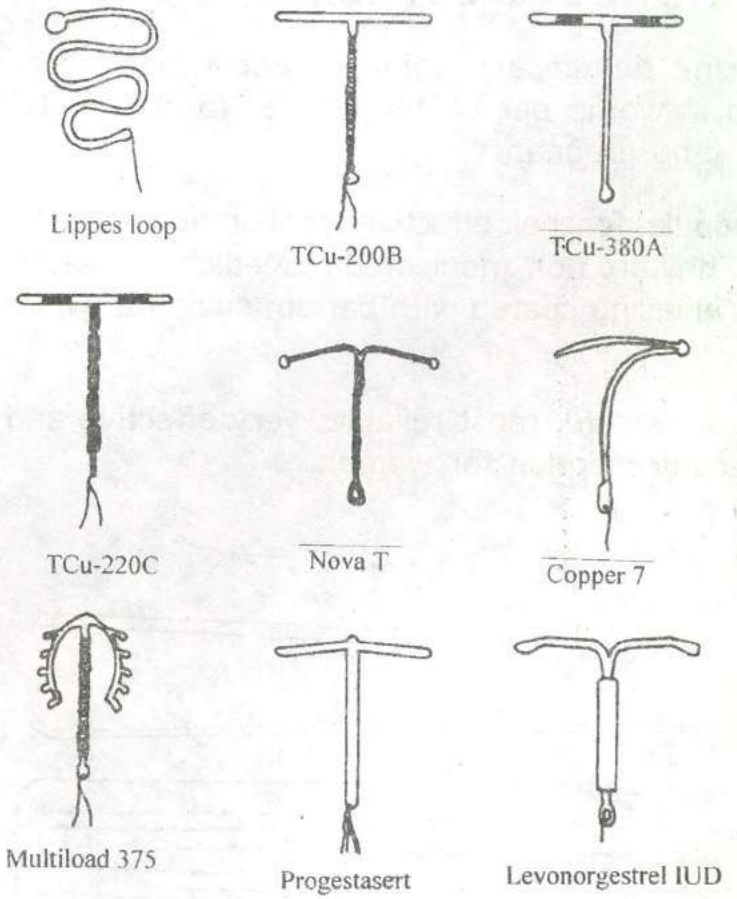


Fig. 5.5 : CuT 2nd Generation 3rd Generation

3rd Generation IUD: Impregnated IUD with progesterone, release of hormone is slow.

Effective life span: 1 year

Advantage: More effective, reduced menstrual flow, less painful menses

Disadvantage: yearly replacement, expensive, chance of ectopic pregnancy

ORAL CONTRACEPTIVE PILLS (HORMONAL CONTRACEPTION)

Oral Pill is every day use Pill. It stops release of eggs; there is no chance of pregnancy. Following types of oral pills are available family welfare centres.

- Combined Pills
- Mini Pills

Post – Coital Contraception (Newer Technique)

Hormonal Pills are most effective contraceptive extensively used by women all over the world. It is most dependable spacing method in educated and motivated females under 35 years of age.

COMBINED PILLS:

It contains low doses of estrogen and progesterone (Female Hormones). Taken regularly and properly is very effective in preventing pregnancy. Starting on 5th day of menstrual cycle, taken consecutively for 21 days. These are supplied through Govt. of India under Family Welfare Programme under the name MALA-N (FREE) and MALA-D(at nominal rate) Mala-D contains 28 PILLs (21 hormonal –white and 7 Haemotanic Brown)

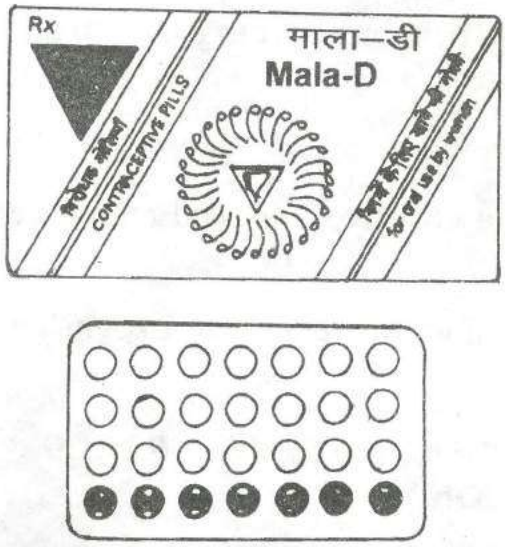


Fig. 5.6 : ORAL Pill (Mala-D)

Advantage:

It has certain health advantage helps reducing menstrual bleeding and prevents anemia.

- Protects against ovarian cancer.
- Restore fertility soon after stopping.

MINI PILLS (Progesterone Pills)

It is estrogen free and contains small does of progesterone (0.3 mg Norethesterone or Levenogestral)

Mode of Action : Inhibits Ovulation

- Makes cervical mucosa tenacious and thickened.

Advantages: Low failure rate, dependable, cheap and independent of sexual act. There are no undesirable effects of oestrogen.

Side effects: Weight gain, suppress lactation, heart attack,

Clotting of blood in arteries(thrombo-embolic phenomenon)

Migraine

Should be avoided when there is :

- Old history of high blood pressure and Ischaemic Heart

Disease

- Diabetes
- Breast Cancer(Lump)
- Jaundice (yellow discoloration of Eyes)
- Heart disease etc.

DEPOT FORMULATIONS (Medroxy Progesterone Acetate)

INJECTABLE : Preparation contains synthetic hormones and is administered once every 3 months Intra-muscularly) First given during 1st five days of menstrual cycle.

Does not suppress lactation

Mode of Action : Inhibits Ovulation

- Acts by thickening of cervical mucus

SUB-DERMAL IMPLANTS (NOR-PLANT)

These are Hormonal Capsules Six in number, thin and flexible made of Silicone implanted beneath the skin of upper arm.

Effectiveness: Effective for 5 years, safe and reversible

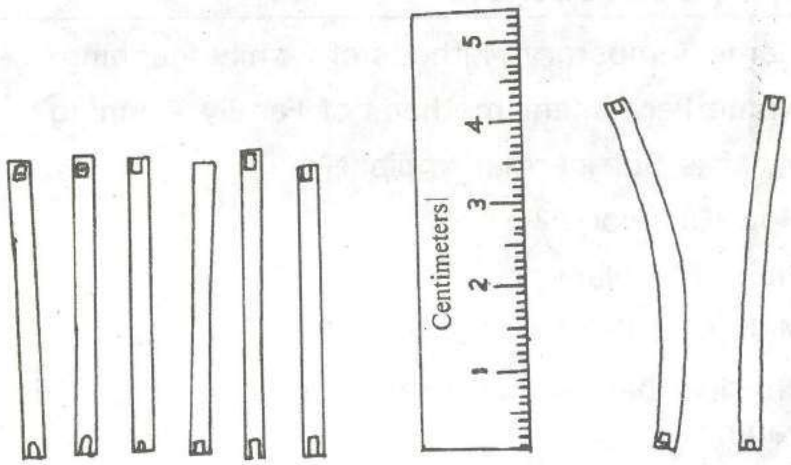


Fig 5.7: Nor Plant

HARMONAL VAGINAL RING(Only Progesterone Ring)

- Acts locally
- Worn for 3 weeks and removal for one week

CENTCHROMAN (SAHELI)

It is non-steroidal weekly tablet oral contraceptive for women.

Duration of Action : One week

Should be avoided :Absolutely in – Liver Dysfunction

Polycystic ovarian disease, Hypersensitivity

Relative : Allergy, tuberculosis

Special Precaution : pregnancy, missed period for more than 15 days (Perform Pregnancy test)

Missed dose to be taken as soon as possible and follow normal course.

How to use : Ist dose to be taken on Ist day of menstrual cycle and 2nd dose on 4th day. Later tablet is to be taken twice a week for 3 months on same day. Later follow once a week on the same day.

Mechanism of Action : Suppress Implantation of Embryo.

INTEXT QUESTION 5.3

1. Name Temporary Methods of Family Planning?
2. Name Permanent methods of Family Planning?
3. What is Sub dermal Implant?
4. How CuT works?
5. Fill in the blanks:

   Multeload CuT can be kept for .....in womb.

   Physical barrier methods prevent ..... depositing in vagina.

   Male sterilization is called.....

   ORAL PILL is ..... method

Combined Oral Pills under Family Welfare Programme are supplied under Name of .....and.....

5.4 PERMANENT METHODS: (STERILIZATION)

Sterilization is a Permanent Contraceptive Method requiring Simple Surgical Procedure with a view to stop birth permanently.

Indication :- For Family Planning to regulate family size (as per need of individual/couple) performed on request of the couple with their written consent.

MALE STERILIZATION : Known as "Vasectomy" is a permanent method of Family Planning for men who does not want more children.

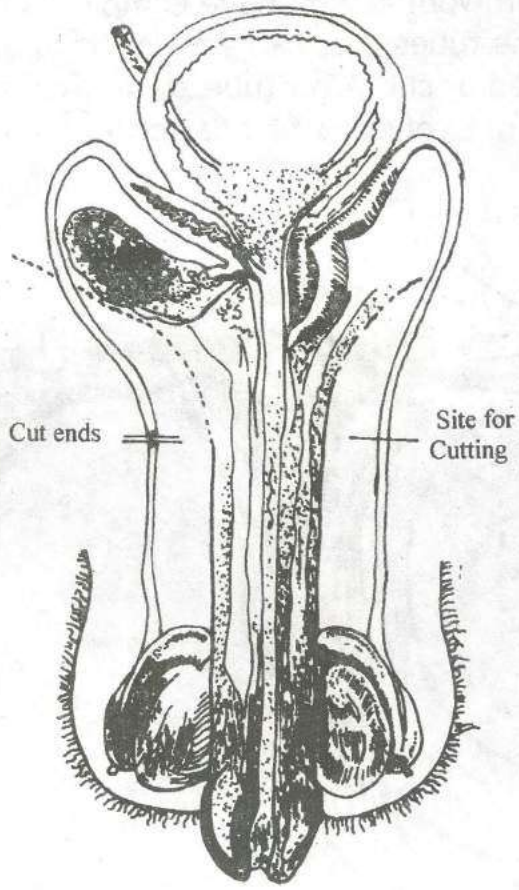


Fig. 5.8 VASECTOMY

It is safe, most effective, easiest and simple Family Planning Procedure. This is minor surgical procedure requiring hardly 20 minutes. Complications are rare.

NEW VASECTOMY TECHNIQUE "NO SCALPEL" TECHNIQUE

It is even simple and easier procedure. In this no stitches are applied to close it. It is less painful, practically eliminates bleeding, can be reversed. Male sterilization very few people know it and few people practice it (use) New technique with wide publicity backed with high quality services is key to success of this neglected method.

FEMALE STERILIZATION:

Known as "TUBECTOMY" as Tubal ligation is a permanent method of contraception in women who have completed their family size. How it works : The tubes that carry ovum from ovary to womb in women are blocked or cut. After tubectomy women has menstrual flow but she can not conceive or bear children.

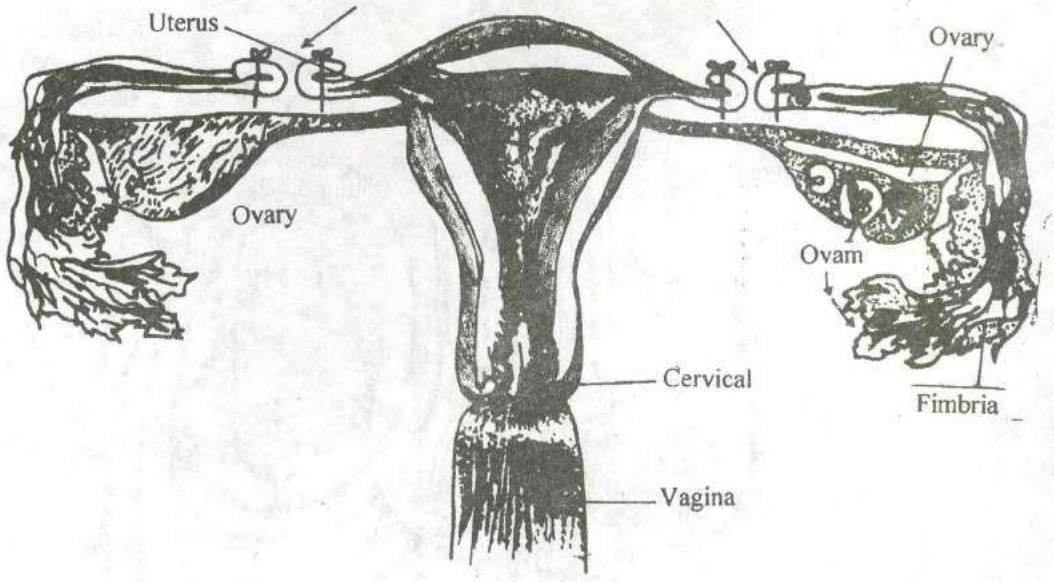


Fig. 5.9 : Tubectomy

vantage : Very Effective

Does not interfere with sex

No side effects

sadvantage

Difficult to reverse

WER METHODS OF FAMILY PLANNING

st-coital Contraception (Emergency Contraception)

ergency contraception is used by women to avoid unplanned gnancy, pregnancy due to failure of contraceptive or after protected sex

o types of emergency contraceptives are available.

Emergency contraceptive Pills,

Emergency IUD insertion

ergency Contraceptive Pills : (each Pill 0.5 mg Levenogestrol)

sage schedule: Two tablets taken within 72 hours after unsafe and a second dose taken 12 hours later

vantage: Nearly 100% effective

Used in Rape cases, or unplanned pregnancy.

ergency Copper IUD Insertion : Copper IUD can be inserted to time of implantation of ovum – Five to seven days after ulation to prevent pregnancy.

vantage : More effective than emergency Pills.

Can be kept to prevent pregnancy for long time

Prevent Unintended pregnancy

Cost effective approach

How to use : Insert upto 5 days after sex to prevent pregnan

CAFETERIA APPROACH

For effective contraceptive a cafeteria approach is practiced family planning under this approach all contraceptive metho are explained to the individual/couple and as per their needs a requirement individual/couple is motivated to select and choo the method that is suited best to his needs according to his o desire and wishes to make it a way of life.

BIRTH SPACING :

Spacing of birth is most important for the health of both moth and infant. It helps in promoting health of mother and infant.

Multiple pregnancy and closely spaced births of children a dangerous to the health of mother and child and expose them risk of death. Mother and infant mortality rates (deaths) are qu high in closely spaced births.

Birth spacing can be effectively achieved by easily availab contraceptive methods and it can help in bringing down moth and infant mortality.

BIRTH SPACING

- Essential for promoting health of mother and infant.
- To reduce mother and infant mortality rate

BIRTH RATE:

Number of children born in given population per 1000 mid ye population:-

$$\text{Birth Rate} = \frac{\text{No. of births during one year}}{\text{Mid year population of the year}} \times 1000$$

1. INFANT MORTILITY RATE:

It is the ratio of Infants deaths to Live Births during particular period of the year in a specific geographic area per thousand live births.

IMR : $\frac{\text{No. of deaths of children less than 1 years of age in a year}}{\text{No. of Live Births in same year}} \times 1000$

2. INFANT MORTILITY RATE:-

In a village having population of 6000 in a state a study conducted during year 2003 for working out infant mortality rate showed the following data

- Number of deaths of children less than 1 year of age – 72
- Number of Live births during the same year in same area – 960]

$$IMR = \frac{72}{960} \times 1000 = 75 \text{ Per thousand}$$

IMR was calculated

3. MATERNAL MORTILITY RATE

In a survey conducted in year 2004 in a area of population 6500 to find out maternal mortality rate (IMR) the number of deaths of females due to complication of pregnancy child birth, with in 42 days of delivery from puerperal causes were registered 3, which in the same area during the same year total number of Live births were recorded 500. The MMR of area calculated as under:

$$MMR = \frac{3}{500} \times 1000 = 6$$

MEDICAL TERMINATION OF PREGNANCY (MTP)

Induced termination of pregnancy by a qualified person (doctor) before the foetus is viable (Upto 20 weeks) of conception as

prescribed by medical or socio economic condition under the Act is termed MTP.

MTP Act 1971 came into Force from 1.4.1972

Every Pregnancy is required to be terminated in Govt. hospital or a place approved by Government

As per the MTP Act a Registered Medical Practitioner having obstetrics and Gynecology experience is authorized to perform abortion.

Consent : Informed written consent of women is taken in form C

Written consent of guardian is required in case of minor.

Illegal, unsafe and septic abortion is leading causes of maternal mortality, which can be prevented by legal and safe abortion by qualified Person at prescribed place by Government under MTP Act.

Women should have awareness of legal safe MTP services.

MTP is not a method of contraception, but there are chances for women to conceive after MTP. Mother should be advised to practice contraceptive best suited to her on her own choice to prevent future unplanned and undesired pregnancies.

M.T.P. - Act 1971

1. Proper Indication of M.T.P. : - Rape, Failure of Conraceptive; continuation of Pregnancy might endanger the mother's life, Mental Health, etc.
2. Who can perform M.T.P. - Reg. Med Prartioner having experience in Gynaecology & Obstetrics. One doctor Can perform it upto 12 weeks & upto 20 weeks Two qualified doctors should perform M.T.P.
3. Place where M.T.P can be done : Hosp. Nursing Home Approved by the Govt.

MTP Guidelines

- MTP is not method of contraception
- MTP is a way of legal and safe abortion by qualified person at prescribed place under MTP Act.
- Maternal Mortality caused by Illegal unsafe and septic abortion can be prevented by MTP services under MTP Act.

Counselling :-

It is a process of helping one person by another person through interpersonal communication.

Counselling is most important task of family planning service provider

The client has easy availability and more choice of contraceptive methods. They have to select one for their use from the wider choice are mostly confused, counselling is needed to guide and help them in their choice of best suited contraceptive. Through counselling one helps individual /eligible couples to choose and continue to use the best family planning method for them i.e.

- One that is safe for couple with least risk
- One that couple wanted to use.

Guidelines For Health Worker

- He would promote Birth Spacing
- He would Advise/Guide the individual/couple to prevent unwanted births
- He would help individual/couple to choose best-suited Family Planning method of their choice.
- He would promote Male Sterilization (Vasectomy) as it can be reversed

- He would cover the unmet needs of the couples for Family Planning.
- He would advise the couple to stick to Small Family Norms.
- IUD should not be used before Ist childbirth.

INTEXT QUESTIONS 5.4

1. How Female Sterilization works
2. What is cafeteria approach in Family Planning?
3. When MTP Act came into Force?
4. Name Newer Technique for Male Sterilization?
5. Name Two Emergency Contraception?
6. Fill in the Blanks
   (a) Female Sterilization is known as .....
   (b) Vaginal Sponge is marketed as .....
   (c) Commonly used 2nd Generation IUD.....
   (d) Multiload IUD is effective for .....
   (e) Birth Spacing helps in promoting the health of ..... and .....

5.6 WHAT HAVE YOU LEARNT

- FAMILY PLANNING METHODS as a way to limit size of family to desired norms.
- Temporary and permanent methods of Birth Control and regulating fertility.
- How to avoid unwanted Pregnancies.
- Emergency Contraceptive methods to avoid unplanned Pregnancies.

Cafeteria approach is to choose the most suited method of contraception.

Counselling to promote contraceptive methods.

6 WHAT HAVE YOU LEARNT

Name Temprory Methods of Family Planning. Describe one of them.

What are indications of M.T.P.

Describe Non Scalpel Vasectery

What do you under stand by Birth Spacing.

7 ANSWERS TO INTEXT QUESTIONS

1

Causes of maternal mortality

- Reproductive tract infections
- eclampsia or pre-clampsia

Mothers – Immunization

- Safe and clean delivery
- encourage hospital deliveries
- Birth Spacing

Children

- Essential new born care
- Immunization
- Prevention of ARI
- Breast feeding

Eligible Couple - Prevention of unwanted pregnancy

- Improving quality of life of people
- adopting small family norm

5. 18 yrs for women

5.2

1. - Avoid unwanted births
   - Birth spacing between two children
   - planned parent hood
2. 1. Control birth and restrict population growth
   2. Two child norm
   3. Mothers and children
   4. Population explosion

5.3

1. Condum - Male, female
   - Diaphragm
   - Vaginal sponge
   - foam tablets
   - suppositories

   Combined methods — Spermicidal - Condoms
   -Diaphragms

   CuT

   Oral pills
   - Norplant
2. Vasectomy

   Tubectomy
3. Sub – dermal Implants and Harmonal Capsules made Silicone implanted beneath the skin of upper arm.
4. CuT inhibits implantation of ovam and decreases sper motality and survival.
5. 5 yrs multiloded

– semen

- vasectomy

- safe and reliable

- Mala D and Mala N

5.4 1. Prevents fertilization by blocking or cutting and ligating tube

2. free to choose methods

3. 1971

4. No scalpel vasectomy

5. Emergency Contraceptive Pills and Emergency IUD Insertion.

6. a. Tubectomy

b. Today . TODAY

c. CuT

d. for 5 yrs

e. Mothers and children

5.8 SUGGESTED ACTIVITIES

1. Visit a family welfare clinic and observe all types of family planning methods.

2. Motivate eligible couple for adopting family welfare services.

3. Follow up couple who have already adopted family planning services.

6

Duties of a Health Worker

6.1 INTRODUCTION

A health worker is the base of any health delivery system. The success of Health Care delivery and success of any National Health Programme partly, depends, on the health worker. Places where health workers are good, all the parameters of health will improve. So the health worker plays a pivotal role, in the success of health care delivery.

6.2 OBJECTIVE

In this lesson you will be able to:

- List of specific tasks and duties to be performed by health workers.
- Participate in delivery of National Programmes to the people and compile statistics that are required for reporting and evaluation of National Health Programmes.
- Communicate to the people of the community about the various programmes.

6.3 EDUCATIONAL LEVEL OF HEALTH WORKER IN THE COMMUNITY

He should be 10th pass and have to undergo one year accredited training Course conducted by State Govt. or Central Govt. (Jan Swasthya Course). On successful completion, he can work as a health worker in Govt. or non-Government organization.

6.4 HEALTH WORKER

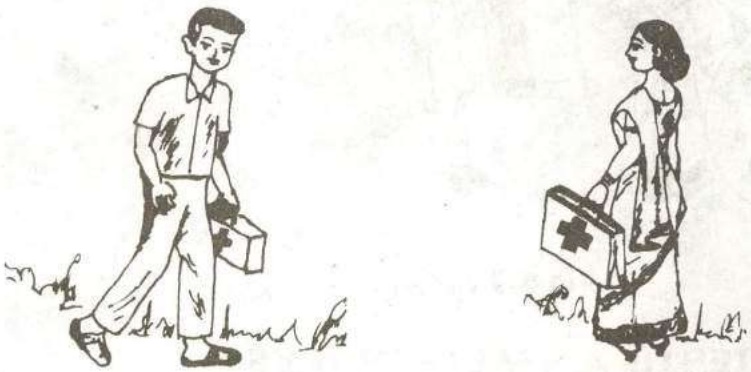


Fig. 6.1 : Health worker

A health worker is a person who may be from Govt. or NGO's , who delivers various health services to the community. These include immunization of mother and children, food supplementation and maintenance of adequate nutrition, weaning procedures, immunization of vaccine preventable diseases etc.

Criteria of Trained Health Worker

A trained health worker is a person who has undergone an accredited training by Central or State Govt. (like Jan Swasthya Course) for one year. He should be smart and having adequate communicaton skills to communicate with the community. He should be minimum 10th pass.

A health worker has to work among 1000 people and should be selected from the same community so that he is easily acceptable and believed. Besides this he has to keep liason with ANM. Primary Health Centre Staffs, PWD and Water Supply Staffs and other block development services.

Fig 6.2 : Health worker

6.5 DUTIES OF A HEALTH WORKER

A. Preparation of Area Map

At the start of his/her work, he/she has to prepare an area map

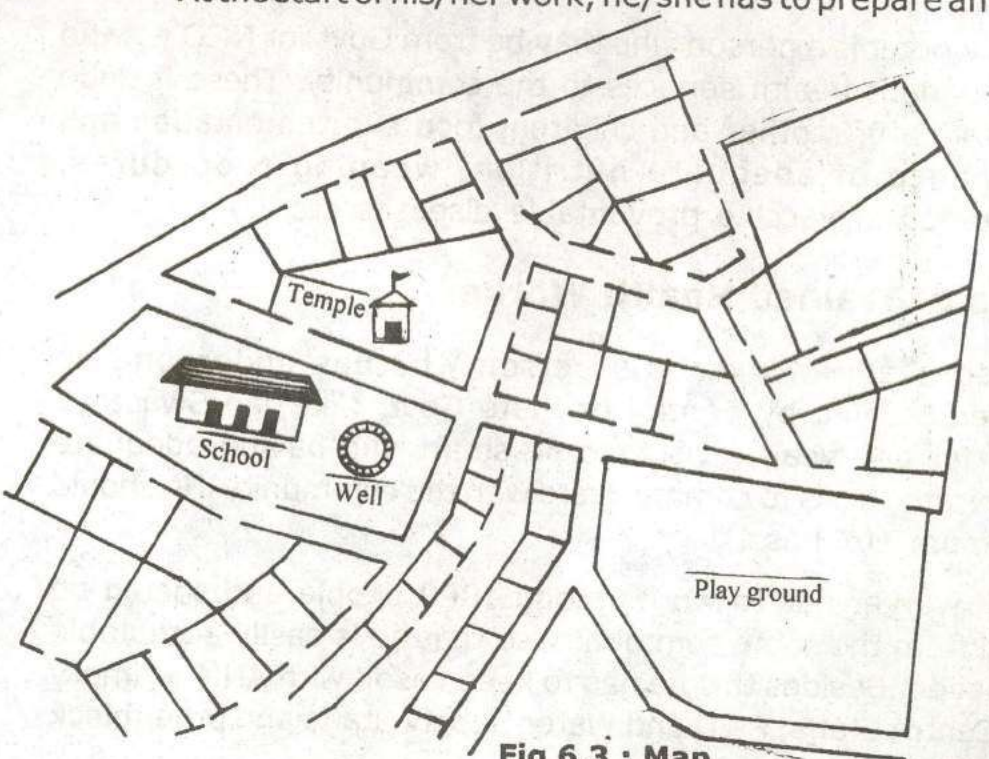


Fig 6.3 : Map

showing all the streets, dwellings, temple, mosque and churches etc. It usually is a common place of meeting like Baratghar, Temples, Churches etc. are to be indicated in the Map.

. Household Servey

He/She has to carry a household survey report indicating the number of households in his/her area, number of families, the education level of members, whether all eat from the same kitchen. In a single household where two kitchens are running are taken as two families, number of adults and children in the family and how many children are below five years of age, education levels of adults and children, how many are going to schools and colleges, whether there is any disabled child in the house.

Household Servey

(1) Village/Area .....

(2) Block/House No. .....

(3) Head of Family .....Type of Family.....

(4) Number of family members

S.No.	Name	Relationship with head of family	Age	Sex	Education-al Qualification	Employment	Immunization BCG/DPT Polio Hepatitis Measles/MMR
1.							
2.							
3.							
4.							
5.							
6.							

(4) Total Family Income per year .....

(5) Number of Rooms in your residence .....

(6) Which of the following do you have at home? .....

- Electricity.....
- Radio .....
- T.V./Fridge.....
- Cassette/CD Player.....
- Cycle/Scooter/Car.....
- Telephone.....
- Cooking Gas.....
- Source of Drinking water
  - (i) Hand Pump.....
  - (ii) Pond .....
  - (iii) Tap water.....
- Clean Toilet.....

(7)

S.No.	Previous Hereditary	History of any preventive disease

(8) Method of waste disposal

Use of latrine – Yes/No

Type of latrine – human carrier/pit latrine
flush type of latrine

Use of Family Welfare Method .....

Eligible couple – Use of FP method

9. Any death in last six month ..... cause of death.

10. Any communicable diseases in last-six month.....

11. Nutritional status

Malnutrition.....

Deficiency diseases .....

(2) Health worker should be visible in the community.

C. Prevention of Diseases

It can be divided into to two broad categories–

(1) **Promotive services** - Specific immunization, balanced diet routine health check up, growth monitoring.

(2) **Curative** (to provide primary basic medicines for various ailments and to act as depot holder of various medicines like ORS, Dai kits etc.

Duties of a health worker aims preventive, promotive and curative service.

D. Preventive Duties

1. Immunization of newborn with one dose of Polio and B.C.G. vaccine where deliveries have taken place at home supervised by a trained Dai.

2. Routine immunization of children with five doses of Polio, DPT, one dose of Measles at nine months and a booster dose of polio and DPT at one year and Polio and DT at three years of age. He should also arrange once in a week immunization clinic at a prominent place in the community taking all aseptic precautions in consultation with ANM and Medical Officer of PHC and under their supervision.

3. Immunization of mother with two doses of TT after six months of pregnancy and provide them with iron and folic acid tablets and arrange nutrition clinic attended by ANM and PHC Medical officer for pregnant and new born mothers.

4. Checking of Blood pressure and heamoglobin estimation of pregnant women periodically is the duty of the health workers. The pregnant women for the first time and those with history of difficult labour are periodically checked and admitted before delivery. Help to identify mothers who are at high risk.

5. The health worker will carry out periodic checking of new borns and growth monitoring through checking height and

weight and keeping a record of it. He/she will also advise mother for weaning diets of babies during weaning time.

6. In keeping liaison with ANM, the health worker will arrange for regular antenatal (check up before birth of the baby) and post natal check up (after birth of the baby) of all mothers.

7. The health worker will keep an eye on general cleanliness of the community, environmental protection, safe water supply and proper disposal of sewage and household refuse, cleanliness in schools and periodical health checkup of school students.

8. He/She should be expert on communication and regularly communicate with community members on various health issues.

9. He or she will keep a record of all women in reproductive age group, their family education, status and communicate with them about spacing, family planning. He/she will counsel women for IUC and sterilisation operation and provide them with oral contraceptives and family planning methods under guidence of Doctor.

10. The Health worker has to arrange for group meeting of women in the village to discuss issues like importance of breast feeding, importance of balanced diet to improve the health conditions of mother and child and family planning services available at the PHC.

11. He/she should provide the basic medicines for fever, diarrhoea, vomiting, malaria and minor ailments etc.

12. He/she should arrange for condom distribution and to Males no scalpel vasectomy, its advantage and importance of limiting family.

13. He/she will keep records of births and deaths in the village, cases of polio in children and report it to sub centre/primary health centre

14. He or she has to deliver all Central Sponsored Schemes like, national programme, blindness control programme, TB control programme, goiter control programme, prevention

of Malnutrition - RCH (Reproductive and Child Health) programme, Diarrhoea control and Cholera control programme etc.

15. Health worker will play a very active role in preventive, curative family welfare programme and national programmes. Thus, his good work will be reflected in the reduction of maternal mortality, infant mortality, reduction in birthrate, reduction in diseases like Measles, cholera, malaria etc. So the improvements in life expectancy of mothers, infants and other members of the community, incidence of diseases, control and prevention depends on the quality of the service of the health worker. A good health worker is the basis of achieving good health in the community.

Fig. 6.4

INTEXT QUESTION 6.1

A. Fill up the blanks

(i) _____ is the base of any health delivery systems

(ii) Places where _____ are good, all the parameters of health improve.

(iii) A health worker has to work among _____ people.

(iv) Prevention of diseases is the duty of _____

(v) Immunisation of pregnant woman with two doses of _____ is the duty of health worker.

B. Give answers to the following questions

(i) What are the duties of a health worker?

(ii) What vaccines are given to new borns immediately after Birth?

(iii) Who looks after the cleanliness of the community?

(iv) Which tabets should be given to pregnant women during pregnancy?

B. Curative Duties of health Worker

(i) Use ORS Packet provided to health worker to treat Diarrhoea Cases. One tea spoon full of ORS is to be dissolved in boiled cool water and given to the child. When he/she finishes Ist glass prepare 2nd glass and continue till the patients recovers. Feed the baby regularly with mothers milk, in case of older baby kichdi or rice dal to be contunied during diarrhoea.

(ii) Acute respiratory infection in children should be treated with cotrimaxozole syrup. 1 teaspoon full of cortimaxozole syrup is to be given to children above 1 yr of age twice daily below one year. The dose should be half teaspoonfull twice daily. Above 3yr dose should $1^{1/2}$ teaspoonfull twice daily for 3 days.

(iii) Given Chloroquin Tablets 50gm/500mg daily. Total 8 tablets to be given, Take blood slide before giving chloroquin.

(iv) In case of fever in infants use Paracetamol syrup and tablets for children.

Table : Dose of Paracetamol

	Age	Dose of Paracetamol	No. of Times
1.	Below 1 year	½ teaspoonfull	3 times
2.	Between 1 year to 3 year of Infant	1 teaspoonfull	3 times
3.	Above 3 yr up to 10 yr	1½ teaspoonfull	3 times

(v) In case of Injury use your first Aid Box provided to you. Details of first Aid to be given, has been discussed in First Aid lesson. You should also advise head of the family and gram sabha & panchayat Pradhan to keep First Aid Box available to them.

Health worker in his area of work before onset of his/her duties should do the following.

(i) He should visit Gram Sabha heads and members of gram sabha and Panchayat Pradhan and Panchayat members.

(ii) If there is an MLA/MP in the area he must meet them before starting his work.

(iii) He should mix with the people in his area. He should have knowledge about their customs and must meet their religious leaders, Mahila Samities and ask for their active help and cooperation in his/her programme.

(iv) Prepare schedule of work to be performed in the area and ask different Mahila Samities to help him/her in their work.

(v) Prepare a list of priority of work after discussing with community leaders and Mahila Samiti members.

INTEXT QUESTIONS 6.2

A. Fill in the blanks

1. Diarrhoea is treated by _____

2. Cotriamaxozole syrup is used _____.

3. Malaria is treated by _____.

4. Fever is treated by _____.

B. State whether following statements are True or False.

1. Duties of Health worker includes Family Planning. True/False

2. Success of Health Programme depends on Health worker. True/False

3. Health worker does not keep records of births and deaths in the village. True/False

4. Checking of Blood Pressure and Heamoglobin estimation of pregnant woman is the duty of the health workers. True/False

6.3 WHAT HAVE YOU LEARNT

In this lesson, you have learnt the role of Health Worker in the community. The Health worker plays an important role in fulfilling the health care requirements of rural community, especially. In the emergency situations a Health Worker is in better positions to provide on the spot First Aid service and to thereby proving to be life-saviour.

6.4 TERMINAL QUESTIONS

1. What are the duties of a Health Worker?

2. Why Survey of the area is important for health worker.

6.5 ANSWER TO INTEXT QUESTIONS

6.1

A. (i) Health worker (ii) Health worker (iii) 1000 people

(iv) Health worker (v) T.Toxid

(i) To provide basic health services

(ii) Polio

(iii) health worker

(iv) Iron and Folic Acid tablets

.2

. 1. ORS 2. ARI 3. Chloroquin 4. Paracetamol

. 1. True 2. True 3. False 4. True

.6 SUGGESTED ACTIVITIES

) Draw a sketch map of your village and show the important places like temple, mosque, Baratghar etc.

) Survey 100 people in your village. Enlist the number of eligible children for immunisation below 5 years and number of fully immunised children and pregnant woman.