

Open Vocational Education Programme
Course Code: 450

Certificate Course
in
COMMUNITY HEALTH

(Training Programme for Health Workers)

2

Maternal and Child Health Care



NATIONAL INSTITUTE OF OPEN SCHOOLING
(An autonomous organisation under MoE, Govt. of India)

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Certificate Course in Community Health (Maternal and Child Health Care – 450)

ACKNOWLEDGEMENT

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GRAPHICS/DTP

M/S Sri Krishna Graphics
Delhi

From the Chairperson's Desk

Dear Learners,

You are welcome at NIOS.

It's a matter of great pleasure that you have enrolled yourself in public health course of NIOS to become a skilled health worker. You have the study material of this course in your hand. It clearly highlights the importance of health for all of us. It also signifies the role of a health worker in public health.

This syllabus is divided into three parts. In the first part, the composition of the human body, physiology, immune system, cleanliness, eradication of common diseases and home remedies, nutrition, yoga etc. are included. It also includes chapters on quality life style, healthy eating habits, standard of living, and how we can make them better.

Maternity and infant health is second part of the syllabus, which includes health care in pregnancy, care of a woman during and after delivery, breast feeding and different national health programmes carried by the government. The problem of increasing population and its solution is also addressed under family welfare programmes.

In the third part of the course, information on contagious diseases, various diseases related to the life style, preventive measures, emergency management and methods of first aid are given. Subsequently, you shall learn about health treatment measures of such diseases. You are also expected to spread awareness on preventive measures related to such ailments, among the masses.

Learners, since health service is a responsibility, hence you would have to take the course very seriously. This study material would be meaningful only when you study it heartily and use it for the welfare of the society. A list of do's and don'ts for health worker is given in the very beginning of the text books. Read them again and again, and follow them. It is important to have sound knowledge and a good experience before giving health related treatment. Maharishi Charak also said in this context 'it is better to consume poison than to give someone treatment without knowledge and experience'. After getting training related to community health, you would not only be able to render service in the rural areas but also be able to work with doctors as a skilled health worker in various hospitals and nursing homes of the country. You would also be able to refer the patient to the concerned doctor after giving him/her the first aid in case of emergency.

To maintain the quality standard of this study material, a team of skilled, experienced and famous doctors had tried to understand the problems especially in the rural context. Your suggestions are also cordially invited to make this study material better.

I congratulate you to continue your study through NIOS. Now you are the proud and privileged member of NIOS community. After studying the course, you shall render valuable services to the community at large, particularly in the preventing health problems in the rural part of the country.

Prof. Saroj Sharma
Chairperson
National Institute of Open Schooling

A Word With You

Dear Learners,

I welcome you at National Institute of Open Schooling. By taking admission in the professional programme of this institute, now you have become member of the world's largest open school system. I am sure you would feel happy while studying as a student under professional programme at National Institute of Open Schooling. Before you commence the learning and training of this study material, I would like to give some useful advice. At National Institute of Open Schooling, we properly understand that you are different from other students. I comprehend that amongst you, some of you must have enriched personal experiences as well. This course shall not only make you skilled health worker, but shall also add to financial stability and social prestige. Most importantly its your vibrant energy and enthusiastic spirit, which made you take admission in this course.

This study, material has been developed in such a way that you do not need a teacher to teach the curriculum. It is advisable to be in touch with your affirmed professional institute to get study material and the information about examination programme, also obtain practical training at your study centre. These centres will provide you proper skillful training which is essential for getting proficiency in any professional course content.

Under the National Rural Health Mission, the Ministry of Health and Family Welfare, GoI, from time to time carries laudable programmes, with the aim of providing effective and accessible health facilities for the rural masses. Our national goal is "Health for Everyone". With the rapid increase in the population, poverty, lack of education, as well as shortage of doctors in the rural areas, comes a constant realization that there is a need to provide formal training to the such prospective students among the masses, who can extend significant contribution to the rural hospitals and health centres. At the same time they can also provide appropriate consultation, even timely first aid to the affected rural masses.

Also, if the need may arise, such trained health workers, can even play multifaceted active role in national health programmes at the respective state level.

I hope this course would provide you an important platform to work in the health sector and would be beneficial. On behalf of National Institute of Open Schooling, I wish you a bright future.

Dr. P.K. Chauhan
Programme Co-ordinator
National Institute of Open Schooling

Do's for the Health Worker

1. Understand the disease properly and enhance your knowledge, information in the health sector or hospital by being regular in touch with the doctors.
2. Follow the rules to prevent the disease, and tell people also about it.
3. Reveal the reality of various superstitious traditions, which is different from medical science.
4. Inform the masses about the basic rules of health defence. Stay away from various addictions and inform the masses as well about the harmful effects of such addictions.
5. You are a worker in the medical field, hence perform your duty as a community health worker in your medical institute or society.
6. Skilled health workers can give optimum help to the patient but in the case of serious and complicated diseases, work only by doctor's advice.
7. You are in the health service sector hence render selfless service to the masses. By doing so, you may realize both desired monetary gains as well as prestige.
8. Delivery and surgery are complicated services requiring intense experience, support, and study. Hence, assist surgeons and doctors.
9. Before giving health advice to someone, first study concerned person's eating habits and life style thoroughly.
10. In emergency, a health worker should be prompt in giving first aid according to the training. If needed, refer the patient to the concerned doctor.

Don'ts for the Health Worker

1. Do not be in a haste to start treatment by partial understanding of the illness. Take regular advice by the doctor.
2. Do not violate prevention rules.
3. Do not use blind superstitious methods in curing process which are different from the methods prevailing in medical science.
4. Actively inform people about the harmful effects of intoxication.
5. Do not consider yourself as a doctor as it needs more in depth study and experience. Do not be in a delusion that you know a lot. Fulfill your responsibility of community health care worker.
6. In serious condition, do not give medicine or injection to the patient without prior advice of the doctor. It can be harmful for both, the patient and your prestige.
7. Do not indulge in any such activity which brings disgrace to the medical service.
8. Do not attempt unusual delivery or surgery on your own. It can be dangerous for the patient's life.
9. Always remember not to give improper advice.
10. Except from the training given to the health care worker, do not indulge in any other medication work.

Certificate Course in Community Health

COURSE CURRICULUM

Course Title: Certificate Course in Community Health

Level of the Course: Certificate

INTRODUCTION OF THE COURSE

Two third population of India lives in rural area and have no access to proper health care facilities. The Alma Mater Declaration of 1978 declared health as a fundamental right, and the attainment of highest possible level of health as a most important worldwide social goal. It also emphasized that such realization requires action from other social and economic sectors, in addition to the health sector. "Health for All" is the national goal and priority. There is an urgent need to provide para-professional health workers amongst the community itself, to provide simple preventive and curative health services including family planning, under the community workers scheme. The government 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) labelled as Community Health Volunteers in 1980 was re-labelled as village Health Guide in 1981. 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. There are many areas/sectors not only in rural but also in urban India, where:

- There are no fully developed medical facilities.
- According to population density, there are no doctors in sufficient numbers.
- No proper facility is available during emergency especially during night. There is also absence of trained and knowledgeable personnel to guide or refer emergency cases to the city hospital.
- Absence of trained personnel to guide the community on family planning, measures of prevention of diseases, and hygiene, health environment, polio prevention and AIDs etc.

Therefore there is an immediate need to prepare health work forces, who can assist, provide appropriate care/service to the community in the rural sectors, hospitals, nursing homes and health clubs etc. These skilled personnels, at least one from each village/mohalla will be trained through this Vocational Training Programme- Jan Swasthya Rakshak (Community Health Worker) Scheme. These trained persons shall work in the

community as a multitasking health worker they shall work as facilitators for creating health awareness, knowledge of healthy environment, health and hygiene, first aid, prevention of diseases and provide appropriate treatment in emergency situations.

Thus, it is expected, that all these gaps can be filled through the trained 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.

JOB OPPORTUNITIES

The programme aims to train and prepare skilled health workers. These trained persons will work in the community as a health workers as well as facilitators for creating health awareness, knowledge of healthy environment, health and hygiene and first aid, and assist in getting appropriate treatment for the patient in emergency situations.

After completing this course, the trainees shall have job opportunities as an assistant/health worker in hospitals, nursing homes, and health centre.

Course Duration: 1 year

Eligibility Criteria: 10th pass

SCHEME OF STUDY

Theory

40%

Practical/Training

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-01: Basic Life Sciences

Subject-02: Maternal and Child Health Care (Including family welfare and immunization)

Subject-03: Prevention and Management of Diseases and Emergency

DETAILED SYLLABUS

SUBJECT-1: BASIC LIFE SCIENCES

Lesson-01: Human Anatomy and Physiology

- Role of human anatomy and physiology
- Our body
- Cell and tissues
- Organization of human body
- Organ and organ system
- Cavities in body
- Brief description of systems
 - Integumentary system
 - Skeletal system
 - Muscular system
 - Respiratory system
 - Digestive system
 - Cardio-vascular or Circulatory system
 - Excretory system
 - Nervous system
 - Glandular system
 - Reproductive system
 - Sense Organs

Lesson-02: Our Body and Immune System

- Immune system
 - Types of immunity
 - Natural immunity
 - Acquired immunity

Lesson-03: Health and Hygiene

- Concept of health
- Factors effecting health
 - Personal hygiene
 - Exercise
 - Rest and sleep
 - Posture
 - Home care and hygiene

Lesson-04: Prevention of Common Diseases and Home Remedies

- Prevention of common disease
- Home remedies for common diseases
 - Major precautions for preparing herbal medicine at home
- General disease that occurs in children and their home remedies
 - Pain in throat
 - Earache
 - Stomachache
 - Fever

Lesson-05: Nutrition

- Our food
 - Functions of food
- Nutrition and nutrients

Course Curriculum

- Protein
- Carbohydrate
- Fats
- Minerals
- Vitamins
- Water
- Dietary fibre
- Food groups
- The balance diet
 - Food pyramid
 - Nutritional requirements
- Lack of nutrients

Lesson-06: Yoga and Health

- What is yoga?
 - Importance of yoga
- Asthang yoga
 - Yam
 - Ahimsa – non-violence
 - Satya – truth
 - Asteya – non-stealing
 - Brahmacharya (celibacy)
 - Aparigrah
 - Niyam – rule
 - Sanctity
 - Satisfaction
 - Austerity

- Self-study
- Ishwar pranidhan
- Asana – Postures
- Pranayama
- Pratyahar – Control of senses
- Dharana – Concentration
- Dhyana – Meditation
- Samadhi
- Yogasan and initial practices
 - Principles (siddhant) of yogaabhyasa
 - Important yogasanas
 - Surya Namaskar (Sun Salutation)
 - Pranayama and its practice

Lesson-07: Management of Diseases through Yoga

- Yoga and life
 - Principles of yoga therapy
 - Basic principles of yoga therapy
- Therapeutic aspects of yoga
 - Yogic management for respiratory problems
 - Yogic management for digestive disorders
 - Management of high blood pressure and heart diseases
 - Yogic management of back pain
 - Yogic management of cervical spondylitis
 - Management of musculoskeletal disorder gout or arthritis
 - Management of diabetes through yoga
 - Management of anxiety and depression through yoga
 - Yogic practice for ladies

SUBJECT-02: MATERNAL AND CHILD HEALTH CARE

Lesson-01: Pregnancy and Care of Woman in Pregnancy

- Puberty
- Menstrual cycle
 - Ovarian changes
 - Uterine changes
- Physiological changes during pregnancy
- Sign and symptoms of pregnancy
- Routine of woman during pregnancy
- Various investigations of pregnant woman
 - Physical examination
 - Steps of abdominal examination
 - Lab investigation
 - Assessment of risk in pregnancy
 - Prenatal screening
- Care of pregnant woman
 - Nutrition during pregnancy
 - How much work should be done in pregnancy?
 - Rest in pregnancy
 - Exercise in pregnancy
 - Personal hygiene

Lesson-02: Woman's Care during the Perinatal and Postpartum Period

- Labour: An introduction
- Signs of true labour
- Assessment of woman after arrival in the labour room
- Assessment of the status of mother and child during delivery

- Preparation of woman for delivery
- Preparation for delivery
- Third stage of delivery
- Immediate care of the newborn
- Care of the newborn baby
- Breast feeding
- Postpartum care of the mother

Lesson-03: Breast Feeding

- First and foremost milk after delivery (Colostrum)
- Advantages of breast feeding and disadvantages of bottle feeding
- Specific conditions where breast feeding is contraindicated
- Good breast feeding techniques
- Common feeding problems and their prevention

Lesson-04: National Health Programme

- National health programmes
 - National vector borne disease control programme
 - Prevention and control of non-communicable diseases (diabetes, CVD and stroke)
 - Revised national TB control programme (RNTCP)
 - Universal immunization programme
 - Reproductive and child health programme (RCH)
 - National family welfare programme (NFWP)
 - National aids control programme
 - National cancer control programme
 - National iodine deficiency disorder control programme
 - National blindness control programme
 - National programme for prevention and control of deafness

- National leprosy eradication programme
- School health programme
- National rural health mission (NRHM)

Lesson-05: Family Welfare Programme

- Importance of family welfare programmes
- Need for family welfare programmes
- Family planning
 - Temporary methods
 - Permanent methods
- Temporary methods
 - Male condom
 - Female condom
 - Diaphragm
 - Vaginal sponge (available in the form of today)
 - Intra uterine contraceptive device (IUCD)
 - Oral contraceptive pills (Hormonal contraceptives)
 - Subdermal implants
 - Hormonal vaginal ring (Only progesterone ring)
 - Centchroman pill (Saheli)
- Permanent methods (Sterilization)
 - Male sterilization
 - Female sterilization
- Post coital contraceptive (Emergency contraceptive)
- Cafeteria approach
- Birth spacing between two children
- Medical termination of pregnancy (MTP)

Lesson-06: Duties and Responsibilities of the Health Worker

- Duties of the health worker
- Responsibilities of the health worker
 - To make road map of the area
 - Survey of homes
 - Duties and responsibilities of a health worker in prevention of diseases
 - Duties and responsibilities of a health worker in curing the diseases

SUBJECT-03: PREVENTION AND MANAGEMENT OF DISEASES AND EMERGENCY**Lesson-01: Communicable Disease – 1**

- Communicable disease
 - Mode of transmission of communicable disease
- Control of communicable diseases
- Communicable diseases
 - Chicken pox
 - Measles
 - Polio
 - Diarrhoea
 - Cholera
 - Pneumonia
 - Tetanus
 - Rabies
 - Fever in communicable diseases

Lesson-02: Communicable Disease – 2

- Parasitic diseases
 - Dengue
 - Malaria

Course Curriculum

- Leprosy
- Tuberculosis
- Diphtheria
- Pneumonia
- Food poisoning
- Venereal infection
 - Syphilis
 - Gonorrhoea
 - Aids
- Some parasitic infections
 - Amoebiasis
 - Hook worm (*Encylostoma duodenale*) infestation
 - Ascariasis (Round worm)

Lesson-03: Preventive Measures

- Origin of disease – it's root cause and associated causes
- Causes of origin of disease and it's control
 - Active immunization
 - Passive immunization
 - National immunization schedule
 - Prevention by chemo-prophylaxis
 - Protective mask
- Different routes of transmission of infection
- Direct contact route
- Prevention of diseases in the hospital
- Food supplementation
- Rehabilitation

- Prevention of diseases
- Personal hygiene
- Quarantine

Lesson-04: First Aid

- General and necessary information
- Emergency conditions
 - Shock
 - Electric shock
 - Hypothermia
 - Chill-blens or frostbite
 - Anaphylaxis
 - Foreign body in trachea
 - Dog bite
 - Earache
 - Foreign body in the ear
 - Bleeding from wound
 - Foreign body in the nose
 - Bleeding from the nose
 - Internal haemorrhage
- Bandages

Lesson-05: Life Style Diseases

- Coronary heart disease
- Hypertension
- Paralysis (stroke)
- Diabetes
- Obesity
- Cancer

Lesson-06: Drug and Drug Reactions

- What is pharmacy?
- Antiseptic and disinfectant
- Drug reactions
- The drugs and materials to be present with health worker

Lesson-07: Emergency and its Management

- Emergencies conditions
 - Drowning
 - Heat stroke/Sun stroke
 - Burning
 - Snake bite
 - Fever
 - Convulsions
 - Abdominal pain
 - Head injury
 - Fracture
 - Poisoning
 - Care of a paralysed patient

EVALUATION AND EXAMINATION SCHEME

Paper	Theory			Practical			Total
	External Assessment		Internal Assessment	External Assessment		Internal Assessment	
	Max. Marks	Time (Hrs)	Max. Marks	Max. Marks	Time (Hrs)	Max. Marks	
Basic Life Sciences	70	3	10	100	4	20	200
Maternal and Child Health Care	70	3	10	100	4	20	200
Prevention and Management of Diseases and Emergency	70	3	10	100	4	20	200

PASSING CRITERIA

S.No.	Subject for the trade test	Max. Marks in Theory	Minimum % required for passing	Minimum marks required for passing
1.	Theory (including Internal Assessment) (Internal Assessment–30)	$(70 + 10) \times 3 = 240$ (Written Test Paper –210)	40%	96
2.	Practical (Including Internal Assessment) Internal Assessment–60)	$(100 + 20) \times 3 = 360$ (Practical Test –300)	60%	216

- Note:**
- In theory, a trainee should secure 40% marks in aggregate including Internal Assessment.
 - In practical a trainee should secure 60% marks in aggregate 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: As per prospectus

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Notes

1

PREGNANCY AND CARE OF WOMAN IN PREGNANCY

After the detailed knowledge of health, now we will discuss changes during pregnancy and care of women during pregnancy. Pregnancy and delivery (giving birth to a child) is the most important phases of a woman's life. This is the extreme experience of her life. Almost every women goes through these natural experiences and natural changes inside them. At this time if proper guidance and help are not available then this experience can be very painful for them and sometimes even be fatal. In our country infant and mother death rates are very high, we can reduce it significantly by providing the immediate proper care and health services during pregnancy.

In this lesson we will learn about the physical and psychological changes during pregnancy and how to take care during that time. Amritasamal.nios



OBJECTIVES

After studying this lesson, you will be able to:

- list the psychological changes during puberty in females;
- list puberty and physiological changes occurring at that time;
- explain about normal physiological changes during pregnancy;
- recognise signs of symptoms of pregnancy;
- identify and treat probable risks during pregnancy;



- perform maternal care during pregnancy;
- give advises to the pregnant woman and her family during her pregnancy.

1.1 PUBERTY

From childhood to adolescence the reproductive system undergoes the gradual changes. These changes start about the age of 9-11 years reproductive organs begin to undergo rapid development. Some changes observe in girls are:

1. Menstruation starts at the age of 11 to 13 years in most of the girls.
2. After 13 years physical changes start take place growth of bony pelvic and widening of hips.
3. Changes occur in breast size and shape.
4. Growth of pubic hair and axillary hair and changes also occur in external genital area.
5. First menstrual period termed as menarche. This usually appears between the age of 10 to 17 years.
6. After attaining the ability for reproduction, the woman passes through a series of cyclical changes each month through out child bearing period called menstruation, when a woman conceives then menstruation does not occur during whole pregnancy. This is normal process, if blood is seen during this period then it is a sign of risk. Generally menstruation stops after the age of 45 years and it is called menopause.

1.2 MENSTRUAL CYCLE

During the menstrual cycle there is a whole sequence of change in ovaries and uterus to adopt pregnancy and if fertilisation does not occur then a series of changes occur.

1.2.1 Ovarian Changes

In the entire cycle, the ovary undergoes mainly the following changes in a phased manner:

- (a) formation and development of Graafian follicle.
- (b) ovulation and
- (c) formation of corpus luteum



(a) **Formation and development of Graafian follicle:** These are present in the ovaries at birth. At puberty during menstrual cycle with help of follicle stimulating hormone (FSH) in mature follicle which are present in ovary become mature. On maturation these reach to the surface of the ovary.

(b) **Ovulation:** Due to influence of hormone only ovum comes out from these mature follicle and reaches to fallopian tube. This whole process is called ovulation. This occurs in the mid cycle around 14th day. It can varies 1-2 days.

Indications of ovulation can also be seen clinically on our body, like – abdominal pain, slight raise in basal body temperature in post ovulatory phase , when the body temperature rises, ovulation occurs at the same time.

(c) **Formation of corpus luteum:** Each month many Graafian follicles starts to mature in ovary but only one or two Graafian follicle gets matured and releases ovum to reach fallopian tube. After the release of ovum the remaining part of follicle dries and shrinks, which is called corpus luteum. This is due to the effect of luteinizing hormone (LH).

1.2.2 Uterine Changes

In the later phase of menstrual period during this period thickness of vascular membrane is prepared for reception of fertilize ovum. When fertilization does not take place ovum dies and this integrates and menstrual bleeding start. Menstrual phase is characterize by vagina for almost 4 days.

Every month female undergoes through this process. This is generally the cycle of 28 to 30 days. During menstruation, woman can have pain in abdomen, headache, backache, heaviness in breasts, itching in vagina, constipation and mental stress. This signs and symptoms should be consider normal. This process is the result of hormonal secretion only. This should be taken normally, if there is any other complication then they should contact the doctor.



INTEXT QUESTIONS 1.1

Fill in the blanks:

1. Menstruation starts from the age of to years.
2. Monthly cycle does not occur in period.



3. Cessation of menstruation is called as
4. Ovulation occurs on the day of menses.
5. Corpus luteum forms due to the effect of Hormone.

1.3 PHYSIOLOGICAL CHANGES DURING PREGNANCY

Normally a woman who is between 15-45 years loses blood through vagina every month, it is called menstruation. If menstruation does not occur in a woman up to 6 weeks, it is quite possible that she is pregnant. In this case baby is born after nine months seven days from the first day of last menstrual period. It would be considered normal, if baby is born 1 week before or after.

During whole pregnancy some changes occur in woman's body, besides this, emotional and physiological changes occur in them, which are due to hormonal changes. Whole pregnancy is divided into three trimesters:

1. First trimester – 1st to 12th week
2. Second trimester – 13th to 28th week
3. Third trimester – 29th to 40th week

Let's see what changes take place in women during this period:

1. **Changes in body weight:** The weight gain during pregnancy is up to 10-16 kilograms. It is less in first trimester but maximum weight gain takes place in second and third trimester.
2. **Changes in reproductive organs:** with the development of fetus, size of uterus also increases. Ovulation does not occur in whole pregnancy. There are some changes in perineum and outer genital organs, blood flow increases in them and some swelling occurs there.
3. **Changes in breasts:** There are some changes in breast also of pregnant woman like their enlargement of breasts. Burning sensation and heaviness are also felt in them. Nipple and surrounding area (areola) becomes large and dark in colour.
4. **Hormonal changes:** There is increase in estrogen production which helps in formation and development of fetus in utero, uterus and placenta. Other systems of body also get influenced by hormone.
5. Since the blood volume increases so blood flow increases in pregnant woman towards heart and her rate also increases.



6. Blood starts collecting in lower limb pulse because of increased pressure on blood vessels and the black coloured vessels appear more prominent.
7. The oxygen required for fetus is obtained from mother only. So the mother's respiratory rate also increases.
8. The efficiency and functioning of kidney may also altered and may lead to presence of glucose and protein in urine.
9. In first trimester of pregnancy the desire for nausea and vomiting is very strong which is usually seen in most of pregnant women.
10. Heart burn is common if cause by frequent (also thrice) regurgitation of acidic content in food pipe.
11. As the size of uterus increases the pressure on intestines is created and intestines relax which causes increases in problem of constipation.
12. Due to stretching effect of hormone of pregnancy and slight lines are formed on breasts, thighs and abdomen which are called stretch marks or striae gravidarum.
13. Breasts and area around it becomes dark in color.
14. Dark circles around the eyes are very common and it has often been seen.
15. During pregnancy women become emotionally more sensitive whose effect is seen in their behaviour. During this time lot of care should be taken for their mental state.

Calculation of Expected Date of Delivery (EDD)

Let's learn how to calculate expected date of delivery-

9 months from first date of last menstrual period (LMP) + 7 days (1 week) = expected date (40 weeks).

For example: first date of last menstrual period of Kamla is 9th January 2017 then her expected date of delivery will be calculated as follows:

Expected Date of Delivery (EDD)

$$\begin{aligned} &= 9 \text{ months from } 9^{\text{th}} \text{ January } 2017 \text{ (} 9^{\text{th}} \text{ October } 2017) + 7 \text{ days} \\ &= 16^{\text{th}} \text{ October } 2017 \end{aligned}$$



INTEXT QUESTIONS 1.2

Fill in the blanks:

1. During pregnancy the body weight increases up to
2. Maximum weight increases during and trimesters.
3. The size of breasts increases and there is feeling of in breasts.
4. Due to intestinal relaxation problem of is there.
5. Due to increase in blood flow rate increases.

1.4 SIGN AND SYMPTOMS OF PREGNANCY

In a woman if there is a gap of more than 6 weeks since last menstrual period then we should get it confirmed that whether she is pregnant or not. Its signs and symptoms are divided into 3 parts:

1. Presumptive Symptoms

These symptoms are reported by pregnant women:

- (i) This time monthly period has been overdue i.e. Amenorrhea (No periods).
- (ii) There is increase in breast size and area around nipple has become dark in color.
- (iii) There is morning sickness, nausea or vomiting in the morning.
- (iv) Frequent micturition.
- (v) Mother first time feels the movement of fetus (quickening).
- (vi) Feeling of fatigue and weakness in the body.

2. Potential Symptoms

These symptoms are revealed by investigations:

- (i) Pregnancy Test: Hormone present in the urine confirms the pregnancy.
- (ii) The size of the abdomen increases according to the time of menstrual cessation.



3. Positive Signs

We do it for the confirmation of the pregnancy-

- (i) Monitoring fetal heart rate with the help of stethoscope or doppler.
- (ii) Active fetal movements.
- (iii) Through ultrasonography.

Once pregnancy is confirmed we need to calculate expected date of delivery.

- (a) We can know expected date by adding nine months and seven days to the first date of last menstrual period.
- (b) By measuring the size of abdomen we can estimate that when the baby will be delivered.
- (c) We can assess expected date by adding 20-22 weeks more to the first date of feeling fetal movements (quickenings).
- (d) Also assessing the development of fetus through ultrasound expected date can be known.

All these signs and symptoms will help you to confirm pregnancy and its expected date and can plan care of pregnant woman accordingly. This helps her a lot.

1.5 ROUTINE OF WOMAN DURING PREGNANCY

Antenatal period (ANC) from conception till onset of labour. During this, special arrangements of care and diet have to be made for pregnant woman because fetus is nourished by nutrition. Her illness also affects the fetus. Even the drugs given during the pregnancy too have a bad effect on fetus. Therefore, the methods of treatment and medicines should also be selected very carefully. To understand the care and needs of pregnant woman, the information about following things is very important:

- (a) Clinical history of pregnant woman.
- (b) Physical examination
- (c) Laboratory investigations and
- (d) Ultrasonography

During pregnancy X-ray examination is not done as its radiation can have bad effect on fetus.



Notes

Key points of Clinical History

1. Age of menarche
2. Are the periods regular or not? How was the flow and what was the interval between the two cycles?
3. Was menstrual period painful (dysmenorrhoea)?
4. What was the first date of last menstrual period (LMP) during pregnancy?
5. Obstetrical history
 - (a) How many children were born before? What is the interval between them?
 - (b) Where was the delivery done? Was there any problem or not? Delivery was cesarean or not?
 - (c) Previous children are healthy or not? Any child died due to any reason.
 - (d) Previously was there any abortion or not? If yes why? Spontaneous or MTP?
 - (e) Any complication during previous pregnancy like diabetes mellitus during pregnancy (gestational diabetes) or eclampsia etc.
 - (f) Sex and birth weight baby's born.
 - (g) What is present condition of children/child?
6. Whether present pregnancy is planned or unplanned?
7. Any abnormal signs and symptoms.
8. Is there any family history of high blood pressure, diabetes mellitus, T.B. etc? Is there any disease like sexual transmitted disease etc. or not in parents and other family members before or now?
9. What is the education of parents and family? What is their occupation? What are their general health habit and life style?
10. Before pregnancy or coming for examination is there any prolonged illness or whether any medicine is taken or not?
11. TT injections were given or not in previous pregnancy? If yes how many and where?



INTEXT QUESTIONS 1.3

Mark Right (✓) or Wrong (×) in the following questions:

1. By urine test the hormone present in it confirms the pregnancy. ()
2. We can find out the expected date by adding nine months and seven days in first date of last menstrual period. ()
3. It is necessary to have X-ray examination in pregnancy. ()
4. Expected date of delivery is known by assessment of development of fetus in ultrasound. ()
5. There is no effect of medicines on fetus given during pregnancy. ()

1.6 VARIOUS INVESTIGATIONS OF PREGNANT WOMAN

1.6.1 Physical Examination

Generally we certainly do the following examinations in pregnant woman:

1. Weight and Height
2. Blood pressure
3. Temperature, pulse, respiratory rate
4. Head to toe examination for any abnormalities. After doing these examinations following things are also be examined:
 - (i) Breasts examination
 - (ii) Abdominal examination (palpation) (in this we):
 - (a) Observe signs of the symptoms of pregnancy.
 - (b) Asses fetal size, growth, position and presentation.
 - (c) Asses fetal health.

1.6.2 Steps of Abdominal Examination

Inspection – Size of abdomen

- Stretch mark or any scar of previous operation

Palpation – Uterus fundus palpated during each and its normal checkup normal size should be as follows:

Change in fundal height from time to time on abdominal examination:

Pursuing each check up normal size should be as follows.

14th week – 2.5cm above the symphysis pubis



Notes



Notes

- 18th week – 4 cm below umbilicus
 24th week – at the level of umbilicus
 28th week – 1/3rd distance between umbilicus and xifi sternum.
 32th week – 2/3 distance between umbilicus and xifi sternum
 36th week – reaches below ensiform cartilage
 Full term – There is lightening (sense of relief of the pressure symptoms) and uterine fundus comes down and it corresponds to fundal height between 32 and 36 weeks of pregnancy level. Palpation is done by outstanding the left palm in the first stage of fundal palpation.

You will learn in your practicals that how palpation is done but in theoretical aspect you will know about the stages of abdominal palpation.

First step: Fundal palpation – To find the fundal height do palpation by opening the left palm completely.

Second step: Fundal grip – woman's face is turned to one side. To feel soft bottom part or hard head part of fetus, fundal palpation is done with the help of both palms.

Third step: Lateral grip – The palpation is done facing the patient's face. The hands are to be placed flat on either side of the umbilicus. It is to find out the positions of the back, limbs and the anterior shoulder.

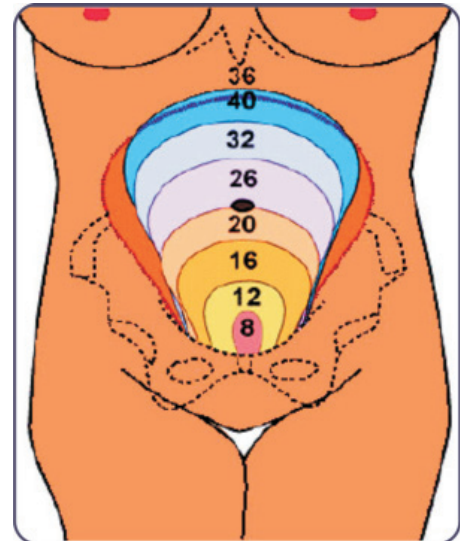


Fig. 1.1: Fundal palpation

Procedure

1. **Fundal grip:** Make woman lie in supine position, uterine fundus is palpated by both hands and feel for head of fetus.
2. **Lateral grip:** Whole uterus is softly palpated to determine fetus back or head.
3. **Pelvic grip:** By gripping lower portion of the uterus just above the pubic symphysis with the thumb, we try to feel whether fetus head is free or engaged, his presenting part is head or buttocks (lower part).
4. **Auscultating fetal heart rate:** with the help of stethoscope, fetoscope or doppler fetal heart rate is heard above the patient's abdomen. Generally fetal heart rate remains between 120-150 per minute.



In case of any irregularity, patient should immediately refer to her specialist physician or hospital. Above mentioned abdominal examination is done only in second and third trimester. In first trimester fetus is not felt by abdominal palpation. Practical use of fundal palpation will be told in practicals. Basic concept is being told.



Fig. 1.2: Fetal heart rate is heard with the help of fetoscope

1. Try to detect height of fundus by the fully stretched right palm. Then with the help of both palms, try to feel the softer or hard part of the head of fetus. But before this, the woman's head turned to the left side. With the help of both palms palpation of lower abdomen is done correctly to know which part is in the lower side whether it is head, back, buttocks or any other irregular part.

1.6.3 Lab Investigation

There are so many investigations which are necessary according to the expert advice of specialist in pregnancy but some investigations must have been done like-

- (a) **Hemoglobin:** This helps in finding level of anemia (hemoglobin level) in woman.
- (b) **Blood Group:** If delivery of woman is being done in hospital and she requires cesarean surgery, then blood group investigation is very necessary. If mother's blood group Rh is negative, she should be referred to the hospital immediately.
- (c) **Urine examination:** In this mainly sugar and albumin are checked so that prediction of difficulties during the time of pregnancy can be done.

1.6.4 Assessment of Risk in Pregnancy

Let us see those factors which cause risks:

- (i) Pregnancy in the under age 15 years or above than 30 years.
- (ii) Multiple pregnancy (Multiple Gravida)
- (iii) Short height and weight women less than 40 kg and below 140 cm.



Notes

- (iv) Twins or multiple pregnancy.
- (v) Mal-presentation – lateral parts instead of head.
- (vi) Anemia – Hemoglobin less than 10 gm.
- (vii) Eclampsia or pre-eclampsia
- (viii) Ante partem haemorrhage
- (ix) Fatal death Still born baby in previous pregnancy, intra-uterine death or premature delivery or history of abortion.
- (x) History of post dated delivery

1.6.5 Prenatal Screening

1. In first 28 weeks i.e. in first and second trimester once in a month i.e. monthly.
2. From 29th week - 36 weeks in every two weeks.
3. From 37th weeks till pregnancy every week examination is necessary. Keep in mind that minimum three times the examination is mandatory throughout pregnancy, otherwise delivery can be risky.

Role of Health Worker in Pregnancy

1. We should aim at helping a women to maintain good health.
2. Early detection of abnormalities, we have enough time to manage it.
3. With adequate preparation during pregnancy they can undergo pleasant child bearing experience.
4. During pregnancy take care of minor things can do away with major difficulties and ignoring those advises would lead to major problems.
5. Advice them for regular check up and to follow the instruction and treatment recommended on time which would lead to mother and childhood health.

1.7 CARE OF PREGNANT WOMAN

1.7.1 Nutrition during Pregnancy

Here in India, we give less attention in up bringing of the girls, pregnancy further depletes the maternal source of nutritions. Ensure during pregnancy there should be



adequate intake of protein, fat, vitamins and minerals in their diet. For this we can advise them to eat meat, liver, eggs, fish, mixed pulses, rajma, milk, curd, cheese etc. Besides this fruits and greens leafy vegetables are the best sources of vitamins and minerals. By its consumption we also get fiber which is helpful in relieving constipation during pregnancy. Other than this iron, folic acid and calcium tablets should be given separately so that right development of child is there.

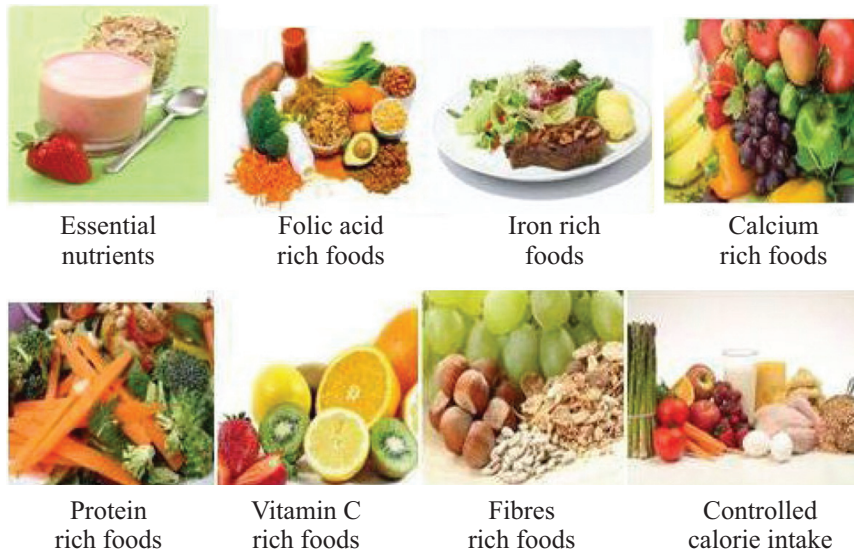


Fig. 1.3: Important nutrients for pregnant woman.

1.7.2 How much Work should be done in Pregnancy?

During pregnancy woman should do light work. Never lift heavy objects. Avoid long distance travelling. Don't do horse-riding and heavy exercises.

1.7.3 Rest in Pregnancy

A pregnant woman needs to sleep at least 8 hours daily out of which, two hours should be in the afternoon. The bedroom should be well ventilated and there should be no interruption during that time.

1.7.4 Exercise in Pregnancy

Entertainment and light weight exercise is necessary as it makes delivery easy.

1.7.5 Personal Hygiene

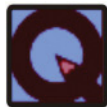
A pregnant woman should take bath daily and take care of her skin. She should wear clean and comfortable clothes. During pregnancy and after child birth breast



Notes

care and hygiene is important for breast feeding. Keep this in mind that undergarments should also clean and comfortable. Tell them that if any of the following symptoms are visible instruct them to report-immediately.

1. Vaginal discharge
2. Swelling or heaviness on face
3. Penetrating and persistent headache
4. Blurred or diminished vision
5. Severe abdominal pain
6. Persistent vomiting
7. Fever or chills
8. Burning and pain during micturition
9. Bleeding
10. Less or no movements of fetus.



INTEXT QUESTIONS 1.4

Fill in the blanks:

1. A pregnant woman should sleep at least for hours.
2. In pregnancy during urine examination and are examined.
3. In pregnancy, and tablets must be given to woman along with regular diet.
4. At least times check-up must be done throughout pregnancy.
5. Pregnancy can be risky if the age of woman is under years.

Regular Check-ups

The pregnant women should be explained why and how important is regular check-up for them. With the help of this only, we estimate high risks and complications and take measure for its prevention in advance. Through this only we detect high risk pregnancy. Hemoglobin and urine tests are very essential along with the physical examination in routine check-up.

Tetanus immunization must be done twice at the interval of 1 month.



Some more Things to Know During Pregnancy

1. Both the parent should be guided.
2. Do their psychological and emotional care with physical care too. Tell their husbands and family members that a healthy baby will arrive only when family environment is cordial.
3. Remove mis-perceptions from their minds and explain the right thing.
4. If there is a disturbing and stressful environment around her, advise the pregnant woman and her family members to stay at different place.
5. Free them from the fear of labour pain.
6. Prepare the family for the arrival of new baby.



WHAT HAVE YOU LEARNT

In this lesson you have learnt that:

- Factual information regarding fetus and pregnancy.
- Symptoms of pregnant woman during pregnancy, their problems, the risk factors and the methods to preventing them.
- What and how examination should be done during pregnancy.
- Necessary advice to be given to pregnant woman and her family.
- Identification of risk factors.
- Information regarding investigations to be done during pregnancy.



TERMINAL EXERCISE

1. Write short note on sign and symptoms of pregnancy.
2. What are the normal physiological changes during pregnancy?
3. How will you identify general abnormalities of pregnancy?
4. Write short note on maternal care during pregnancy.



Notes



ANSWERS TO INTEXT QUESTIONS

1.1

1. 11 to 13 years
2. Pregnancy
3. Menopause
4. 14
5. Luteinizing hormone

1.2

1. 10-16 kg.
2. Second and third trimester
3. Heaviness
4. Constipation
5. Heart rate

1.3

1. Right
2. Wrong
3. Wrong
4. Right
5. Wrong

1.4

1. 8
2. Sugar and albumin
3. Iron, folic acid and calcium
4. Three
5. 15

Recommended Activities

1. Do the obstetrical examination on dummy.
2. Practice hemoglobin estimation on each other.



Notes

2

WOMAN'S CARE DURING THE PERINATAL AND POSTNATAL PERIOD

In the previous lesson, you studied about the changes occurring in a woman's body during pregnancy and how to take care of a woman during that period. In this lesson, you will study how to manage and take care the woman during and after the delivery.

Child birth is the most difficult period in a woman's life. During this time, she needs extreme care and sympathy. The first pregnancy and the first childbirth have high chances of complications. That is why, during the first pregnancy, she must be given good antenatal care. All the antenatal tests must be done regularly so that problems like anemia, hypertension, vomiting, diabetes, etc. are diagnosed and prevented before any major complication. Because of these tests and antenatal care, the person can be alerted of any complications and can be treated on time. In this lesson, we will study the danger signs during delivery so that any complications arising in this time can be detected and cured.



OBJECTIVES

After studying this lesson, you should be able to:

- differentiate between true or false labour pain;
- assess women before childbirth;
- check women for safe delivery in case of emergency;
- plan and implement care for the mother and the child after childbirth.



Notes

2.1 LABOUR: AN INTRODUCTION

The period of delivery is a difficult time for both the pregnant woman and the fetus as they go through the pain of the delivery process. During childbirth, emotional support and care of the woman is essential. Also, trained persons have an important role in the process so that both the woman and the baby remain safe and healthy after delivery. It is important to boost the morale of the pregnant woman so that she experiences less pain or can withstand labour pains. This needs emotional cooperation and care of the pregnant woman who is in labour.

Every pregnant woman should be made aware to go for delivery to a trained person or **institutional delivery**, because there is always a risk of complication which can be fatal for the mother and child. It is essential to be nice to the pregnant women so that she can cooperate during delivery process. You can do this by greeting her and making her comfortable. During the process of physical examination, listen to her carefully, talk sweetly and console her again. If she is not registered, then her complete present history, obstetric history, family history and other complication related detailed information must be taken. If she has been coming to the hospital for regular checkups, then her Antenatal card must be asked.

Before onset of the labour, an internal examination must be done to measure the progress of the labour. If there is any discharge of fluid from vagina, then it could be 'show' / delivery indicating vaginal discharge (thick sludge which is mixed with blood) or an amniotic fluid (which is similar to water). The amniotic membranes may rupture at the time of delivery or even before it.

To assess the progress, frequency, duration, and intensity of contraction, place your hand on the abdomen of the pregnant woman. The situation will be clear in a while. If a contraction is felt 2-3 times in 10 minutes, then it means that labour has started. Listen to the fetal heart sounds (FHS) and its regularity. Make sure to check the sanitary pad in event of breakage of amniotic membrane so that quality and colour of the discharge is known.

Normal labour means the process of expulsion of fetus, placenta, and membranes without any complication. For first pregnancy, the first stage of labour starts 2-3 weeks prior to the delivery, while in second or subsequent child birth starts 2-3 days before the delivery. During this period, uterus comes down and the head of the fetus descends into the pelvis, which is also known as 'Lightning'. The cervix starts getting thinner and shorter and gradually begins to dilate.

A pregnant woman should start preparing for delivery one month before the expected time of delivery (Estimated Delivery Date). Clean clothes for self and



baby, pads, soap, oil, antenatal card should be kept in a bag so that nothing is left out.

One should ensure the woman is made aware of the symptoms of true and false labour before one month of delivery i.e. at the beginning of the 9th month of pregnancy, she can contact the health worker when the labour starts. At the beginning of childbirth, a woman should be encouraged to take bath and wear clean clothes and use clean sanitary pads. Health workers should also clean and disinfect all their equipments. During delivery, they must wash their hands before starting any procedure.

2.1.1 Signs of True Labour

- Regular painful intense contractions.
- The intensity and frequency of pain during contractions gradually increases with time.
- The cervix gradually dilates.
- Show (delivery indicator) and vaginal bleeding.
- No relief by pain killer medication.



INTEXT QUESTIONS 2.1

Mark either Right or Wrong

1. 2-3 contractions in 10 minutes is a sign of the onset of labour. ()
2. In first delivery, the first stage of labour starts 2-3 day before delivery. ()
3. Determination of progress of labour can be made by placing hand over the abdomen of pregnant woman. ()
4. Descending of the fetal head in to the pelvis is called lightning. ()

2.1.2 Assessment of Woman after Arrival in the Labour Room

First, the women must be made comfortable in the room and then we should ask about the pain, contractions, and vaginal discharge. We should inquire about the onset of pain, its duration, intensity, and frequency.



Notes

Her general examination should include pulse rate, temperature, blood pressure and respiratory rate. Once again confirm the fetus' axis (Lie) and presentation by palpating the abdomen.

Count the fetal heart rate and assess the regularity. If it is abnormal (<120 or >160), contact the doctor immediately.

Dilatation of the cervix and the nature of any discharge must be checked under aseptic conditions. Contact the doctor immediately, if there are any signs of leakage of amniotic fluid or the discharge is brown colored fluid also known as 'Meconium stain'.

Confirm the onset of labour and the stages of labour.

Assessment for Stages of Labour:

(i) First stage of labour

- Duration - 10 hours in primigravidae (first pregnancy)
- 6 hours in multipara
- 2-3 contractions in 10 minutes
- 4 cm – 9 cm cervical dilatation.
- Cervical dilation rate is 1 centimeter or more per hour
- The head of the fetus starts coming downwards.

(ii) Second stage of labour

- Duration lasts 1-2 hours in first delivery and less than one hour in multiple deliveries.
- The presenting part of the fetus reaches the lower surface of the pelvis and the bulge of the head starts appearing on the perineum.
- The frequency of contractions increases to 3-4 times per minute.
- The cervix is completely dilated 10 cm.
- The fetus continues to come down.
- The tendency of pushing down increases as the intensity of contraction increases.
- The period from the dilatation of the cervix to the birth of the child is called the second stage of labor.



Signs of Complication

1. If the fetus stops coming down.
2. Outward contraction stops.
3. If contractions begin to occur continuously and cervical dilation is incomplete. The doctor should be informed about this immediately and the woman should be sent to the hospital immediately.

At the end of the second stage of delivery, the baby's head comes out in a period of 10-15 minutes.

2.1.3 Assessment of the Status of Mother and Child during Delivery

Mother's Status

If there is an increase in the mother's pulse rate, respiratory rate or temperature, there may be a complication of dehydration (loss of water), infection or labour pain. Therefore, re-evaluation should be done. Complications can arise due to this.

Blood Pressure

Any fall in blood pressure can be caused by excessive bleeding (hemorrhage) or shock. If there is an increase in blood pressure, it may indicate pre-eclampsia. Assess the mother's ability to deal with childbirth and provide adequate support to the mother.

Fetal Status

The fetal heart sounds (FHS) must be checked every 30 minutes in the starting stage of the labour. But after the contraction's frequency and intensity increase, FHS and its regularity must be checked every 15 minutes. In the second stage of labour, FHS must be checked regularly. And if FHS is less than 120 or more than 160 then one must immediately contact the doctor.

During the second stage of delivery, the mother should be encouraged, and she should also be guided to push the baby downwards with each contraction and take deep breaths and rest between the two contractions.

2.2 PREPARATION OF WOMAN FOR DELIVERY

- She must be informed about the labour process in detail.



Notes

Woman's Care During the Perinatal and Postnatal Period

- Provide privacy to the woman and cover her well with a sheet for vaginal examination.
- Keep a pillow under the head and Mackintosh under the buttocks.

Materials required for the Delivery

For the mother

- Mackintosh (Rubber sheet)
- Bowl-2
- Kidney tray-1
- Artery forceps-1
- Dissecting forceps-1
- Needle holder-1
- Scissors
- Cotton
- Antiseptic lotion
- Thermometer
- Clean piece of cloth and sanitary pad
- Gloves

For the baby

- Clean clothes for keeping the baby
- Thread or rubber band to tie the cord stump
- Lukewarm water
- Clean clothes to wear

Apart from these Hand wash articles, sufficient light, clean environment, and warm and clean room.



INTEXT QUESTION 2.2

Match the following:

- | (a) | (b) |
|-----------------------------|-------------------------------------|
| 1. First stage of delivery | (i) 10 hours duration |
| 2. Second stage of delivery | (ii) 6 hours duration |
| 3. First delivery | (iii) Raised blood pressure |
| 4. Multiple pregnancy | (iv) 2-3 contractions in 10 minutes |
| 5. Pre-eclampsia | (v) 3-4 contractions in 1 minute |

2.3 PREPARATION FOR DELIVERY

The labour room and the area where the mother will deliver and baby is kept must be clean. The labour room must be warm and dry. There should be privacy for the woman. An attendant should be allowed to stay with the pregnant woman voluntarily during delivery.

All the instruments and things used during labour should be sterilized so that they are aseptic and do not contain any infection. In case of home delivery, 5 points must be kept in mind – 5 C's

1. Clean place
2. Clean hands
3. Clean blade
4. Clean aseptic thread to tie umbilical cord
5. Clean cloth

Steps of the Process

- Hands should be washed thoroughly and wear gloves
- Perineum must be cleaned with a swab dipped in antiseptic lotion
- By applying antiseptic lotion mixed water on the perineum by pressing the swab (cotton swab) to clean the discharge from the base.
- To clean the perineum, the cotton swab should be brought from top to bottom and one swab should be used only once.



Notes



Notes

Woman's Care During the Perinatal and Postnatal Period

- The perineum should also be cleaned outside the mid-line.
- Separate the labia minora from the fingers of the left hand.
- Wearing gloves, insert two fingers of right hand (index finger and middle) inside the vagina and check for tear and dilation of the cervix.
- Presenting part of the fetus which will come out first, check the presenting part and its position.
- Check the status of the membrane and its presence/absence.
- Check the capacity of the pelvis to ensure that there is no contraction.
- After checking all the points, take the fingers out of the vagina.

Vaginal Examination to Assess the Progress of Delivery

While performing a vaginal examination, look for the level of the head of the fetus (usually the head remains the presenting part). In normal delivery, the head of the fetus should come down gradually.

We have to Always Remember

- The descent should occur throughout the delivery period.
- If the bladder and rectum are full, then it causes a delay in descending. Therefore, in the first phase, the woman should be advised to urinate.

Management in the Second Phase of Delivery

- Make the woman to lie in a comfortable position.
- When the head of the fetus is visible, encourage the woman to push downward with contractions. If the cervix is not fully dilated, then pushing downward can be dangerous.
- Hear the fetal heart rate after each contraction.
- Cover the anus with a sterile pad and keep it all throughout the entire period of contraction to avoid infection and to cover the perineum from rupturing.
- Allow delivery of head slowly, preferably between contraction. Give flexion to prevent sudden extension of head which may result in perineal tear.

Woman's Care During the Perinatal and Postnatal Period

- In the middle of contractions, ask the woman to take small breaths and not force down.

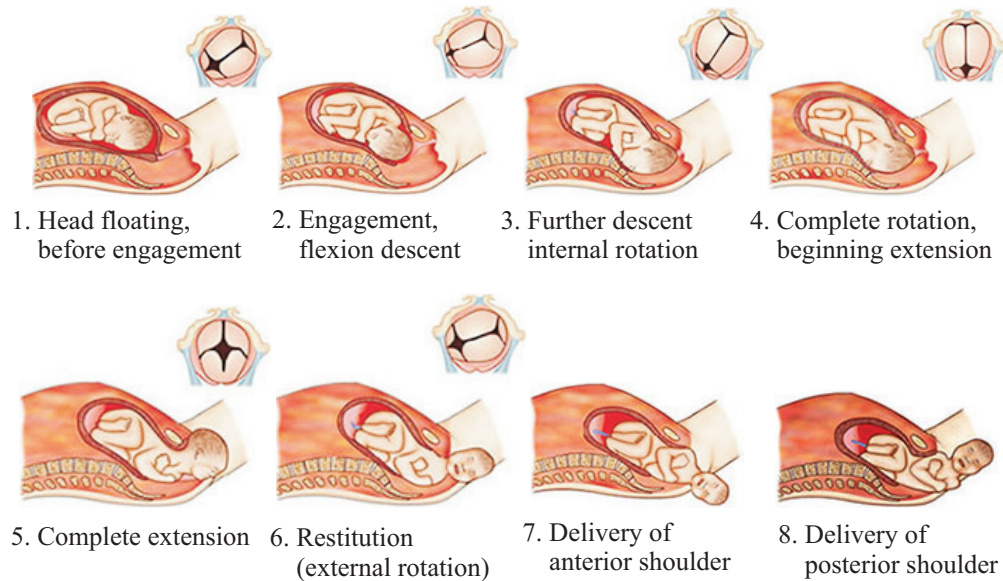


Fig. 2.1: Automatic rotation of the head in birth canal

- As soon as the head comes out, the mouth must be cleaned with a finger to remove the mucus obstruction so that baby can breathe easily. Clean the nose as well by pressing.
- After the head is delivered, wait for the shoulders to rotate automatically. With the help of two fingers support the neck of the baby and feel the tightening of the umbilical cord and if it is loose, try to take it out from over the head.
- If the umbilical cord is tight, then hold the umbilical cord with two fingers at two places at a distance of 4 cm, hold it with artery forceps and cautiously cut between the two clamps so as not to harm the baby's neck.
- After the head comes out, allow two to three minutes for the delivery of the torso. Put the baby's head between the two hands, first, take out the upper shoulder, and then lower shoulder.

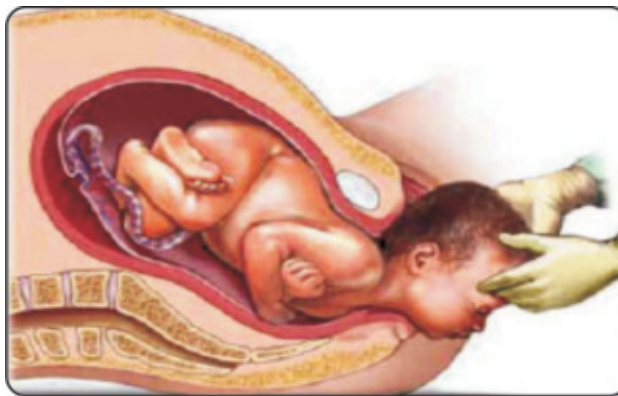


Fig. 2.2: Controlled delivery of the head



Notes



Notes

- Clean the baby's airways and wrap her in clean clothes. At a distance of 5 cm from umbilicus a thread is tied on the umbilical cord at two places and cut is made in between the two knots.
- Make sure that there is no bleeding from the umbilical cord.
- Check the time of birth immediately after the birth of the baby and note it down.



INTEXT QUESTION 2.3

Fill in the blanks:

1. If the fetal heart rate is less than or more than contact the doctor immediately.
2. In normal delivery of the fetus should come down gradually.
3. At a distance of cm from umbilicus a thread is tied on the umbilical cord at two places and cut is made in between the two knots.
4. In the middle of a contraction, if the head comes out may tear.
5. to minutes should be given for delivery of the rest of the body after the head is out.

2.4 THIRD STAGE OF DELIVERY

The third stage of delivery takes 15-20 minutes (in the first delivery or the second/third/fourth delivery). In this period, the woman must have an experienced/skilled person. In this stage, the placenta and membrane are removed.

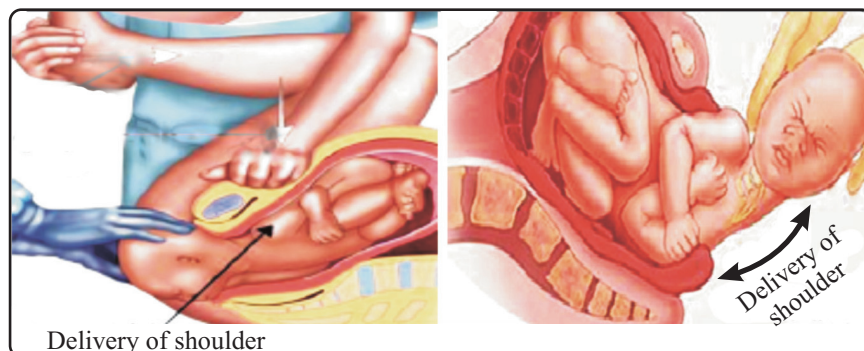


Fig. 2.3: Delivery of shoulder

Woman's Care During the Perinatal and Postnatal Period

In this process, the uterus becomes stiff, due to which the placenta and the membrane begin to separate from the inner surface of the uterus. Its symptoms are a sudden flow of blood from the vagina and drooping of the umbilical cord. Tell the mother to push a little downward and wait for placenta to come out. Check the placenta and the membrane so that no part of it remains inside. Clean the perineum with cooled water (which was boiled earlier). Keep the mother in a comfortable position after applying the pad and changing clothes. Examine uterine and vaginal bleeding once an hour. Give the mother a hot drink. Check temperature, blood pressure and respiration rate. In case of any abnormal situation, contact the hospital/doctor immediately.



Notes



Fig. 2.4: Cutting of the umbilical cord

After delivery, keep the mother and baby warm and take care of them. Check the woman twice a day for 3 days and visit the mother and child once daily till they are fully healthy.

2.5 IMMEDIATE CARE OF THE NEWBORN

Immediately after birth, wipe the baby with a clean, soft cloth and check its condition.

- Put the baby on the mother's chest and ask for immediate breast feeding.
- Encourage mother to check for any abnormalities in the baby.
- Monitor the weight of baby. The average body weight of an Indian baby is 2.5 kg.
- After 3 days there is a decrease in the weight of the baby. But by the 10th day, the baby regains the weight.



Notes

- With the help of tape, measure its length. The average length of the baby is 47 cm. to 50 cm.
- In case of any type of physical abnormality,
 - Report it e.g. if the baby's lips or face become blue.
 - If your baby vomits green.
- Observe the cry of the baby. In the case of weak crying, report it, and send it to the hospital.
- See if the child has passed feces and urine.
- Examine the skin from head to toe, mouth, chest, umbilical cord, abdomen, and genitals .
- Protect your baby from hypothermia.
- Bathe the baby only after 12 to 24 hours after birth.
- Dress according to the season.
- Clean the eyes with a soft clean cloth.
- Take care of the cord to prevent infection and dress it till its separation.
- Get the child vaccinated according to the schedule.
- Recommend breast feeding and highlight its importance.
- Demonstrate the breast feeding process.

2.6 CARE OF THE NEWBORN BABY

Prevention of hypothermia after the newborn comes out of the vagina.

The newborn is at risk of hypothermia. To prevent this:

- Keep the newborn in close contact with the mother.
- Wrap the newborn baby in surgical cotton or warm clothes according to the season.
- Keep the room appropriately warm according to the season.

Bath

- Bathing the baby just after the delivery may result in hypothermia. Bath the baby after 12 -24 hours. If the baby weighs less, then his/her bath must be further delayed.



Clothing

- Clothing must be done according to the weather, Soft, clean cotton cloth is recommended. Cloth must be dried under the sun.

Care of Eyes

- Eyes must be cleaned with soft cotton and from inward to outward direction.

Immunization

Immunization should not be denied even if the newborn baby is sick. The mother should be educated about the immunization and its importance for the child's well being. Advise mother to give immunization as per schedule as advised by health centre.

Immunization Schedule as per National Immunization Programme

Table 2.1

	Age	Inj.	Dose
1.	Birth	BCG	0.1 ml
2.	1½ Month	DPT – 1 st dose, OPV-1 st dose	0.5 ml, 2 drops
3.	3½ Month	DPT – 2 nd dose. OPV -2 nd dose	0.5 ml, 2 drops
4.	9-12 Month	Measles	0.5 ml, 2 drops
5.	15 Month	MMR	0.5 ml, 2 drops
6.	15 -24 Months	DPT – (Booster), OPV (Booster)	0.5 ml, 2 drops
7.	5 – 6 years	DT Inj.	0.5 ml,
8.	10 – 16 years	TT Inj.	0.5 ml,

Care of the Umbilical Cord

Immediate assistance must be provided in case of any type of bleeding from cord. The baby must be kept clean and dry. No medicine is applied on that part. Normally it falls in a week. Breastfeeding is suggested exclusively. Any kind of water or formula feed should be avoided.

2.7 BREAST FEEDING

Breast feeding is the best and every new born must be given breast milk. Breast feeding must be given immediately after birth. It helps in strengthening the emotional bond between mother and the child. It also helps in restoration of the



Notes

uterus. The thick, yellow milk that occurs for the first few days after birth is rich in vitamins and antibodies and provides protection against infections is called colostrum. This milk must be fed to the baby.

Burping should be done after breast feeding. (by placing the baby on your shoulder and patting him on the back). You will learn more about breast milk and breastfeeding in the coming lesson.

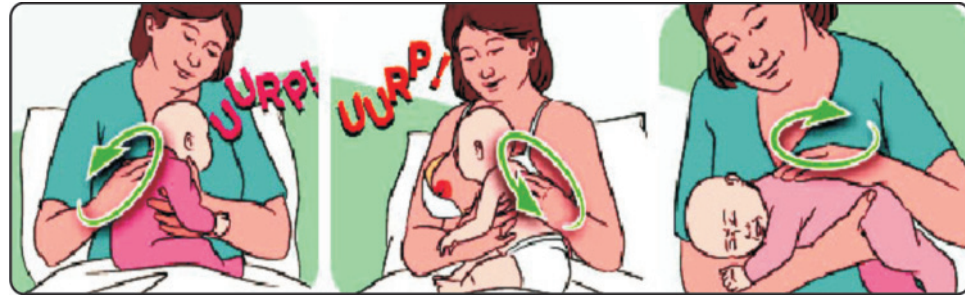


Fig 2.5: Burping technique

2.8 POSTPARTUM CARE OF THE MOTHER

The first few hours and days are important in the postpartum period. To find out any type of problem, evaluate mother as soon as possible and send her to the hospital immediately if you see any symptoms of any abnormality.

- Observe the general condition and facial expressions so that any discomfort due to pain or excessive bleeding or fatigue can be detected.
- To provide sleep and relaxation, give hot drinks to the mother and allow her to sleep appropriately.
- Help to develop her emotional attachment to the baby by bringing baby's skin in contact with mother's skin and starting breastfeeding.

Lochia - (vaginal discharge after delivery) for 6 to 10 days. The red colored vaginal discharge starts becoming pink and then it stops. This duration may vary in women.

Observe the perineum for any type of secretion or inflammation or any infection.

- Observe the vital signs like temperature, pulse, respiration and blood pressure, in case of any abnormality, contact the health care center.
- Examine the breasts for any hardness in breasts, engorgement of breast or any other abnormality.

Woman's Care During the Perinatal and Postnatal Period

- If milk is collected in or around the nipple, then a crust is formed, and bleeding may start. So, clean the nipple with a soft cloth. Before feeding the baby, wash the breasts with lukewarm clean water.

Personal Hygiene

- The mother should bathe daily with soap and water and wear clean clothes.
- Wash breasts well and keep them clean.
- To avoid infection, clean the perineum as often as possible.

Nutrition

- Lactating mothers should eat more food than their usual diet.
- Include locally available seasonal food, fruits, vegetables and milk in your diet.
- Drink plenty of liquid.

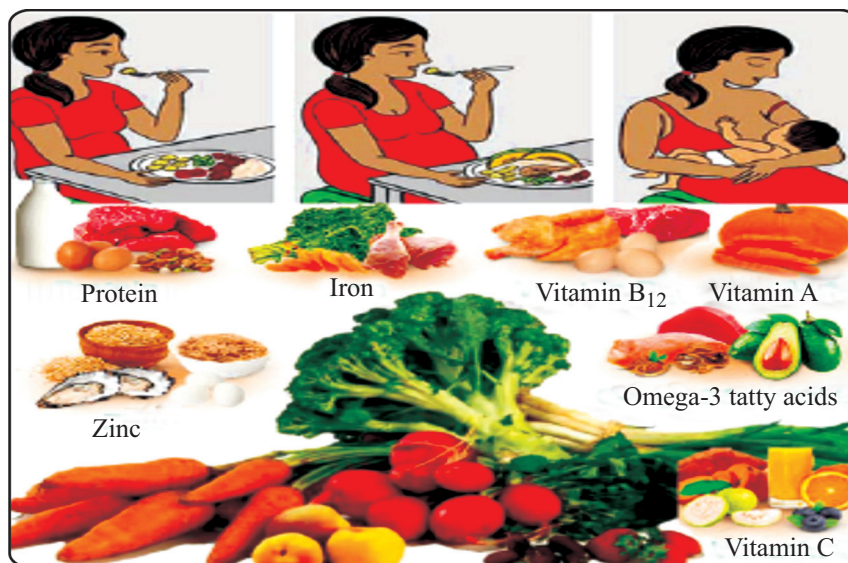


Fig. 2.6: Nutrition for the puerperal mother

Family Planning

Recommend the adoption of permanent or temporary methods of family planning according to the current size of the family and the wishes of the parents.



Notes



Notes

Post Natal Follow Up

Advise the mother to go to the health center for post-natal follow-up after 40 days of delivery and visit the baby clinic for examination of the baby.



INTEXT QUESTIONS 2.4

Choose the correct answer for the following questions.

1. The duration of the third stage of delivery is

(i) 5 minutes	(ii) 15–20 minutes
(iii) 1 hour	(iv) 2–4 hours
2. Average weight of the body of an Indian baby

(i) 1.5 kg	(ii) 2.5 kg
(iii) 3.5 kg	(iv) 4.5 kg
3. The appropriate time to give first bath to a newborn baby is

(i) Immediately after birth	(ii) After 1 hour
(iii) After 12-24 hours	(iv) After 3 days
4. The first vaccine given to a newborn after birth is

(i) Measles	(ii) D.P.T.
(iii) M.M.R.	(iv) B.C.G.
5. Appropriate postpartum diet given to the mother is

(i) Hot beverages	(ii) Cold beverages
(iii) Non-veg food items	(iv) Burgers, pizzas



WHAT HAVE YOU LEARNT

In this lesson, you have studied various stages of labour from the beginning of child birth and the care of women during delivery. Also, you learned how to assess the condition of mother and baby during child birth.

Since the mother and the new born require immediate and special care, specific signs, to keep in mind, have also been discussed. Therefore, now you can understand that special attention to be given to mother and newborn baby in case of home delivery.



TERMINAL EXERCISE

1. What are the conditions in which home delivery should not be done?
2. What five things should be kept in mind in case of home delivery?
3. Discuss in detail the care of the newborn.
4. Write about the postpartum care of the mother.



ANSWERS TO INTEXT QUESTIONS

2.1

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

2.2

1. (iv)
2. (v)
3. (i)
4. (ii)
5. (iii)

2.3

- (i) 120, 160
- (ii) head
- (iii) 5
- (iv) perineum
- (v) two to three

2.4

1. (ii)
2. (ii)
3. (iii)
4. (iv)
- 5) (i)

Suggested Activities

1. Practice mock delivery on a dummy.
2. Practice cord tying and cord cutting on rope.



Notes



Notes

3

BREAST FEEDING

In the previous lesson, you have already learned in detail about care of women after delivery and care of a new born baby. You know very well that care of the new born is utmost important after birth. Mother's milk is considered to be the best food for the baby as it is available in disease free condition. Breast feeding keeps the baby healthy by providing all the required nutrients and it also helps the body to fight against diseases by empowering the immunity. In this lesson you will learn about benefits of breast feeding, its techniques, breast feeding related problems and their respective treatment.



OBJECTIVES

After studying this lesson, you will be able to:

- know about the importance of mother's milk for the babies;
- create awareness among people about the importance of mother's first milk (colostrum);
- explain the proper techniques of breast feeding;
- give information about problems occurring during the period of breast-feeding and their treatment.

3.1 FIRST AND FOREMOST MILK AFTER DELIVERY (COLOSTRUM)

- The first and foremost milk produced from mother's breast immediately after delivery is called colostrum. It is produced in first 2-3 days after the delivery. It is yellowish, sticky and is rich in nutrients.

Breast Feeding

- Within half an hour after birth the newborn baby should be fed with colostrum.
- Delay in initiating breast feeding will lead to vascular congestion and edema in breast, thereby resulting in breast engorgement which is painful.
- Colostrum should not be removed and discarded.
- Ideally exclusive breast feeding should be given for minimum 6 months so that it provides all the required nutrients to the baby and also protects the baby from various types of infections.
- Immunoglobulins are present in the colostrum which protects the baby from various infections and allergy.
- Lactoferrin, which is present in the colostrum protects the baby from growth of harmful bacteria and also helps in absorption of iron element.
- It helps in proper growth and development of the baby and decreases incidence of rejection of milk in early days.
- Since colostrum has abundant amount of vitamin-A, it helps in preventing infections and also keeps the eyes safe and healthy.
- Animal milk or powder/formula milk increases the chances of infections, whereas colostrum which is rich in immunoglobulins will decrease the chances of infections.



Notes

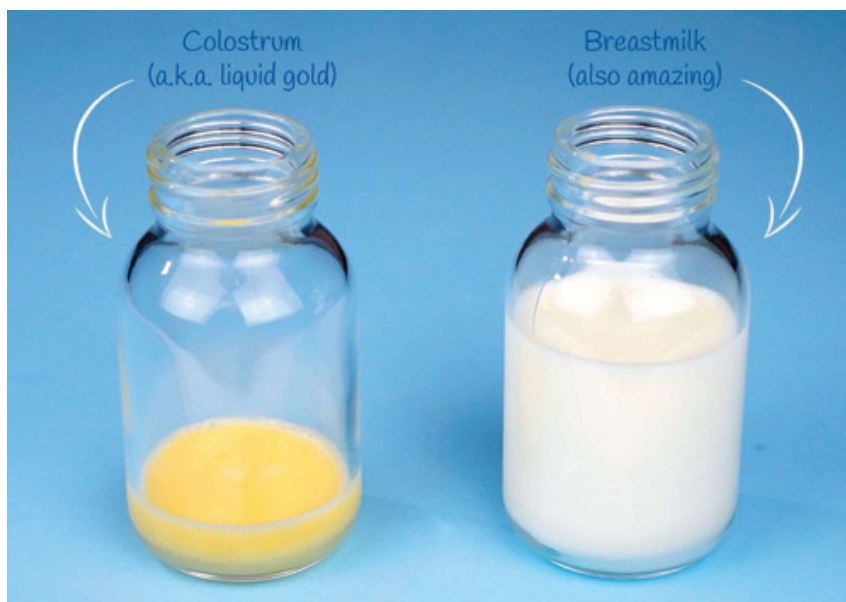


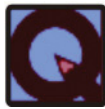
Fig. 3.1: Colostrum



Notes

Role of Health Worker

1. The baby gets all the nutrients through breast feeding in the first four to six months of life. So, discuss about the importance of breast feeding.
2. First milk (colostrum) is safe and it contains abundant amount of nutrients. Discuss about the significance of colostrum.
3. As in the first 4 months mother's milk is advised to baby, that means no other liquid foods like honey, gutti, animal milk, powered milk, water etc. should be given.
4. Create awareness among mothers and general public about the importance of colostrum. In this way new generations will be safe, infection free and healthy.



INTEXT QUESTIONS 3.1

Find out the following True/False:

1. First and foremost milk or colostrum should not be discarded.
2. The baby should be offered breast feeding 4-5 days after the delivery.
3. Immediately after birth, the baby should be given honey, gutti etc.
4. Abundant amount of anti-infective immunoglobulins are present in the colostrum to protect the baby from various infections and allergies.
5. Vitamin-A is present abundantly in colostrum.

3.2 ADVANTAGES OF BREAST FEEDING AND DISADVANTAGES OF BOTTLE FEEDING

S.No.	Advantages of Breast Feeding	Disadvantages of Bottle Feeding
1.	Breast milk is an important and complete food and it provides all the nutrients which are essential for the baby.	The essential nutrients are not present in bottle milk.

Breast Feeding

S.No.	Advantages of Breast Feeding	Disadvantages of Bottle Feeding
2.	Breast milk is available in optimum temperature and is easily digestible.	Formula feed or bottle milk is not easily digestible to all neonate babies.
3.	It protects the babies from various allergies and infections.	Possibility of occurrence of diarrhea and respiratory infections due to bottle feeding.
4.	Breast feeding provides emotional security and promotes close bonding between the mother and baby.	Emotional security and close bonding cannot be established between mother and the baby because anybody can feed through the method of bottle feeding.
5.	Breast feeding delays the onset of menstruation which helps in preventing the next pregnancy.	It won't help in delaying the next pregnancy.
6.	Vitamin A and all other vitamins are present in good amount.	Vitamin A is less in bottle milk.
7.	This is economical, free of cost and readily available whereas formula feeds are to be purchased.	Purchase of feeding bottles, warming bottle, formula milk or animal milk is costlier than breast feeding.
8.	Mother's health is maintained and she can regain her pre-pregnancy body-weight earlier.	Mother's health is neither maintained nor she regains her pre-pregnancy body-weight.
9.	Breast feeding reduces the risk of development of breast cancers and ovarian cancers in mothers.	It would not guard the risk of developing breast and ovarian cancers in mothers.
10.	It provides optimal growth and development to the babies.	Bottle feeding increases the risk of developing various infections which hampers the growth and development of the babies.
11.	Breast feeding provides immunity to the baby which gives protection from various diseases.	It won't protect from anemia and other diseases.



Notes



3.3 SPECIFIC CONDITIONS WHERE BREAST FEEDING IS CONTRAINDICATED

S.No.	Unfavourable conditions	Indication/Contraindication
1.	Cancer	Breast feeding is not advised
2.	Epilepsy	Breast feeding is continued and child is observed for sleep patterns
3.	Jaundice	Breast feeding is continued, at the same time observe child for signs and symptoms related to jaundice
4.	Oral contraceptive pills	May reduce production of milk
5.	Mild Fever	Breast feeding is continued
6.	High fever	Breast feeding is discontinued
7.	Malaria, Tuberculosis	Breast feeding is continued

Other Indications

- After 6 months, supplementary food should start for babies along with the breast feeding.
- First to start in supplementary food is liquid foods like soups, vegetable soups, daal soups etc.
- Further the consistency of food is increased gradually from liquids to semi-solid foods (like mashed banana, mashed potatoes and other vegetables, daliya, khichdi etc.). They are given along with continuation of breast feeding.

Points to be Remembered

- The amount of breast milk is not dependent on the size of breasts.
- The more the baby sucks the breasts, more amount of milk is produced.
- Mother is encouraged to breast feed her baby during the nights.
- Baby is always kept closed to mother (skin to skin contact) especially while feeding.
- Never bottle feed the babies before offering breast feed.
- Immediately after birth, the baby is initiated for breast feeding.
- The role of the health workers is to create awareness and counsel pregnant ladies about importance of mother's milk during ante natal.



INTEXT QUESTIONS 3.2

Fill in the blanks below:

1. The risk of occurrence of and Cancer is reduced if the mother breast feed her baby.
2. Mother's milk establishes bonding between mother and baby.
3. Bottle feeding delays and of the baby.
4. If the mother had breast cancer, then breast feeding is
5. At 6 months the baby is introduced along with breast feeding.

3.4 GOOD BREAST FEEDING TECHNIQUES

- Mother should wash her nipples with plain water (once or twice a day with soap water) before and after every breast feed.
- Mother should sit comfortably and hold the baby in such a way that head and neck of the baby are placed in her elbow while back and buttock are supported by the her forearm and hand. Mother has to hold her breast and help in positioning the nipple and areola into the baby's mouth.
- The mother should touch the baby's cheek with her breast to stimulate the rooting reflex.
- Proper attachment of nipple with the child is the key for successful breastfeeding.
- When the baby does not get sufficient milk, he/she sucks more vigorously resulting in sore nipple.
- Mother should always keep in mind that she has to offer alternate breast at every feed so as to get milk in each breast.

The Signs of Inadequacy of Mother's Milk to the Baby

- Frequent cry of the baby.
- Inappropriate weight gain.
- Delay in growth and development.
- Passing dry and green colour stool.
- Small quantity of stools passing very frequently.



Notes



Notes

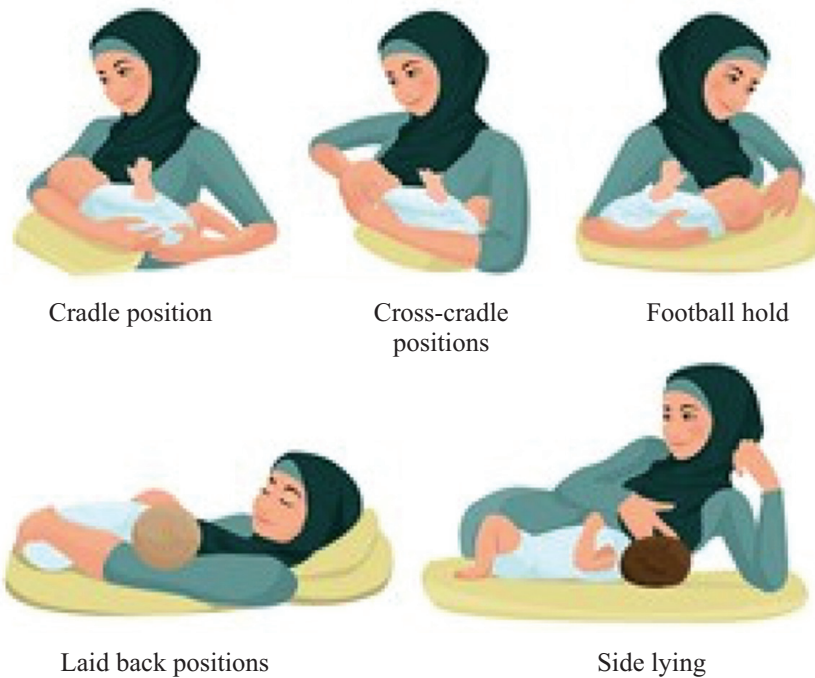


Fig. 3.2: Breast feeding positions

Cleanliness of Breast

To maintain health and cleanliness of breast, mother has to take bath every day. Once or twice a day nipples are cleaned with soap and water. Before every breast feeding, the breast and nipples are cleaned/wiped with a clean and wet cloth. Mother should wear clean clothes every day.

Signs of Adequate Breast Feeding

- After satisfactory breast feeding the child goes into sound sleep.
- Baby passes stool normally.
- Baby passes urine 6 – 8 times a day, usually after every feed.
- The weight of the baby constantly increases.

3.5 COMMON FEEDING PROBLEMS AND THEIR PREVENTION

1. Engorgement of Breast

If the milk is not ejected from the breast in time the breasts become heavy, swollen, hard and painful.



Causes

- Decreased frequency of breast feeding and long duration intervals.
- Congenital anomalies in the babies lead inability to suck.
- Pre-lacteal food.
- If mother is psychologically not ready to breast feed.

Prevention

- Mother should breast feed her baby more frequently during day as well as night.
- Best supportive guidance is given to mother in initiating her breast feeding and also to make her aware about correct techniques of breast feeding.
- If the baby is not in a position to suck, the milk must be expressed and collected in a sterile container and can be fed with a cup and spoon.
- Baby is not given pre-lacteal foods which may infect the baby.
- Hot fermentation provides relief to the engorged breasts.

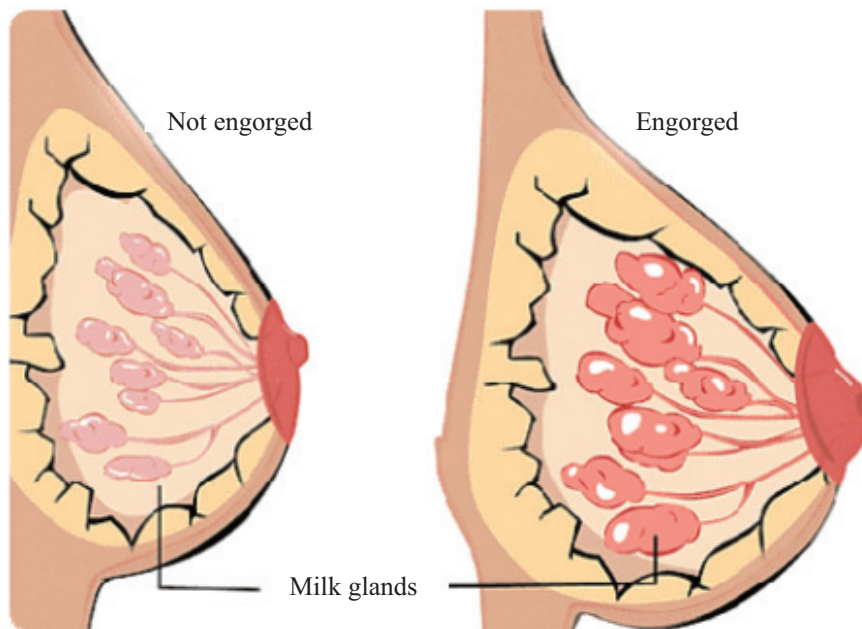


Fig. 3.3: Engorgement of breast



Notes

2. Sore-nipples

Symptoms

Nipples are swollen and very painful.

Cause

- Not maintaining personal hygiene and wearing unhygienic clothes.
- Babies sucking the nipple vigorously.
- Frequently washing the nipples with soap.
- If the baby is suddenly separated from the breast while feeding actively.

Prevention

- Mother is educated to feed her baby with best breast feeding techniques.
- Nipples are cleaned with soap and water once or twice a day, and not frequently.
- Babies should not forcefully get separated from breast during breast feeding. This implies means mother has to wait until the baby withdraw breast on his/her own.

3. Blocked Duct

Symptom

Blocked or plugged ducts are the condition where blockage in a milk duct results in poor or insufficient drainage of the duct.

Causes

- If the breast feeding is infrequent.
- Wrong techniques of breast feeding.
- Unhygienic nipples.
- Unhygienic conditions of the body.

Prevention

- Mother has to increase the frequency of breast feeding.

Breast Feeding

- Demand feeding helps in prevention of blocked duct.
- Mother should sit comfortably and breast feed the baby with the correct technique.
- Mild massage should be done to the breast towards nipple before and after every feeding.
- Nipples should be cleaned slowly and cautiously and not in a hurry.

4. Cracked Nipples

Symptom

The skin layer of nipples gets damaged and cracked.

Cause

Babies who suck the nipple vigorously.

Prevention

- Mother should wear loose clothes and avoid the use of bra.
- Nipples must be exposed to light air for a while.
- Apply mild cream or ghee on cracked nipples.



INTEXT QUESTIONS 3.3

Match the following:

A

1. Optimal breast feeding
2. Engorgement
3. Sore nipple
4. Cracked nipple

B

- (i) Breast feed the baby frequently during day and night.
- (ii) Nipple should be exposed to light and air
- (iii) Normal weight gain of the baby is obtained.
- (iv) Nipple should be washed with soap only once or twice a day.



Notes



Notes



WHAT HAVE YOU LEARNT

In this lesson, we learnt all about breast feeding and its various benefits. Also problems arising due to bottle feeding, knowledge about specific conditions where breast feeding is indicated and contraindicated, knowledge about common breast feeding problems, their symptoms, treatment and prevention.



TERMINAL EXERCISE

1. Write four uses of breast feeding.
2. Write four disadvantages of bottle feeding.
3. Write any two conditions, where breast feeding is contraindicated.
4. Write any two preventive ideas for blocked duct and cracked nipple.
5. Write two causes of breast engorgement.



ANSWERS TO INTEXT QUESTIONS

3.1

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

3.2

1. Breast and ovary
2. Emotional bonding
3. Growth and development
4. Don't do
5. Complete food

3.3

1. (iii)
2. (i)
3. (iv)
4. (ii)



4

NATIONAL HEALTH PROGRAMME

So far, you have learnt about the care of women and newborn during pregnancy and childbirth. You also learnt that breast feeding is a complete and the best diet for the infants at the same proper health precaution should be practised. Lack of proper precautions towards health shall make the person ill. To overcome related diseases or illness, many health programmes were launched by the government at the national level.

There are certain diseases which spread across the country. Such diseases affect people at large. If such disease continue to rise, affecting population in larger magnitude, then such diseases are included in the national programme. Programmes are being run at the national level for the control and eradication of various diseases. The central and the state government jointly work on these programmes. The required support is received from the international institutions and organisations as well.



OBJECTIVES

After studying this lesson, you will be able to:

- provide the information on various important national health programmes being run by the government of India;
- disseminate the information to the people about the cure and control of various diseases covered in these programmes;
- explain the operations of all these programmes;
- Create awareness about these at the community level and make people aware about the facilities involved in these programmes for the prevention and control of such diseases.



4.1 NATIONAL HEALTH PROGRAMMES

The programmes that are being run to control the disease are covered under the control programmes and the diseases which are to be eradicated completely come under the eradication programmes.

The following national health programmes are being run by the government of India:

1. National Vector Borne Disease Control Programmes (NVBDCP)
2. Prevention and Control of Non-Communicable Diseases (Diabetes, CVD and Stroke)
3. Revised National TB Control Programme (RNTCP)
4. Universal Immunization Programme (UIP)
5. Reproductive and Child Health Programme (RCH)
6. National Family Welfare Programme
7. National AIDS Control Programme
8. National Iodine Deficiency Disorder Control Programme
9. National Cancer Control Programme
10. National Blindness Control Programme
11. National Programme for Prevention and Control of Deafness
12. National Leprosy Eradication Programme (NLEP)
13. School Health Programme
14. National Rural Health Mission (NRHM)

The detailed description of various health programmes in India are as follows:

1. National Vector Borne Disease Control Programme

Vector borne diseases like Malaria, Dengue, Lymphatic Filariasis, Kalazar, Japanese Encephalitis and Chikungunya comes under this programme. The main objective of this programme is to prevent and control these diseases.

Under this programme the following activities are done

1. Spraying of insecticidal drugs through which the vectors that carry spread these diseases are controlled.
2. Use of appropriate medicines in these diseases, such as to use 'Chloroquine' medicine for malaria disease.



3. In epidemic area, to send all fever cases to clinic/health centres for examination so that they can be properly diagnosed and treated in time and may reduce the number of patients.
4. Drug Delivery Centre (DDC) and fever treatment departments are made available, which helps in the control and eradication of such diseases.

2. Prevention and Control of Non-Communicable Diseases (Diabetes, CVD and Stroke)

Under this programme various activities are done at national level for the prevention and control of non-communicable diseases (NCD), especially for diabetes, cardio vascular disease (CVD) and stroke.

3. Revised National TB Control Programme (RNTCP)

High lights of this programme are:

- To send the person as soon as possible to the hospital for examination suffering from cough and mucus for three weeks or more.
- To motivate the person to take TB drugs regularly when diagnosed with infection.
- Also, to advise to have sputum, blood, chest investigation and X-ray done regularly.
- After birth, all infants to be vaccinated with BCG.
- DOTS (Direct Observed Therapy for Short term): This system has been arranged to treat TB patients. The purpose of DOTS is to provide direct care and treatment under supervision. Outdoor patients are given medicines in the doctor's/health worker's supervision. Over the years treatment by DOTS system has reduced the mortality rate of TB patients heavily.



INTEXT QUESTION 4.1

Match the following columns:

- | (A) | (B) |
|-----------------------------|-----------------|
| 1. Non-communicable disease | (i) Chloroquine |
| 2. TB | (ii) Diabetes |
| 3. Malaria | (iii) Dengue |
| 4. Vector borne disease | (iv) DOTS |



Notes

4. Universal Immunization Programme

Under the universal immunization programme, vaccination programme is being run by the government for pregnant women, infants and children. In this, children and pregnant women are protected from various diseases through different vaccinations. These vaccines are provided free of cost at all government hospitals and health centres. The safety period provided by the vaccination varies with vaccine to vaccine. Booster doses are given in the case of some vaccines to re-establish immunity provided by the vaccination. For example, in cases of diseases like diphtheria, pertussis and tetanus, booster doses are required for immunity to prevent from infections.

Immunization Table

National Immunization Schedule (NIS) for Infants, Children and Pregnant Women

Vaccine	When to give	Dose	Route	Site
For Pregnant Women				
TT-1	Early in pregnancy	0.5 ml	Intra-muscular	Upper Arm
TT-2	4 weeks after TT-1*	0.5 ml	Intra-muscular	Upper Arm
TT-Booster	If received 2 TT doses in a pregnancy within the last 3 years*	0.5 ml	Intra-muscular	Upper Arm
For Infants				
BCG	At birth or as early as possible till one year of age	0.1 ml (0.05 ml until 1 month age)	Intra-dermal	Left Upper Arm
Hepatitis B- Birth dose	At birth or as early as possible preferably within 24 hours	0.5 ml	Intra-muscular	Antero-lateral side of mid-thigh
OPV-0	At birth or as early as possible within the first 15 days	2 drops	Oral	Oral
OPV 1, 2, & 3	At 6 weeks, 10 weeks & 14 weeks (OPV can be given till 5 years of age)	2 drops	Oral	Oral
Pentavalent 1, 2, & 3	At 6 weeks, 10 weeks & 14 weeks (can be given till one year of age)	0.5 ml	Intra-muscular	Antero-lateral side of mid-thigh

National Health Programme

Rotavirus#	At 6 weeks, 10 weeks & 14 weeks (can be given till one year of age)	5 drops	Oral	Oral
IPV	Two fractional dose at 6 and 14 weeks of age	0.1 ml	Intra-dermal two fractional dose	Intra-dermal Right upper arm
Measles/MR 1 st Dose\$	9 completed months, 12 months (can be given till 5 year of age)	0.5 ml	Sub-cutaneous	Right-upper arm
JE-1**	9 completed months-12 months	0.5 ml	Sub-cutaneous	Left-upper arm
Vitamin A	At 9 completed months with measles-Rubella	1 ml (1 lakh IU)	Oral	Oral

For Children

DPT booster-1 st	16-24 months	0.5 ml	Intra-muscular	Antero-lateral side of mid-thigh
Measles/MR2 nd	16-24 months	0.5 ml	Sub-cutaneous	Right-upper arm
OPV Booster	16-24 months	2 drops	Oral	Oral
JE-2	16-24 months	0.5 ml	Sub-cutaneous	Left upper arm
Vitamin*** (2 nd to 9 th dose)	16-18 months. Then one dose every 6 months up to the age of 5 years	2 ml (2 lakh IU)	Oral	Oral
DPT Booster-2	5-6 years	0.5 ml	Intra-muscular	Upper Arm
TT	10 years & 16 years	0.5 ml	Intra-muscular	Upper Arm

- *Give TT-2 or Booster doses before 36 weeks of pregnancy. However, give these even if more than 36 weeks have passed. Give TT to a woman in labour, if she has not previously received TT.
- **JE Vaccine is introduced in select endemic districts after the campaign.
- ***The 2nd to 9th doses of Vitamin A can be administered to children 1-5 years old during biannual rounds, in collaboration with ICDS.
- #Phased introduction, at present in Andhra Pradesh, Haryana, Himachal Pradesh and Orissa from 2016 and expanded in Madhya Pradesh, Assam, Rajasthan and Tripura in February 2017 and planned in Tamil Nadu and Uttar Pradesh in 2017.
- \$Phased introduction, at present in five states namely Karnataka, Tamil Nadu, Goa, Lakshadweep and Puducherry. (As of Feb 2017)

Source: https://www.nhp.gov.in/universal-immunisation-programme_pg



Notes



Notes

Primary immunization is given in the first year of age so that the child can be given optimum protection. Any kind of delay in vaccination can increase risk of these infections for the baby. Therefore, timing, order and frequency of vaccination should be done according to the above shown table.

5. Reproductive and Child Health Programme (RCH)

Different components of family welfare programmes are family welfare, maternal and child welfare, child health and safe motherhood. For these the government has developed RCH programme. All these components are implemented under RCH programme. Under this programme, health service are provided to the following target groups:

- 15-49 years of Females (reproductive age)
- Children under the age of 5 years.
- School children
- Adolescent children

Under reproductive and child health programme, related services are provided according to the needs of the people. For this, the health worker is also made efficient by arranging good and proper training. In evaluating this programme, emphasis on the following three things is given:

1. Reducing birth rate
2. Reducing maternal mortality rate
3. Reducing infant mortality rate

For the services available under this programme, the physicians, ANM and citizens carry the joint responsibility so that maximum benefit of these government services can reach to the people.

Under this programme, the following things need attention:

1. The minimum legal age of marriage should be 21 years for the boys and 18 years for the girl. It should be implemented effectively, and strictly.
2. There is a need to convince the people about the importance and usefulness of contraceptive for interval between two children.



Maternal Safety

1. There is a need to strengthen the delivery system in primary health centres/hospitals. Awareness should be created among the people to give child birth here. Hospitals/centres should be encouraged for childbirth by telling the benefits of childbirth in such places.
2. Complications of pregnancy should be reduced by doing home visits and there is need to develop the knowledge of ANM by facilitating in-service training to her.
3. There is a need to make referral service more effective. An expected improvements in this regard can be made by support of women as Anganwadi and Asha sister and the health worker. Integrated efforts can be made to make the programme successful.
4. There is a need to change the mindset of people by giving knowledge about the risk of pregnancy at an early age, at short interval and repeated pregnancy. Only then birth rate can be reduced in India. Through this infant mortality rate could also be reduced.

Infant Mortality Rate

In India, infant mortality rate is very high till date in comparison to other developed countries. The main reasons of infant mortality rate in India are:

1. Severe respiratory infections
2. Diarrhoea
3. No vaccination/vaccination not on proper time
4. Malnutrition
5. Insufficient care of newborn
6. Premature birth and low birth weight baby

Therefore, ANM has to initiate measures to provide ORS, vitamins and vaccines at right time and referral of patients with complications. Especially in the children's diarrhoea, there is an increase in infant mortality rate due to not getting ORS, hence there is need to pay attention to this. There is a need to explain the importance of oral rehydration therapy to the people so that they get the maximum benefit of its facilities.

Overall form of maternal child health, family welfare, child survival and safe motherhood (CSSM) is reproductive and child health programme (R.C.H). Main



aim of this is to reduce birth rate, maternal mortality rate. This programme is now accomplished under the National Rural Health Mission (NRHM), which is an important part of it. It is being implemented in our country since 2007.

Activities of the Programme:

- Antenatal Care
- Maternal and newborn care during labour
- Postnatal care
- Family planning services
- Referral services
- Safe abortion (M.T.P) services
- Investigation and treatment for the control of reproductive system infection
- Mid-wife training services
- Organizing child health camps
- Providing 24 hour's safe delivery services at primary health centres and community health centres.

6. National Family Welfare Programme N.F.W.P.

The increase in population is emerging as a serious problem not only for India but also for the world at large. It is affecting every level of life because the population grows in geometric rate while food production increases in arithmetic rate. As a result, the food production does not increase in proportion to the population, due to which many problems of malnutrition along with starvation are occurring globally. India is the first country in the world that started the National Family Welfare Programme in the year 1952 (from the time of first five-year plan) to get rid of these problems.

Definition

“Family Welfare” is a form of voluntarily adopted way and introspection of living life which is based on couple's responsible decision, elevated emotions and knowledge. It helps in the development of their health, family uplifting and the social development of nation effectively (World Health Organisation-I)



**According to second expert committee of
World Health Organisation 1971**

“Family welfare is a process which helps individuals and couples to fulfil the following objectives”:

- (a) Children should be born by choice and not by chance.
- (b) The number of children in a family should be such that they can be raised properly.
- (c) There should be proper gap between the births of the children so that they can get the time to develop and plenty of mother’s love.
- (d) They can lead a healthy and happy life and ensure appropriate opportunities for the proper development of children.

Population Growth and Status of India

Only 2.4 percent of the world’s land is in India, while 14.6 percent of the world’s population lives here. Here, a child is born in one and a half second, 60 thousand children in a day and 21 million children in a year are born. There are eight million deaths per year. Thus, approximately there is an increase of about 13 million in population per year.

The major reason for population growth is the greater difference between birth rate and death rate.

Note: Detailed information about the family welfare programme is given in Lesson-5.



INTEXT QUESTIONS 4.2

Fill in the blanks:

- 1. The legal age of marriage for boys is years.
- 2. Diarrhoea is one of the main cause of mortality rate.
- 3. Safe abortion services is a part of reproduction and health programme.
- 4. Conception at age by woman can increase the life risk.
- 5. The greater difference between birth rate and mortality rate is the major cause of growth.
- 6. To restore the immunity of diphtheria dosage is given.



Notes

7. National AIDS Control Programme

AIDS occurs due to Human Immunodeficiency Virus (HIV). It spreads through:

- Unprotected sex with infected partner
- Transfer of infected blood or blood products into healthy individuals
- Use of infected needles
- Infected mother to her baby

Various activities of the programme:

- Protecting people from HIV infection.
- Providing safety to blood and blood products.
- Restricting the supply of blood without checking the safety of blood i.e. HIV.
- Arranging HIV investigation.
- Encouraging people for blood donation and storing blood in blood bank by organising blood camps.
- Facilitating health education related to HIV/AIDS disease to the masses by making it effective.
- Providing essential health education to other family members of the patient.
- Arranging rehabilitation for HIV patients and boosting their morale.
- Making informative entertainment arrangements for patients admitted with AIDS so that they remain mentally healthy and stress free.
- Providing spiritual services.
- Controlling sexually transmitted diseases (STD) such as syphilis gonorrhoea etc. and promoting STD diagnosis and eradication services.
- Promoting the use of condoms.
- Providing anti-retroviral therapy (ART) free at centres (medicines to control HIV).
- Providing proper services of voluntary consultation and investigation centres to the people.
- Delivering and promoting “School AIDS Education Programme” in the schools.
- Providing consultation and screening facilities to all pregnant women to prevent HIV infection in child through the mother.



8. National Cancer Control Programme

Cancer is a dangerous disease affecting the community. The count of people suffering from cancer is increasing rapidly. Keeping this in view, the government has designed national programme to cancer control. Cancer is more prevalent in male's mouth, lungs and prostate gland while in female's cervix, uterus and breast.

Main activities of the programme:

- Early detection of cancer.
- Making the arrangements for early screening of cancer.
- Strengthening the cancer treatment facilities.
- Providing effective health education to people for cancer prevention like:
 - (i) Educating women for self-examination of breast
 - (ii) Informing about the harms of taking tobacco
- Arranging palliative care for last stage cancer patients.
- Making proper arrangements of treatment with radiation, chemotherapy etc.
- Training of medical and paramedical staff.



INTEXT QUESTIONS 4.3

Fill in the blanks:

1. The HIV also spreads through the use of needles.
2. Syphilis is a transmitted disease.
3. Providing anti therapy helps in controlling the HIV.
4. In males gland cancer is found more.
5. is a method of treating cancer.

9. National Iodine Deficiency Disorder Control Programme

Goiter disease is caused due to the deficiency of iodine. This disease occurs due to deficiency of iodine in the food. This disease is found only in some parts of India, especially in hilly areas, like Himalaya region etc. In this thyroid gland enlarges. As



Notes

National Health Programme

the disease progresses, the goiter appears like puffed balloon, which causes difficulties in breathing. This disease has emerged as a health problem for people. Government of India has adopted it as national programme.

This disease can be prevented by providing proper health education to the community. The main aims of this programme are:

- Identifying those areas by survey where there is more outbreaks of goiter.
- Emphasizing the use of iodised salt in the affected areas by the Indian government, rather than ordinary non-iodised salt.

Use of Iodized salt is necessary for the prevention of Goiter disease.

10. National Blindness Control Programme

Blindness is a serious public health problem for India from the social and economic perspective. Due to this it was included in the national control programme by the Indian Government in the year 1976 and it has been widely implemented throughout the country by combining it with the Trachoma control programme. Now the trachoma control programme has become the part of the blindness control programme.

The policy made by the Indian government for the control of blindness in the country is as follows:

1. Provision of health education in the community.
2. Formation of mobile eye unit for treatment, which can explain and convince people for eye-check-up.
3. Proper provision of permanent health service for eye care
4. To operate cataract timely.

Providing proper health education for the health of eyes is an integral part of this programme. Proper nutritious diet to enhance eye sight in which there is adequate amounts of vitamin A and vitamin D (such as given leafy vegetables, mango, carrot, tomato, pumpkin, papaya etc.) should be advised to eat. Children should be given vitamin A supplements regularly. It is also necessary to check the eyes from time to time by skilled eye specialist.

The government of India has provided the following facilities for the operation of the programme.



1. Formation and development of mobile eye unit.
2. Establishment of regional eye science institute
3. Special facility of eye treatment in medical college hospitals, district hospitals and primary health centres.
4. Special training arrangements for doctors, eye assistants, technicians and nurses for the operation of cataract.
5. To arrange the cataract operation by replacing the old method of operation of cataract with the modern method of surgery.
6. To construct and expand separate eye ward, operation theatre in the district hospitals.
7. To arrange advanced training of eye surgeons and supply of necessary equipment to them.
8. To find out eye deformity, refractory related disorders found in children and treat them successfully.
9. To prepare records by making a list of those visually impaired patients who are completely blind (by both eyes) so that their necessary rehabilitation can be arranged.

For these activities co-operation is received from the following voluntary organisations who are playing significant role in it:

1. World Bank
2. Lions International
3. Rotary International

Care of eyes should be done properly as it is an extremely important sensory organ.

11. National Programme for Prevention and Control of Deafness

In India according to WHO estimate, approximately 63 million people are suffering from deafness. According to NSSO, presently, 291 people in one lakh population are suffering from severe deafness. Due to deafness, the victim has to face severe physical and economical loss. Most people are suffering from deafness of one ear or less deafness.



Notes

Objective of the programme:

1. Preventing deafness caused due to injury and any other illness.
2. Early detection, diagnosis and treatment of ear problems responsible for deafness.
3. Medical rehabilitation of all age groups suffering from deafness.
4. Strengthening the existing inter-regional relations for the continuation of the rehabilitation programmes for the deaf people.
5. Providing equipment, material and training personnel for ear care services to develop institutional ability.

Activities of the programme

1. Management, training and development – early identification of hearing disorders and deafness.
2. Providing facilities and services for early treatment of deafness.
3. Building efficiency – providing ENT related training in hospital, community health centre and primary health centre.
4. Rehabilitation Related Services – setting up camp and providing health care for early diagnosis of deafness/problems related to low hearing.
5. Creating deafness awareness through health education.

12. National Leprosy Eradication Programme

The main objective of this programme is to eradicate leprosy. Under this the following activities are covered:

1. Finding out leprosy patients as soon as possible.
2. Providing free diagnosis, treatment and medicines by the primary health centres in the villages and in the cities by health centres and hospitals.
3. Encouraging the patient to take medicines regularly for a specified time.
4. Providing health education with proper and regular treatment for the eradication of this disease.
5. Providing medical rehabilitation service.

The right and the best way to treat leprosy is the early detection of this disease and doing regular and complete treatment.



INTEXT QUESTIONS 4.4



Notes

Mark right (✓) or wrong (×)

1. Operating cataract is the main part of National Blindness Control Programme.
2. According to the survey, mostly people are suffering from deafness of both ears.
3. Early detection of leprosy disease, regular and complete treatment is the best way to treat it.
4. Use of iodized salt is necessary for the prevention of goiter disease.

13. School Health Programme

School Health Programme is a programme for school health services under National Health. This programme is specially focused on school children. The main goal is to improve the physical and mental health of children. Apart from this, improve their personal hygiene, nutrition, and providing safe drinking water, Yoga facility, environment cleanliness etc. come under this. Simultaneously providing appropriate counselling services to adolescent boys and girls is also a major part of the programme.

Components of School Health Programme

- General Health check-up
- Anemia/Nutritional status check-up
- Personal hygiene check-up such as teeth examination, status of skin, eye examination etc.
- Consultation services for behavioural problems
- Deworming
- Immunization – according to National Immunization Programme
- Providing mid-day meal.
- Distribution of vitamin ‘A’ and ‘Iron-Folic Acid’ tablets together with local health workers.
- Encouraging regular practice of yoga in schools
- Health education
- Providing referral services



14. National Rural Health Mission – NRHM

The framework and methodology used to provide rural health services in India was unable to treat health problems of India in a way it should have been. Hence, Government of India launched a new programme called National Rural Health Mission in the year 2005 (April). Its main aim is to provide basic health services to the villagers conveniently.

Health workers engaged in achieving mission goals at village level are:

1. ASHA Didi
2. Trained Dai/Mamta
3. Anganwadi Worker (AWW)
4. Village Health Guard (VHG)
5. Male and Female Health worker (MFHW)

With this mission, rural health worker were selected as ASHA and placed in that village where she is resident. That means, the village where ASHA worker resides in, she works for that village only. She is completely unsalaried but on the basis of her work capacity, incentive amount is paid to her. She does the first contact at the village level and by helping the villagers to get the complete benefits of the health services, she tries to fulfil the hopes of the people of the village. There is one Asha works for the population of 1000 and her age should be between 25-45 years. She must be minimum 8th standard passed.

Objectives of National Rural Health Mission

1. Providing door to door health care delivery and making their complete benefits accessible to people.
2. Access to the deprived population of the community who used to have difficulty in getting health care.
3. By promoting ancient medicine system such as Ayurveda, Unani, and Homeopathy (AYUSH) to deliver maximum benefits to the public.
4. Raising the living standards of the villagers.
5. Bringing out expected improvement in factors affecting health of villagers like – environment, cleanliness, drinking water, nutrition etc.



The main goals of National Rural Health Mission

1. Reducing maternal mortality rate (MMR) and infant mortality rate.
2. Restraining the population of country that means population stabilization.
3. Developing reproductive and child health (RCH) services.
4. Controlling of infectious and communicable diseases.
5. Strengthening of immunization work.
6. Prevention and effective solution of malnutrition.
7. Connecting the ancient system of medicine to the mainstream of the community and to deliver its benefit to the people.
8. Implementing health education effectively.
9. Implementation of Janani Suraksha Yojna (JSY) correctly.

Some Major Programmes of the National Rural Health Mission

(i) Rural Health, Sanitation and Nutrition Day Programme (VHSND)

Under the National Rural Health Mission, the concept of providing primary health services to the last person of the village is envisaged. Under this, organizing rural health, sanitation and nutrition day is an important strategy. Here, people of the community can get preventive and promotive health and nutrition services.

This day is organized once a month at Anganwadi Centre level through which services related to health, nutrition and clean drinking water are implemented with the participation of Panchayati Raj.

Objective of Rural Health Sanitation and Nutrition Day

1. Reducing maternal mortality rate and infant mortality rate.
2. Preventing infectious diseases under NVBDCP and reducing the number of people suffering from it.
3. Reducing the malnutrition rate.
4. Highlighting the preventive and promotive dimensions of health among the masses.



Notes

Services provided in the rural health, sanitation and nutrition day -

1. On the fixed day, ASHA worker, anganwadi sevika and sahayika collect women and children of village at Anganwadi centre.
2. ANM and other health workers provide all the health and nutrition related facilities at the Anganwadi centre on time.
3. All health and nutritional information is provided through health education. Apart from this people are made aware for check-up of pregnant woman, children immunization, health education of adolescent girls and boys, registration of births and deaths.

(ii) Janani Suraksha Yojna (JSY)

The main objective of NRHM is to reduce maternal mortality rate (MMR) and infant mortality rate (IMR). In this direction, Janani Suraksha Yojna (JSY) is a new initiative. This scheme is a revised form of the National Maternal Benefit Scheme (NMBS).

The Janani Suraksha Yojna has the following objectives:

1. Reducing maternal mortality rate (MMR) and infant mortality rate (IMR)
2. Increasing the number of hospital deliveries in BPL (Below Poverty Line) families.



INTEXT QUESTION 4.5

Fill in the blanks:

1. The main goal of school health programme is to improve and mental health of the school children.
2. One ASHA Didi works for the population of
3. The main goal of national rural health mission is to reduce mortality rate and infant mortality rate.
4. To re-establish the immunity for diptheria dose is given.



WHAT HAVE YOU LEARNT

In this lesson you have received information about various health programmes which are run by government to eradicate and control of life-threatening diseases. You have also learnt as how the government has started various programmes for the diagnosis and control of health-related problems which are very important to the country.



TERMINAL EXERCISE

1. Describe the main functions of revised national TB control programme.
2. Write down the various activities of reproductive and child health programme.
3. Name all the national health programmes and explain any of these two programmes in detail.



ANSWERS TO INTEXT QUESTIONS

4.1

1. (ii)
2. (iv)
3. (i)
4. (iii)

4.2

1. 21
2. Infant
3. Child
4. Early
5. Population
6. Booster

4.3

1. Infected
2. Sexually
3. Retro-viral
4. Prostate
5. Chemotherapy/Radiation



Notes

**Notes****4.4**

1. Right
2. Wrong
3. Right
4. Right

4.5

1. Physical
2. 1000
3. Maternal
4. Iron Folic Acid (IFA)

Suggestions/Activities

1. Students shall participate in any one programme and submit the report.
2. Students shall participate in pulse polio immunization camp and prepare the report.



5

FAMILY WELFARE PROGRAMME

Increasing uncontrolled population is a matter of concern for India. Increasing population engulfs our resources and development. Today we are world's most populated country after China. That day is not far away when we will move forward from China in terms of population. Therefore, programmes on family welfare are needed which can help in controlling the rise in population.

In the family planning programme we devise such methods by which the gap between the births of two children can be created or birth can be controlled. In this lesson, we will discuss the importance, need and methods of family welfare programmes.



OBJECTIVES

After studying this lesson, you will be able to:

- understand the necessity and importance of family welfare programmes;
- generate awareness about various options under these programmes to the general public;
- describe various family planning options;
- suggest ways to keep gap between the births of children;
- educate common people as well, about family welfare programmes.

5.1 IMPORTANCE OF FAMILY WELFARE PROGRAMMES

We observe or hear around us that during pregnancy women suffer from anemia, post-partum hemorrhage or many other complications due to giving birth to more



Notes

children, which incidently can also be the cause of their untimely death. In malnourished mother there can be infection of sexual organs during reproduction. Such infections remain untreated for a longer time, mainly due to social shame. Unfortunately, they prove fatal for the affected women. This is one of the main reasons for high maternal mortality rate in the rural areas.

Apart from this, pregnant women are also at higher risk of hypertension (high blood pressure), eclampsia, pre-eclampsia. These too, often get ignored or do not get the right treatment on time, which results in the rise of maternal mortality rate.

During illegal, unsafe abortions, infected abortions and deliveries by untrained midwives (which are very popular in this country) maternal mortality rate increases significantly.

The correct age for conceiving is 20 to 30 years. In conceptions before 20 years and after 30 years many types of gestational complications can increase. By the measures of contraception we can overcome unwanted pregnancy and its related complications.

Unsafe methods of delivery, low level of immunization, ignorance regarding immunization, some superstitions and blind beliefs, diarrhea, pneumonia and some other fatal infections; all these are the reasons for high maternal and infant mortality rate in our country.

All these problems can be controlled through the appropriate family welfare schemes. Therefore, proper arrangements for antenatal and post-natal care should be made.

The motive of family welfare programmes is to have a small family. The number of children should not be more than two. Also the quality of the living standard of the people should improve.

Child life and safe motherhood have been integrated, and includes the following aspects:

Safe Motherhood

In this, emphasis is given to the following points:

- (i) Measures to avoid unwanted pregnancy.
- (ii) Gap of at least 3 to 5 years between two pregnancies.
- (iii) Determination of the number of children as per the need and income in the family.

Family Welfare Programme

- (iv) Infection in the reproductive system – This is the biggest reason for women’s illness. Therefore, intensive campaign is being run against this.
- (v) Steps have been taken towards quality deliveries. Efforts have been made in services side also and the scope of service is also being carried out to complete female health after delivery.

The entire programme is being made consumer centric so that people can get maximum benefit from it.

Universal Immunization Programme

Under this programme, we can eradicate many fatal diseases of infants through vaccination, thus can reduce infant mortality rate. Immunity from disease can reduce disease related to malnutrition of children. Apart from immunization, mortality and malnutrition can also be reduced through ORS in case of diarrhea.

Some Important Points

- By using healthy measures of motherhood, the baby remains alive and healthy. At the same time the mother also reaps maximum advantage of sound health.
- While making sexual intercourse the couple should ensure that there is no fear of sexually transmitted diseases or unwanted pregnancy.
- Pregnancy is a normal and natural process. Its correct way keeps both, the mother and the baby healthy. Only due to wrong methods it causes risk and crisis.
- Conceive only when there is need and desire of child. There are many contraceptive measures available for you as per your need.
- Prevention and treatment management of infertility and reproductive system infections is the part of the family welfare programme.
- Management of vaccination and treatment of women and children is also a part of this programme.



INTEXT QUESTIONS 5.1

Mark Right or Wrong (√)/(×):

1. Deliveries in the hospital should be encouraged. ()



Notes



Notes

Family Welfare Programme

2. Pregnant woman should be given three doses of TT at the interval of one month. ()
3. The correct age of conception is 16 years to 35 years. ()
4. The aim of family welfare programme is to control population growth. ()
5. Between two pregnancies, the gap of 1 year is appropriate. ()

5.2 NEED FOR FAMILY WELFARE PROGRAMMES

Population of our country is increasing rapidly. If the family welfare programmes will not be implemented successfully, available resources will be finished soon. Through this programme we will be able to control the increasing population by reducing the birth rate. Family Welfare Programmes are very essential for risks of increasing population and conservation of available resources. There is a need of family welfare programmes as:

1. It is necessary for reducing the birth rate.
2. Necessary for the control of the population.
3. Necessary for improvement in living standard.
4. Necessary for reduction in maternal and infant mortality rate.
5. Necessary for healthy mother and healthy child.
6. Necessary for the prevention of unwanted pregnancy.

5.3 FAMILY PLANNING

Methods of contraception: These are the methods, through which couples can avoid conception. There are many ways of contraception. By explaining them to the people, we can provide them according to their need and convenience.

Let us now discuss the following measures:

We divide contraceptive measures mainly into two parts:

5.3.1 Temporary Methods

Such method which can be stopped as per desire and can be conceived again. It can be used for keeping the gap between two children. Now the unwanted pregnancy can be removed even by MTP. First of all, let's understand some essential things about temporary methods:



1. Barrier Method

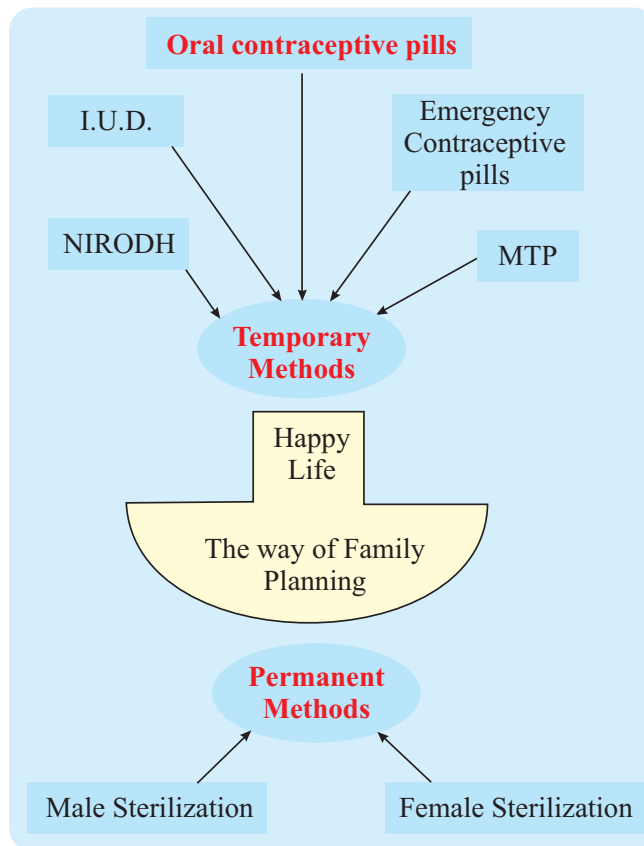
A. Physical Barrier

For this mainly four things are used:

1. Male condom – Nirodh
2. Female condom
3. Diaphragm
4. Vaginal sponge

B. Chemical Barrier

1. Cream
2. Foam
3. Suppository



C. Mixed Barrier

1. Spermicidal condom
2. Spermicidal Diaphragm



Notes

2. Intra Uterine Contraceptive Device (IUCD)

- Loop
- Copper-T
- Hormonal Copper-T

3. Hormonal Drugs

These drugs cause obstructions in ovulation. There are many such types available in the market:

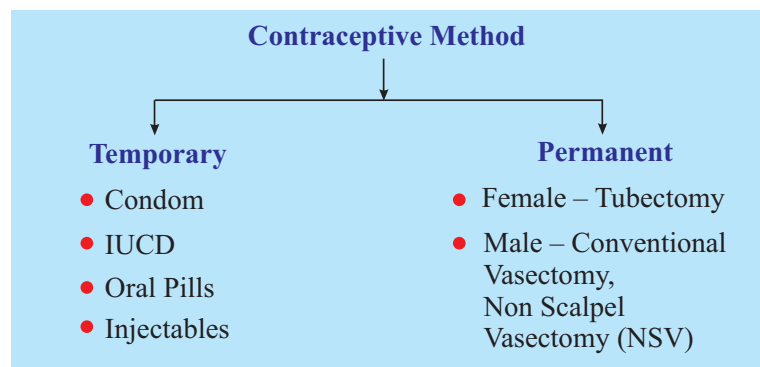
1. Oral pills: combined pills, mini pills
2. Injection: Depo Provera etc. which does not let pregnancy for upto three months.
3. Subdermal Implant: It goes slowly in our body through our skin and prevents pregnancy.

5.3.2 Permanent Methods

After such methods, woman cannot conceive again. These measures are for those people whose family have been completed. These measures are:

A. Male sterilization

1. Normal – Vasectomy
2. NSV (Non-Scalpel Vasectomy) without incision, without stitching, sterilization



B. Female Sterilization

1. Open tube ligation
2. Laparoscopic tube ligation

5.4 TEMPORARY METHODS

Let us now look at each method in detail-

1. Male Condom

- Physical barrier contraception are widely used by men. These are available in the market by famous names like Nirodh, BILLS, Masti etc.
- It is made up of cylindrical round latex rubber. This is used during sexual intercourse. It is designed in such a manner that it fits perfectly on the penis.
- It prevents semen from getting accumulated in the vagina.
- It should be removed every time after use. It should be destroyed after sexual intercourse.

Effectiveness

When it is used correctly, along with contraceptive, it is very effective in preventing sexually transmitted diseases.

Precaution

To prevent the semen from falling, it should be removed carefully. It is easily found in the market as dry or water based lubricant.

Benefits

- Cheap, easy to carry.
- Protection from the risk of AIDS/HIV/STD
- This reduces cervical lesion or infection.
- It is convenient to use and it can also be used with other methods or foam tablets.

Disadvantages

- Some couples feel less pleasure during sexual intercourse.
- It can also be failed if it is not used properly and due to leakage.

2. Female Condom

This is a mechanical barrier, made up of polyurethane coating and it is inserted into the vagina before intercourse. There are two spheres, one is inserted deeper into



Notes



Notes

the vagina and the long flexible ring remains outside the vagina which covers the outer sexual organ.

Advantages

- If a man refuses to wear condom, at that stage the woman herself can start this.
- It protects against unplanned pregnancies and infectious diseases.



Fig. 5.1: Female condom

Disadvantages

- High cost
- Misconception in using this method.

3. Diaphragm

It is a sex organ barrier made up of synthetic rubber or plastic (5-10 cm in diameter) and it is inserted into the vagina to cover cervix before intercourse. This prevents the penetration of the sperms in the uterus and can be used as the combination of spermicidal jelly.

Disadvantages

- Frequent infection and more failure.
- Cannot be kept within the vagina for long period

4. Vaginal Sponge (available in the form of Today)

- It is of umbrella shape, made up of polyurethane sponge and it is put into the vagina to cover the cervix. This can be pulled out with the help of loop attached to it. It is easy to use.
- It prevents penetration of semen into the cervix.
- This absorbs ejaculated semen and is spermicidal.

Disadvantages

- Expensive



- Rejected by adult women
- Have to learn the method to use it otherwise it may fail.

5. Intra Uterine Contraceptive Device (I.U.C.D.)

- This is a small device with flexible polyethylene that fits into the uterus. It prevents conception.
- It is famous due to being effective for a long period.
- For women copper-T serves as safe, more reliable, effective and prolonged contraceptive.

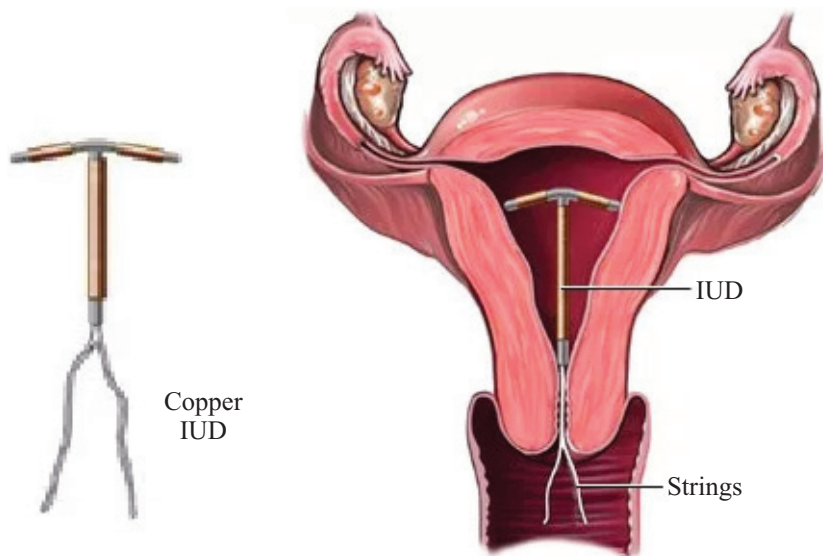


Fig. 5.2: Copper-T

First Generation IUD

This IUD is medicated and as long as it is desired, it is kept in the uterus even for a long time. Now it is used as a more effective contraceptive. Second generation IUD is also available.

Second Generation IUD

This is medicated and copper is wrapped on it, Different types of copper- T like copper-T-200, Copper-T-220, Copper-T-250, multilayered copper-T-375 (copper layer area per square mm) are available. Copper makes it effective and prevents implantation of ovum. This reduces activity of sperm and its survivor.



Notes

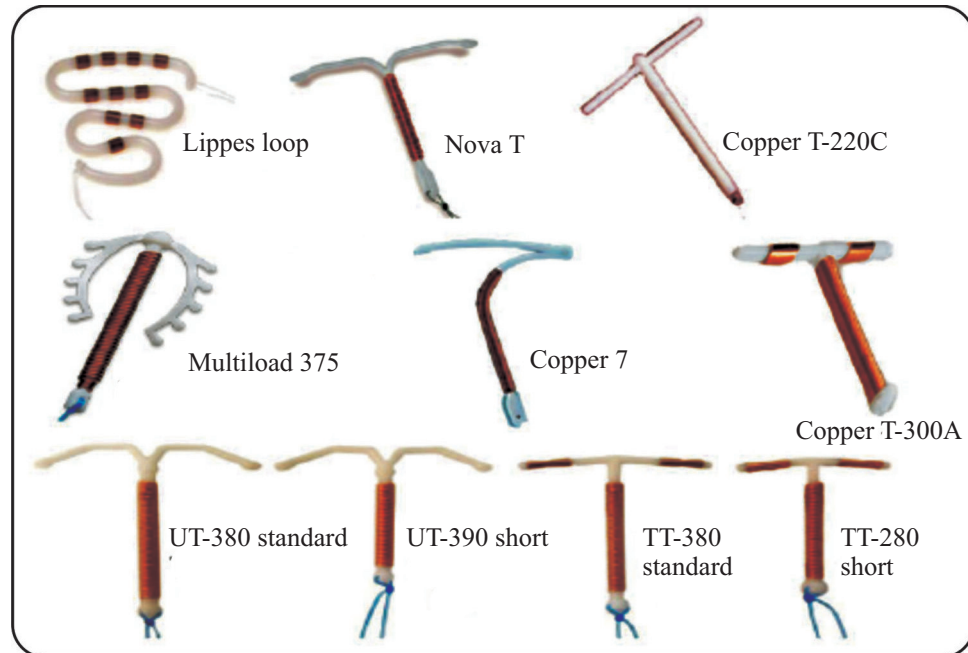


Fig. 5.3: Different type of Copper-T

Advantage

It fits easily. It causes less pain and bleeding is also less. The expulsion rate is low and does not interfere with sexual activity. Copper-T is applied for 3 years and multi-load is for 5 years.

Disadvantage

Its use can cause bleeding with pain. In some cases menstrual cycle becomes irregular and ectopic pregnancy also occurs.

6. Oral Contraceptive Pills (Hormonal Contraceptives)

Oral contraceptive pills are to be used daily. These prevent ovulation and no possibility of getting pregnant from it. Following types of oral contraceptive pills are available at family welfare centres:-

- Combined pills
- Mini pills
- Post-coital contraceptive (new technique)



Hormonal contraceptive pills are more effective in contraception and they are widely used by women of the entire world. For women, up to the age of 35 years this is a reliable way of spacing between children.

Combined Pills

In this small doses of estrogen and progesterone (female hormones) are there. It is very effective contraceptive if taken regularly. It should be taken from the fifth day of menstrual cycle and should be continued till 21st day. Under family welfare programme it is being supplied by the name of Mala-N (free) and Mala-D (minimal rates) by Govt. of India.



Fig. 5.4: Oral contraceptive pills

Mala-D has 28 pills (21 Hormonal-white and 7 hematinic, brown red color). These seven pills help in increasing blood.

Advantages

- It has many health benefits. It helps in reducing menstrual blood flow and preventing anaemia.
- Protection from ovarian cancer.
- Immediately after discontinuous of these pills, women are able to conceive again.



Notes

Mini Pills (Progesterone Pills)

It does not contain estrogen at all. Rather it has small doses of progesterone (0.3 mg norethisterone or levenogesterel)

Method of working

- It prevents ovulation.
- This makes the cervical mucus tenacious.

Advantages

- Low rate of failure
- Reliable and cost effective
- Freedom in sexual activity
- No unwanted effect of estrogen

Disadvantages

- Increases weight
- Can reduce milk secretion
- Can cause heart attack
- Thrombosis may occur

Avoid its use in the following conditions:

- High blood pressure
- Diabetes
- Breast cancer
- Jaundice (yellow eyes)
- Heart disease etc.

7. Subdermal Implants

- These are six hormonal capsules. These capsules are thick, flexible and made up of silicone. These are implanted under the skin over the arm.



Effectiveness

- It remains effective for 5 years. It is safe and reversible.
- Depot formulation (medroxy progesterone acetate)
- Injectable
- It prepares synthetic hormones and this circulates in internal muscle once in every three months. It is given first time during first five days of menstrual cycle.
- No reduction in milk secretion.

The date of subsequent dose may be remembered from MPA card provided.

Method of Working

- Prevents ovulation
- Thickens cervical mucus
- Makes implantation of fertilized egg difficult.

8. Hormonal Vaginal Ring (Only Progesterone Ring)

- This works locally.
- This should be inserted for 3 weeks and should be remove for 1 week.

9. Centchroman Pill (Saheli)

- This is non-hormonal, non-steroidal pill which is taken by women once a week for contraception.
- Activity period – one week

Do not use it in the following conditions:

- If the liver is not functioning properly
- Polycystic ovarian disease
- Hypersensitivity
- Allergy
- Tuberculosis



Notes

Special Precaution

- If there is no menstrual period for more than 15 days, test for pregnancy.
- Take the left dosages as soon as possible and follow the normal course.

Method of Use

- Take first dose (pill) on first day of menstrual cycle and second dose on fourth day. Afterwards take one pill twice a week for three months on same days. From fourth month take one pill once a week of same first pill day.

Method of working

Prevents embryo formation.



INTEXT QUESTIONS 5.2

Fill in the blanks:

- Multiload copper-T (Cu-T) is inserted in uterus for
- Physical barrier methods prevents deposition in vagina.
- Male sterilization is called as
- Oral contraceptive pills are method of family planning.
- Names of pills supplied under the family welfare programme are and

5.5 PERMANENT METHODS (STERILIZATION)

Sterilization is permanent method of family planning in which a simple operation is done to prevent the ability to give birth permanently.

To regulate the size of the family for family planning (in personal form/according to the couple's requirement) it is executed on the basis of written consent of the couples.

Male Sterilization

It is known as "vasectomy". This is the permanent method of family planning for those males who do not want more children. This is safe, more effective, and easy family planning process. It involves a minor surgical procedure which takes only 20 minutes. In this complications are very less.



New Vasectomy Method (“No Scalpel” Technique)

This is very simple and easy procedure. There is no need of stitching in it. There is very less pain in it, no bleeding in the practical and re-canalization can be performed. Only few people know about this method in male vasectomy and only few people use this new method. It should be widely publicized by the health workers for the success of this method.

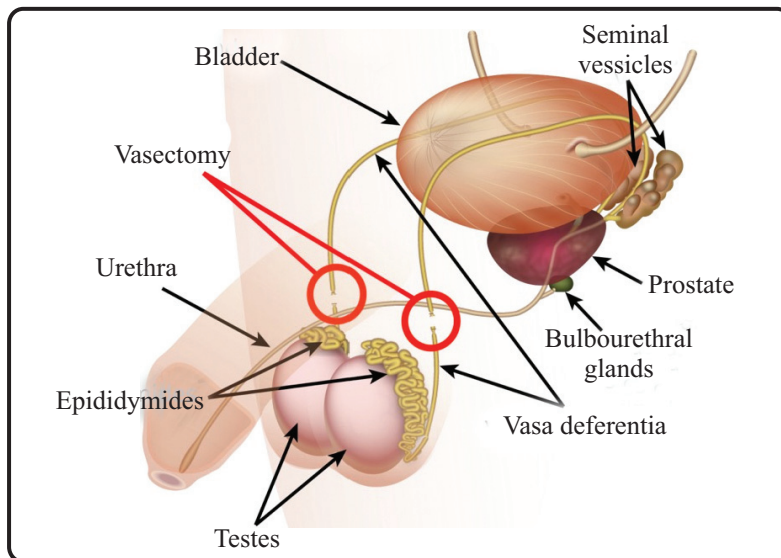


Fig. 5.5: Male Sterilization

Female Sterilization

This is known as “Tubectomy” or tube ligation. This is the permanent method of family planning for those females whose family has been completed.

How this works

Fallopian tubes are either blocked or cut. After tubectomy menstrual flow comes, but they neither conceive and nor give birth to the child.

Advantage

- Very effective
- No interference with sexual activity.
- No harm to the body.



Notes

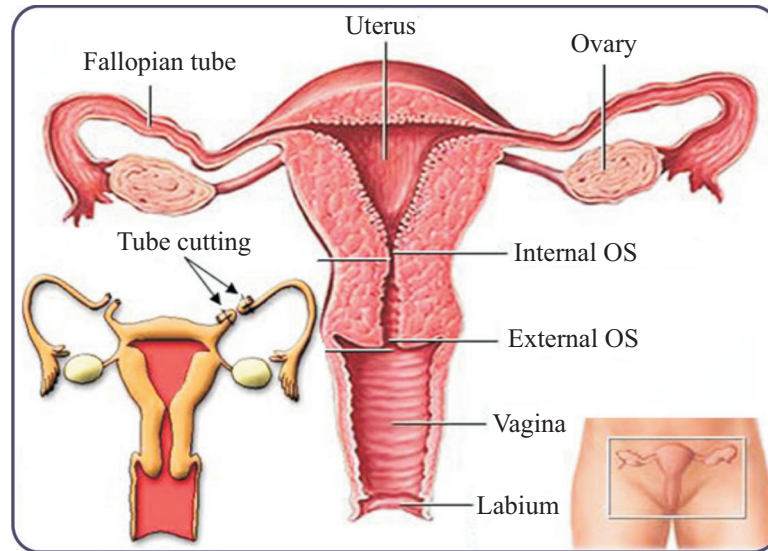


Fig. 5.6: Female Sterilization

Disadvantage

- Re-canalization is very difficult.

5.6 POST COITAL CONTRACEPTIVE (EMERGENCY CONTRACEPTIVE)

Emergency contraceptive is used by females to protect unplanned pregnancy, conception after failure of contraceptive or conception after unprotected sex.

According to the emergency following contraceptives are available:

- Emergency contraceptive pills
- Emergency insertion of I.U.D.

Emergency Contraceptive Pills (Each pill is of 0.5 mg Levonorgestrel)-I-Pill

Two pills within 72 hours after unprotected sex and after 12 hours second dose should be taken.

Emergency I.U.D. Advantage

- More effective than emergency pills
- Can be kept for long as contraceptive

Family Welfare Programme

- Protects from unwanted pregnancy
- Economical

Method of Use

- For contraception apply for 5 days after sexual activity.

5.7 CAFETERIA APPROACH

Today by the grace of our scientists, there are so many measures of contraception available that we can provide the contraceptive methods as per the requirement and convenience of every person. Like in a cafeteria we order to eat as per our wish, in the same way we can choose the methods of contraception according to our need and interest. Someone might like condoms while others copper-T. Some feel comfort in oral contraceptive pills and some in injection. Someone needs permanent method, while some may opt for subdermal implant. Any method, if it provides contraception and helps in population control then it is the best.

5.8 BIRTH SPACING BETWEEN TWO CHILDREN

For mother and child health, it is necessary to have gap of at least 5 years between the births of two children. Repeated pregnancy and giving birth to a child causes bad effect on mother's health. If this gap is very less, the mortality rate of both mother and infant increases. Having more children also reduces the physical and mental development of the children in the womb and after the birth.

Birth Rate

The birth rate is the total number of live births per 1,000 in a defined population in a year or period.

$$\text{Birth Rate} = \frac{\text{Total number of live births in a year}}{\text{Total population in that year}} \times 1000$$

Crude Birth Rate (CBR) is the number of live births per year per 1,000 mid-year population.

$$\text{Crude Birth rate} = \frac{\text{Total number of live births in a year}}{\text{Estimated population at mid-year}} \times 1000$$



Notes



Notes

Infant Mortality Rate (IMR)

IMR is the number of deaths per 1,000 live births of children under one year of age for a given region.

$$\text{IMR} = \frac{\text{The no. of children dying under one year of age in a given year}}{\text{No. of live birth in a given year}} \times 1000$$

Maternal Mortality Ratio (MMR)

Maternal mortality ratio is defined as the number of maternal deaths per 100,000 live births due to causes related to pregnancy or within 42 days of termination of pregnancy, regardless of the site or duration of pregnancy.

$$\text{MMR} = \frac{\text{(Estimated) No. of maternal deaths in a given year}}{\text{(Estimated) no. of live births in a given year}} \times 100,000$$

Maternal Mortality Rate

It is defined as the number of maternal deaths in a given period per 100,000 women of reproductive age during the same time period.

Maternal mortality Rate =

$$\frac{\text{No. of maternal deaths per population in a year}}{\text{No. of women of reproductive age during the same time period}} \times 100,000$$

5.9 MEDICAL TERMINATION OF PREGNANCY (MTP)

On April 1, 1971, the MTP Act was passed in the Indian Parliament, in which the old rules were amended to make new more safe and easy rules in relation to abortion.

1. Abortion (pregnancy upto 20 weeks) should be done according to the supervision and instructions of the qualified physicians.
2. Abortion can be done only in government hospitals or government approved centres.
3. Only registered medical practitioners having experience in gynaecology and obstetrics can do abortion.
4. For abortion of more than 10 weeks consent of two medical practitioners is necessary.



5. Written consent of the female undergoing abortion is required before abortion. But if female is minor under age or mentally disabled then guardian's consent is necessary.

Some important facts about M.T.P.

1. If conception occurs due to rape, failure of contraceptive method or is dangerous to mother's health or some congenital deformity in the fetus or the woman is mentally challenged, in such situations, there is provision of abortion.
2. It should be done within 20 weeks – after that abortion is illegal. Abortion of pregnancy, between 10 weeks and 20 weeks should be done with the consent and co-operation of two physicians.

Who can do M.T.P.

- Only registered medical practitioners having experience in gynaecology and obstetrics can do abortions.
- For abortion of more than 10 weeks consent of two physicians is necessary.

Place of conducting M.T.P.

- Abortion can be done only in any government hospital or government approved centre.

Remember

1. MTP is not a method of contraception.
2. Abortion done by right person at the right place is necessary for safe abortion. This can reduce septic abortion and maternal mortality rate.

Role of Health Worker

Encourage people to have gap of 3 to 5 years between births of two children.

Advice various methods for prevention of unwanted pregnancy at the personal level to use them as per their interests and needs.

Help couple to choose the best method of family planning.

Encourage male sterilization instead of female sterilization as it is easy and an effective procedure.

Give consultation on benefits of small family and its contribution to the country.



Notes

What Health Worker Should not do

1. Must give necessary advice of abortion but he/she himself/herself does not do abortion.
2. Do not advice use of IUCD before the birth of first child.
3. Advice abortion only in helplessness – not like fashion.
4. Each contraceptive method has some advantage and some disadvantage – give them full information – don't hide anything.

**INTEXT QUESTION 5.3**

Fill in the blanks:

- (a) Female sterilization is known as
- (b) Vaginal sponge is present in the market in the form of
- (c) In generally the second generation IUD is used.
- (d) For abortion more than weeks consent of two physicians is necessary.
- (e) Spacing gap between births of children promotes health of and

**WHAT HAVE YOU LEARNT**

According to the expected criteria, the medium of keeping family size limited is various methods of family planning. In this chapter temporary and permanent methods to control birth have been explained in detail. It is also discussed that how to avoid unwanted pregnancies. To avoid unplanned pregnancy, emergency contraceptive methods have also been mentioned. It is also told that cafeteria approach selects most suitable method of contraception. The importance of consultation has also been discussed to encourage contraceptive methods.

**TERMINAL EXERCISE**

1. Name the temporary methods of family planning. Explain any one of these.
2. Discuss about post coital contraception.



3. Describe non-scalpel vasectomy.
4. What do you understand by birth interval?
5. Write rules of M.T.P.
6. Write about safe motherhood programme.
7. Write about female sterilization.
8. Highlight the need of family welfare programme.



ANSWERS TO INTEXT QUESTIONS

5.1

1. Right
2. Wrong
3. Wrong
4. Right
5. Wrong

5.2

- (a) 5 years
- (b) Semen
- (c) Vasectomy
- (d) Temporary
- (e) Male-D and Mala-N

5.3

- (a) Tubectomy
- (b) Today
- (c) Copper-T
- (d) 10 weeks
- (e) Mother and Child

Recommended Activities

1. Observe all types of family planning methods by visiting a family welfare hospital.
2. Encourage and consult qualified couples to accept family welfare services.
3. Make a report of those couples who have already adopted family planning services after knowing the response.



DUTIES AND RESPONSIBILITIES OF THE HEALTH WORKER

In the last chapter, you have studied about several schemes operated by government under family welfare program. Health workers play an important role in delivering the health services to people in proper manner and in making several national health programmes successful. Skillful, efficient and trained health workers can only do their duties and responsibilities properly in various health programs. In this chapter, you will learn about responsibilities and specific duties of the health worker.

Usually the entire health system works as a team. The efficient team work is the one where all the team members work together and help each other. The role of each member in this team is important but the health worker plays an utmost important. In other words, no success can be achieved in these programmes without their role. The places where qualified, skilled and trained health workers are utilized in a proper manner, their health parameters have improved significantly. Their role is very important in ensuring continuous availability of health services to general public.



OBJECTIVES

After studying this lesson, you will be able to:

- explain the important duties and responsibilities of health worker;
- create awareness about the information and benefits related to national health programmes to the people;
- report and record data related to various national programmes;
- collect the desired data for evaluating;

Duties and Responsibilities of the Health Worker

- Help the health programmes run smoothly by giving their contribution to the government and non-government organizations.

6.1 DUTIES OF THE HEALTH WORKER

A health worker by associating with government and non-government organizations keep available different services related to various health schemes to all people in the community. These services are as follows:

- Vaccination to mother and child.
- Informing importance and ways to have balanced diet.
- Help in maintaining nutritional level of mothers and children.
- Delivering health services to public during epidemic.
- Telling preventive measures to avoid them.
- Encourage for vaccination etc.
- Informing about the importance of breast feeding
- To make available other health services

Qualifications of a Trained Health Worker

A trained health worker must fulfill the following criteria:

1. He/she must have completed one year training programme from any state/central government recognized institute.
2. He/she must pass at least 10th class.
3. He/she must have good communication skills so that they can convey message effectively.
4. Health worker should be intelligent and soft spoken so that people can interact happily and comfortably.
5. A health worker is supposed to work for a community of at least 1000 persons and they should preferably belong to same community so that people can feel comfortable and connect easily.
6. He/she should make acquaintance and be in regular contact with ANM, employees of primary health care centre, PWD, water supply and block workers so that related work can be completed easily and smoothly.
7. Health workers should behave in such a way that community population should feel that they are always ready to help them and provide right and proper advice related to health and prevention as and when required.



Notes



Notes

6.2 RESPONSIBILITIES OF THE HEALTH WORKER

1. To make road map of the area

Health worker should necessarily make a road map of their area before starting the work. This will make them convenient in working and preparing report of that area. They should definitely mention about temples, mosques, community hall, houses, drains, well and other public places of that area. People usually gather at public places so these places should be necessarily included in the map.

2. Survey of homes

During house surveys health workers should keep the following things in mind:

- How many total households are there?
- How many family members are there in those houses?
- Educational status of family members.
- How many joint families are there in the house who make food together? If food is made at two different places in a house, it should be considered as two families.
- How many children are under the age of 5 years?
- How many adults are there and what is their educational qualification?
- How many family members go to school or college for studies?
- Is there any person with disability in the family?
- Health worker should collect and retain the data so that this information could be utilized whenever required.

S.No.	Name	Relation with the head of the family	Age	Gender	Occupation	Vaccination- BCG, DPT, Polio, Hepatitis, Measles MMR



Notes

List of House-Survey

- (i) Village/Area:
- (ii) Block/House no.....
- (iii) Head of the family
- (iv) Type of the family
- (v) No. of family members
- (vi) Total annual income of family
- (vii) No. of rooms in the house
- (viii) Which of the following items are available in the house?
 - Electricity
 - Radio
 - T.V.
 - Refrigerator
 - Computer
 - Cassette/CD Player
 - Telephone
 - Bicycle/scooter/car
 - Clean toilet
 - Domestic gas
 - Source of drinking water – Hand Pump/Pond/Tap water
- (ix) History of diseases in the family:

S.No.	Name	Past illness/Hereditary diseases	History of any cured disease



Notes

- (x) Method of sewage system
Use of lavatory – Yes/No
Type of lavatory – Manual cleaning/toilet with pit / flush type toilet
- (xi) Any death in last 6 months – Yes/No
Causes of death
- (xii) Any infectious disease in last 6 months Yes/No
if yes, name the disease
- (xiii) Nutritional status
Malnutrition
Deficiency Diseases
- (xiv) Use of family welfare method – Yes/No.
If yes, mention it

6.3 DUTIES AND RESPONSIBILITIES OF A HEALTH WORKER IN PREVENTION OF DISEASES

A health worker has to handle several duties and responsibilities related to prevention of diseases such as-

- Find out new born babies location at the earliest and vaccinate them for polio and BCG. Those babies, who are born in home by ANM instead of hospital, should also receive this benefit. It is the duty of health worker that no baby in that area is left without vaccination.
- Health worker should ensure that every child of the community should get regular and the booster doses of vaccines like DPT, Polio, measles, hepatitis-B, etc. on proper time at primary health centres or as per the doctor’s instructions. All precautions should be taken during survey. A weekly vaccination clinic should be provided for children.
- During the pregnancy period pregnant women should be given two doses of tetanus toxoid (TT) injection, tablets of iron-folic acid (IFA) and calcium regularly. A clinic should be run under the supervision of primary health centre and ANM so that pregnant women should get maximum facilities.
- It is also the duty of health worker to check blood pressure, hemoglobin (Hb) level and to examine urine in pregnant women regularly in order to identify any risk in advance, so that she could be shifted to hospital before any problem arises. How to identify risk during pregnancy – we have already studied in the previous chapter.

Duties and Responsibilities of the Health Worker

- The duty of health worker is to measure weight, length and also to assess mental development of new born babies. Monitor, record and inform to the doctor timely.
- Along with ANM, a health worker should organize health camps and check-up all the women during their pregnancy and after delivery. They should give them health education in an affectionate manner.
- It is the duty of health worker that he/she creates awareness among people about general cleanliness, conservation of environment, clean water supply, proper sewage and drainage, cleanliness of schools, public places and train them. Besides the above, the health of school students should be checked timely.
- The health worker should expertise in conveying message about his/her subject with people in detail so that if any doubt arises in the public that can be discussed with them clearly.
- Health worker should tell about the importance of birth spacing (keeping the gap between the birth of two children) and other family welfare programmes to the women; keeping in mind about their educational, economic and social background. They should aware people about methods like Intra uterine devices (IUD), sterilization, contraceptive pills and others under the guidance of physician and make these facilities available to them.
- Health worker should arrange a meeting with village women to give information about breast feeding, balanced diet of mother and child and nutrition and other information related to family welfare program. They have to help them to follow the same.
- He/she should aware people about common diseases like fever, diarrhoea, Malaria, vomiting etc. and should make available basic medicines to them.
- Health worker should help people in distribution of condoms, make them aware about male sterilization, its benefits and importance of a small family.
- He/she should prepare and maintain a record of every birth and death, any case of polio, contagious disease in the village and should send this information to sub-centre/primary health centre.
- He/she should help informing general public about all national health programmes like blindness prevention, goiter control, malnutrition prevention, diarrhoea control, Janani Baal Suraksha Yojna, measles eradication etc.



Notes



Notes

- A health worker has an active role in all the three dimensions of treatment - prevention, curative programmes and national programmes. In this way, with active role and support of health worker, we can reduce mother and child mortality rate, prevent and treat contagious disease to great extent. A good health worker helps in establishing good and healthy society. With their help we can definitely attain success in increasing average age, reduction in diseases, controlling and prevention of diseases.



INTEXT QUESTIONS 6.1

Mark Right or Wrong (✓)/(×):

1. It does not require any educational qualification to become a health worker. (Right/Wrong)
2. Pregnant women should take regular doses of iron, folic acid and calcium tablets. (Right/Wrong)
3. A health worker has to work for the population of 5000 people. (Right/Wrong)

6.4 DUTIES AND RESPONSIBILITIES OF A HEALTH WORKER IN CURING THE DISEASES

Although the treatment part is considered mainly an area belonging to doctor, but a health worker can make the work of doctor easier by their contribution. There are several areas where they can help doctors in skill oriented procedures. Some examples are given below.

- (i) If there is diarrhoea outbreak in the community then health worker can make available simple treatment, i.e., Oral Rehydration Solution (ORS) to the people. Death rate due to diarrhoea can be reduced by telling about the importance of ORS. This information should also be given that infants suffering from diarrhoea should not stop breast feeding. Older children suffering from diarrhoea should be given, 'khichadi', 'maand' (boiled rice water) and lentil soup etc. along with the ORS.
- (ii) Paracetamol should be given to the young child suffering from fever in syrup form and older children in tablet form. The dose for the child below 1 year of age is half a tea-spoon thrice a day, 1-3 years is 1 tea spoon thrice a day to and above 3 years of age is 1½ tea spoon thrice a day.



Notes

Table 6.1: Showing doses of Paracetamol

S.No.	Age	Dose of Paracetamol (PCM)	Frequency per day
1.	1 year	½ tea spoon	3 times
2.	1 – 3 years	1 tea spoon	3 times
3.	3 – 10 years	1½ tea spoon	3 times

- (iii) Cotrimoxazole syrup should be given to child suffering from respiratory tract infection. One tea spoon twice a day to children more than one year of age and one and half tea spoon to children more than 3 years of age.
- (iv) In case of trauma or injury first aid box should be used. Its detailed description is given in the related chapter. Advise everyone to keep basic first aid box in their home. Same advise is given to Panchayat head also.

A health worker must follow the below points in order to carry out his/her duties properly:

- (a) He/she should make cordial relationship with members of Gram Sabha, Panchayat head and its members.
- (b) If there is MLA or MP present in their area then they must meet them before starting the work.
- (c) He/she should meet important persons/dignitaries of their area. They should also be aware of customs and meet with religious leaders of that area. They should request them to participate actively in these programmes.
- (d) He/she should make date wise list of all the programmes in their area and request active women committees of that area to participate in those programmes.
- (e) After discussing with community leaders and women committees they should make list of programmes on the basis of priority.
- (f) Thereafter implement them according to the plan and also evaluate them time to time.



Notes

**INTEXT QUESTIONS 6.2****A. Fill in the blanks:**

1. medicine is given to person suffering from fever.
2. is helpful in treatment of diarrhoea.
3. A health worker should be aware of customs and other activities of his/her area.
4. box should be used in case of trauma or injury.

B. Mark Right (✓) or Wrong (×):

1. Family planning is also included in the duties of the health worker.
(Right /Wrong)
2. The success of health programme does not depend on health worker.
(Right /Wrong)
3. A health worker does not keep the record of birth and death occurring in the village /community
(Right /Wrong)
4. Blood test and hemoglobin test of pregnant women is done by the health worker
(Right /Wrong)

**WHAT HAVE YOU LEARNT**

Health worker plays an important role towards community health in our society. He/she also contributes significantly in building healthy society by preventing various diseases and also by providing basic treatment to many life threatening diseases. By providing first aid to the patient, health worker also plays an important role in saving lives of people. Working with doctor he/she can create a healthy society and healthy nation.

**TERMINAL EXERCISE**

1. Write in detail about the duties of a health worker.
2. What are the various information a health worker should collect while surveying in their area?



ANSWERS TO INTEXT QUESTIONS



Notes

6.1

1. Wrong
2. Right
3. Wrong

6.2

- A. 1. Paracetamol 2. ORS 3. Religious 4. First aid
- B. 1. Right 2. Wrong 3. Wrong 4. Right

Suggested Activities

1. Prepare a map of your village where important places like temple, mosque, community hall etc. are shown.
2. Conduct a Survey of 50 families in your village. Prepare a list of children aged less than 5 years to whom immunization is to be done, who are completely immunized and list of pregnant women who have received vaccination.