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LIFE BEGINS

We are all fascinated when we watch a baby playing all by itself in its bed. The tiny hands and feet, the innocent smile and twinkling eyes- all bring out the protective and parental instincts in us. We are sure you must have wondered how this tiny being comes into the world.

Well, it is no magic! You may have observed the birth of a baby in your own family or neighbourhood. You might have also observed the special care of the mother-to-be during pregnancy- a very special phase in her life. It will be interesting for you to learn about this process because you will soon come to a stage in life when you too, will become a parent. Girls would be able to understand better the changes their body may go through if they are pregnant and boys will be able to understand and appreciate the needs of women during this significant phase of their lives.

In this lesson, you will learn how a baby develops in the mother's body and how it arrives into the world after the completion of its development in the womb.



OBJECTIVES

After completing this lesson, you will be able to:

- relate the signs of pregnancy with the changes taking place in a woman's body;
- describe the development over the three trimesters;
- recognize the need for taking special care of a woman before and after she delivers a baby;
- advocate the right of the female foetus to be born and receive all the necessary post natal care;
- negotiate and plan your own family and
- assess the social and emotional consequences of an unplanned pregnancy.

17.1 PREGNANCY

It is wonderful to have a baby in the family, but do you know how a baby is conceived? Some of you may have studied science as a subject and may have already learnt about the process of reproduction. You may recall that it needs both a man and a woman to bring a baby into the world. A woman carries the unfertilized egg (ovum) in her womb and the man carries the sperm. As a result of sexual contact between a man and a woman the sperm and the egg unite through a process called 'fertilisation' and the fertilised ovum is called a 'zygote'.

Do you know what happens to the 'zygote'? It gets attached to the uterus and begins to grow by drawing nutrition from the mother's body. The zygote is called a 'foetus' till it is born and after birth it is called a 'baby'.

Now you will discover the fascinating steps in the development of the foetus as it transforms itself into a little baby.

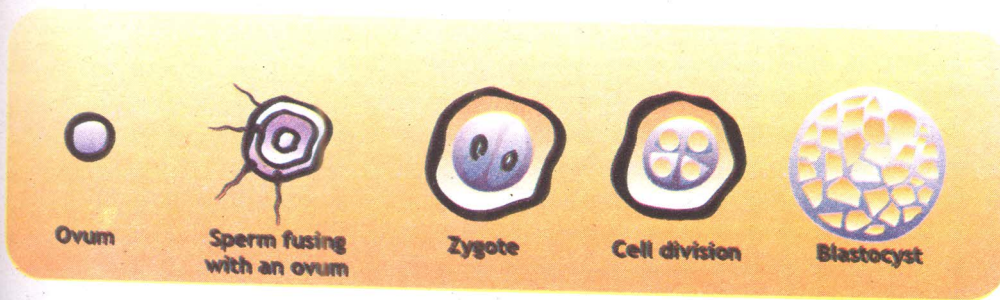


Fig. 17.1: Stages of Fertilisation

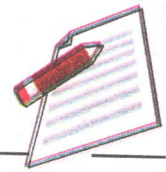
17.1.1 Signs of Pregnancy

From the time fertilization takes place, many changes occur in a woman's body. These changes include physical, hormonal and emotional changes. Some of these changes are:

- the woman misses her menstrual period. This is the first indication of pregnancy in every woman;
- morning sickness or nausea is usually experienced in the morning but some women may experience it at any other time of the day;
- changes in the breast occur they tend to get enlarged and feel tender. The nipples become more prominent and the dark area around the nipple called areola becomes darker and enlarges;



Fig. 17.2



Notes



- the frequency of urination may increase towards the end of pregnancy;
- hormonal changes taking place in the woman's body could lead to:
 - a craving for certain foods such as sweets or spicy or sour food. Some pregnant women may even want to eat certain inedible things like mud or chalk or slate. If they have a craving for such inedible things, they must consult a doctor;
 - an aversion to certain foods and smells such as onion, apples, perfumes etc.

However, not all women undergo these changes to the same extent. The experience of cravings and aversion may vary. Some women may experience such feelings for one pregnancy and not for the other.



ACTIVITY 17.1

You may ask your mother to recall any cravings and/or aversion she had when she was carrying you or her other siblings. What did she do to overcome these cravings or aversions?

Do You Know?

1. What determines the sex of a foetus? The sex of a foetus is determined by the combination of sex chromosomes of the mother and the father. You will recall that it is only the father who carries the chromosome that determines whether the sex of a baby will be male or female. You may read your Science books (Lesson- Heredity) or use a library or internet to find out more about chromosomes and how they help in deciding whether a baby would be a girl or a boy.
2. When two babies are born to a mother at the same time, they are



Fig. 17.3 A mother with twins

called twins. Twins can be fraternal or identical. How does that happen? To know more about this you may refer to a website- www.betterhealth.vic.gov.au

It is rare but sometimes more than two babies may be borne by a mother at the same time.

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17.1.2 Development of foetus inside the mother's womb

A foetus remains in the mother's womb for about nine months (280 days). This is called the prenatal period, which begins with conception and ends with birth. Have you ever wondered how the doctors or other trained professionals tell a pregnant woman when she can expect her baby to be born? It is actually a very simple calculation and you can do it yourself, too. It is as follows:

Expected Date of Delivery = First day of last menstrual period + 7 days + 9 months

For example, if a woman's last menstrual period started on January 1, 2012, then you add 7 days to that which makes it January 8, 2012. Adding another 9 months to this gives the expected date of delivery as October 8, 2012. But you have to remember that it is only an approximate date and can vary marginally.

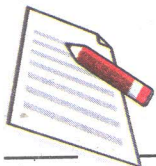
'Natal' refers to birth and 'pre' means before. Therefore, prenatal development refers to the changes taking place inside the mother's womb before the birth of the baby. You can divide the nine months of pregnancy into three trimesters – 3 periods of 3 months each. During each trimester rapid growth and development takes place. Let us now see some distinct changes that take place in these trimesters.

The First Trimester: 0 - 3 Months

This trimester begins with fertilization. The fertilized egg which is a single cell begins to divide. As a ball of cells, it attaches to the wall of the uterus and then further growth and development makes it an 'embryo'. The embryo's life support systems include the amniotic sac, placenta and umbilical cord. They protect and feed the embryo. The vital organs like heart and lungs are formed and the circulatory system starts operating by the end of three months. Male and female reproductive organs develop and the embryo, which is now called a foetus, attains a human form (Figure 17.4).

The Second Trimester: 3 - 6 Months

In this trimester there is rapid increase in the size of the foetus and the brain development is very fast. The foetus begins to move and the mother can feel the movements. Remember, a 6-month old foetus is under-developed and if born prematurely cannot survive outside the womb (Figure 17.4).



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The Third Trimester: 6 – 9 months

The increase in size of the foetus continues and it can now regulate breathing, body temperature and suck its thumb. In the eighth month of prenatal development, the foetus' body prepares for life outside the uterus. It gets antibodies from the mother so that it can be protected from diseases after birth (Figure 17.4).

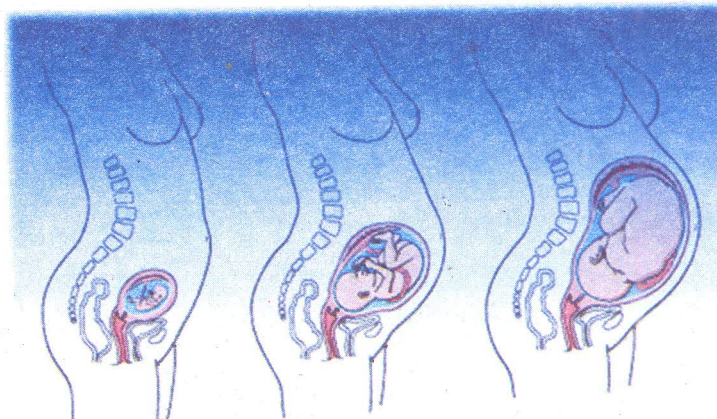


Figure 17.4: Development during the three trimesters

17.1.3 Factors Affecting the Growing Foetus

The growing foetus, although well protected inside the womb, is affected by certain factors.

1. Mother's emotional state

It is believed that a happy mother gives birth to a happy baby. That is why a pregnant woman must avoid tension and stress. The mother's emotions of anxiety, distress, fear or grief affect the foetus and the baby may be irritable after birth.

2. Mother's diet

A mother must take a nutritious diet so that her baby gets proper nutrition to grow. This is because oxygen and food needed by the foetus is obtained from the mother through the placenta. If the mother's diet is not enough or lacks in some nutrients, the baby will also be born weak. Such a baby is more likely to catch infections very soon and fall sick after birth. A pregnant woman's diet must contain:

- rice / wheat for carbohydrates - required for energy;
- pulses / eggs/ non vegetarian food for proteins - required for muscle development;

- green leafy vegetables and fruits for minerals - required for brain development and
- milk for calcium - required for growth of bones
- excessive consumption of ghee, oil and butter should be avoided. As shown in figure 17.5, a mother's diet should contain foods from all the food groups. This has been discussed in lesson 3- 'Food Groups'.

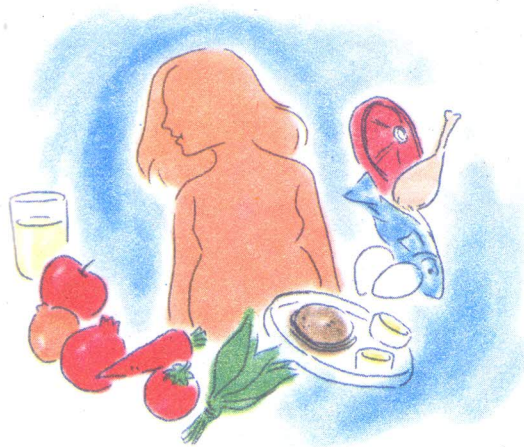


Figure 17.5: Diet of a Pregnant Woman

3. Age of mother

The right age to have a baby is when the mother is between 20 and 35 years old. Before 20 years, the reproductive system is not very well developed. It may lead to a physically and mentally weak child, a risk to the mother's and child's life and a risk of miscarriage. It is important to maintain a gap of minimum 3 years between the two children. This helps in proper growth of the first child and allows the mother's body to recover for the second pregnancy.

4. Medicines taken by the mother

Some medicines can pass through the placenta and enter the baby's body. This can be harmful for the baby. That is why a pregnant woman should always ask her doctor before taking any medicines. A pregnant woman should avoid taking medicines without the doctor's advice. She should also avoid getting herself X-rayed as this can harm the growing foetus in her womb.



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Do You Know?

An ultrasound is a technique where sound waves of very high frequency are used to check the growth and development of the foetus. It is a very safe procedure and does not harm the unborn child in any way. This procedure is very useful in detecting any defects in the foetus at a very early stage.

5. Disease, germs that affect the foetus

If a mother catches diseases like German Measles or an infection like sexually transmitted infections or HIV/AIDS, their germs may sometimes pass the thin placental wall and damage the growing foetus. Mothers must therefore be careful during pregnancy and avoid catching infections.

6. Drugs, alcohol and smoking

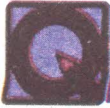
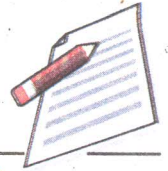
Smoke from cigarette or 'bidi', chemicals from alcohol or drugs like 'afeem' (morphine) pass into the blood stream of the foetus through the placenta and can cause major damage to the foetus. A pregnant woman should avoid sitting in a room where someone is smoking as the smoke can affect the health of the baby.



Figure 17.6: A pregnant woman should avoid drugs, alcohol and smoking

**ACTIVITY 17.2**

Write two slogans/ messages to inform women about importance of good health or ill effects of taking drugs/alcohol/smoking during pregnancy. Samples are given below: "Healthy Mother – Healthy New born" or "Smoking can harm the foetus – Avoid it during pregnancy".

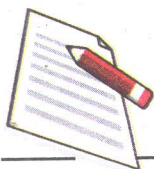
**INTEXT QUESTIONS 17.1**

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1. Fill in the blanks with the appropriate options:
 - (i) The fertilized egg is also called _____.
(a) an ovum (b) a zygote (c) a foetus
 - (ii) The zygote attaches itself to the lining of the _____.
(a) vagina (b) uterus (c) cervix
 - (iii) The vital organs like heart and lungs of the child start developing in the _____ trimester of pregnancy.
(a) first (b) second (c) third
2. Calculate the expected date of delivery for a woman who had her last menstrual period from June 15 to June 19, 2009.
3. What are the possible ill effects of having a child before 20 years of age?
4. Given below is a set of statements describing the condition of some women. Name the women who may be pregnant and need to consult the doctor.
 - (a) Mary feels nausea on smelling perfumes or dal or an odorous substance.
 - (b) Meena got married in October and from November she has not had her periods.
 - (c) Sheela is scared to get up in the morning because as soon as she brushes her teeth she vomits.
 - (d) Jaswinder has been menstruating every 28 days.
 - (e) Pinky needs to gulp an antacid after every meal.

**17.2 CARING FOR A PREGNANT WOMAN
(PRENATAL CARE)**

You are now familiar with the signs of pregnancy and know about the major changes that take place during the nine months of pregnancy. With a rapidly growing foetus in her womb the pregnant woman, experiences physical and emotional stress during this time. It is important for every woman to take care of her health throughout her life. She becomes extremely vulnerable during the period of pregnancy and child birth. Therefore, she needs a lot of support from the



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people around her. You must have seen the concern shown by all the members of her family, neighbourhood and the community in general. They advise the pregnant woman to do or not do certain things. This advice may be based on local practices and customs. Therefore, it may be best to consult a trained professional before acting on any such advice.

During pregnancy, the family must ensure that the following are taken care of:

17.2.1 Medical Check-Up

After the first missed period, the lady becomes anxious to know if she is pregnant. This can be done with a simple urine test done by the doctor during her first visit to the health centre. Kits to test pregnancy at home are also available with chemists.

It is extremely important for all pregnant women to go to a doctor for a proper medical checkup. If a doctor is unavailable in the area, a trained midwife or some other trained health professional can be consulted. In fact, the pregnant woman should get herself registered at the nearest health centre or with a doctor as soon as possible. If you live in a village, seek the help of an ASHA or an Anganwadi Worker. She will take you to the nearest health centre. At the health care center a pregnant woman should not hesitate to consult the doctor available whether male or female. The doctor ensures that a pregnant women undergoes some routine blood and urine tests - these are haemoglobin (for anaemia), blood group (for transmission of blood, if required) and blood sugar (for diabetes), VDRL test (for sexually transmitted infections) and HIV/AIDS.

Her weight is measured and she is given an injection for Tetanus. This ensures safe motherhood and delivery. A visit to a doctor at least once a month for the first 8 months of pregnancy and once a week during the last month is a necessity. Figure 17.7 indicates a pregnant woman being examined by a doctor. She may need to consult the doctor more frequently in the first trimester because of various problems she may have.

These days' doctors may advise ultrasound test or sonography to check for any abnormalities in the growth and development of the foetus. Some parents and doctors misuse this facility to determine the sex of the foetus and terminate the pregnancy if the foetus is found to be female. This is called female foeticide. The practice of female foeticide has led to a serious decline in the number of baby girls being born in our country. This has a serious negative social impact, as is seen in



Figure 17.7: Medical Check-Up during pregnancy

the increasing incidence of violence against our sisters and daughters. Every child conceived has a right to be borne. This is an important human right. It is our duty to promote and advocate this right and reduce the gender bias in our society.

17.2.2 Nutrition

Remember, only a healthy woman can give birth to a healthy baby. To be healthy, she must eat the right food. What is right for a pregnant woman? Adequate nutritious food, that is, a balanced diet is a must during this time. You already know what a balanced diet is and that a woman needs to consume extra nutrients during pregnancy. Talking to a trained medical or paramedical professional will help you to know why certain foods are good and others are not, during this period. Eating meals at regular times is also important.

- Coping with morning sickness- During the first three months of pregnancy, nausea and vomiting are quite common especially in the morning. To combat this morning sickness, a pregnant woman can eat a piece of dry toast or biscuit or puffed rice in the morning. Eating food when she is not feeling nausea will help her to maintain her nutritional intake.
- A diet rich in iron helps in preventing anaemia. The pregnant woman can include whole cereals and pulses; green leafy vegetables, jaggery and amla in her diet to get good amounts of iron. Women who consume non-vegetarian food can consume eggs and organ meats like liver and kidney.
- Another common problem faced during pregnancy is that of constipation especially during the later stage of pregnancy. This is largely due to reduced physical activity and other pregnancy-related causes. To overcome this problem, a pregnant woman must eat a lot of fruits and raw vegetables and drink plenty of fluids.
- Spicy and fried foods are best avoided as they tend to cause acidity and discomfort. It is best for the pregnant woman to take small but frequent meals. The last meal of the day must be taken at least 2-3 hours before going to bed.

Do You Know?

Some women may suffer from acute heartburn, swelling of the lower legs, diabetes or hypertension during pregnancy. At times, these problems could lead to severe pregnancy complications and cause maternal or foetal deaths. Get more information about these problems from a doctor or search on the internet.



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MODULE - 2

My Family & I



Notes

Life Begins

In different regions and communities in our country, there are traditional practices which may sometimes advocate or prevent the pregnant women from consuming certain foods. This could be for various reasons like fear of abortion or other complications during pregnancy. Some foods are recommended to get a male child or even to have a baby with fair complexion. Most of these practices are simply myths and superstitious beliefs. The foods that may be advised to be avoided could be rich sources of various nutrients that are beneficial for a pregnant woman, like eggs, fish, pulses, milk and others.



ACTIVITY 17.3

1. Interview at least two pregnant women to find what changes (if any) they have made in their diet to ensure their and their baby's good health. Record your observations.
2. Talk to your elders and make a list of foods traditionally recommended by them during pregnancy. Then talk to a doctor/nutritionist and categorise these foods as desirable and undesirable giving appropriate reasons.

17.2.3 Weight

A pregnant woman gains weight as the foetus grows. Normally, she should gain on an average of 12 kg. This indicates healthy growth of the baby. How can a pregnant woman judge whether she is gaining weight normally? If possible, she should weigh herself during each visit to a doctor. If she stops gaining weight, or there is sudden weight gain in the last few months, she must go to a doctor.

17.2.4 Taking Medicines

Any medicine taken by a pregnant woman must be strictly under medical supervision of a doctor. Taking medicines must be avoided as far as possible. The pregnant woman must take a tetanus vaccination in order to prevent tetanus in the newborn child. This is taken in two doses. The first dose should be taken as early as possible followed by a second dose, a month after that. The doctor may prescribe medicinal supplements of iron and folic acid for preventing or treating anaemia.

17.2.5 Clothes to Be Worn

Clothes worn during pregnancy sometimes pose a problem, especially for young girls who feel shy of their growing abdomen. A loose kurta worn with a salwar would look good and be comfortable at the same time. A well draped sari also gracefully conceals the growing abdomen. Ensure that the clothes allow free and unrestricted movement of the body.

17.2.6 Exercise and Rest

The pregnant woman must remain active and continue with her normal daily work. However, she should avoid picking heavy items or getting injured. Normal activity level helps her body to remain fit and active. This will help her at the time of delivery. But she must also get adequate rest because the woman tends to get tired easily during this period. Minimum 10 hours of sleep is recommended by the doctors. The family members and colleagues must pay special attention to her and ensure that the woman gets adequate rest and remains stress free at all times. Constant support from the family, friends and colleagues can help the pregnant woman easily tide over this physiologically and psychologically stressful period.

All this is important because the period of pregnancy must pass smoothly and without any problem or complication. A complication can be fatal for both mother and child. Proper care during this period can ensure a healthy mother and a healthy baby.



INTEXT QUESTIONS 17.2

1. Give one reason why a pregnant woman should do the following:
 - (a) Avoid spicy and fried foods.
 - (b) Take small and frequent meals.
 - (c) Take tetanus vaccination.
 - (d) Continue to do her normal daily work.
 - (e) Weigh herself at periodic intervals.
2. Read the following situations and give appropriate answers.
 - (a) You are travelling in a bus and are lucky to have got a seat because the travelling time up to your home is more than an hour. At the next stop a pregnant woman boards the bus. Should you look away or offer her the seat? Why?
 - (b) Your 21 year old married sister is 6 months pregnant. She is shy and refuses to step out of her home. What kind of clothes would you recommend she wears during pregnancy?



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17.3 SAFE DELIVERY

Perhaps the most anxious time in a woman's life is the time of giving birth. Some common questions are- Will I be safe? Will my baby be safe? What will happen in case of any complication?

She can easily reduce her anxiety by finding out where she can have a safe delivery- it may be a hospital, a primary health center (PHC) or a registered nursing home. By gathering this information beforehand, she can decide where to go at the time of delivery and also collect the things she would need at that time. By choosing to register with a doctor, she assures herself of competent medical attention at the birth of her child. It is always safer to have an institutionalized delivery, that is, in a hospital or nursing home. If a woman has not been able to get herself registered with a doctor and the health centre is far away, the next best option is to call a trained midwife or dai to the house for the delivery.

A trained midwife is important because she would -

1. do everything scientifically,
2. follow the rules of cleanliness,
3. know what to do in case of any complication.

The five Rules of Cleanliness :

- Clean hands and fingernails
- Clean surface for delivery
- Clean sheet
- Clean all items to be used for delivery with antiseptic solution and soap
- Clean cutting of the cord with a new blade and tying with new (fresh) thread

**ACTIVITY 17.4**

1. Identify and make a list of a hospitals/nursing homes/Primary Health Care Centre in your neighbourhood where deliveries can be conducted.
2. Make a list of things that would be required in case a delivery has to be conducted at home by a trained midwife/ dai.

17.4 CARE OF THE NEW BORN BABY AND MOTHER (POSTNATAL CARE)

Whether a girl or a boy—a baby brings a smile of joy to everyone's face! Both boys and girls have an equal right to be born and to get love and care from their parents.



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The human baby is one of the most vulnerable beings- totally dependent on adults for its care and survival. All parents wish to have a healthy baby and will benefit if they also learn beforehand, as much as they can, about caring for their child.

We have already understood the meaning of 'prenatal'. 'Post' means 'after'. Therefore, postnatal means 'after birth'. While it is true that the newborn baby needs a lot of tender loving care, it is equally true that the mother who has just had a baby needs as much, if not more, looking after. She has gone through a stressful time of giving birth and her body needs to recover its strength after giving birth. She can also catch infections if she does not look after herself properly after delivering the baby.

Once the baby is born, a lot of care needs to be taken. The newborn is likely to sleep a lot (about 16 hours), cry sometimes and need frequent feeding. The baby takes some time to develop a pattern of sleeping and waking. So the first few months will be a time of adjustment for the parents and the family.

Some health professionals now refer to the postnatal period as the 'fourth trimester'. Though the time span of this period is definitely more than three months, using the term 'fourth trimester' suggests continuity and importance of the first few months after delivery for the mother.

It will be helpful to keep the following points in mind while handling a new born baby, also called a neonate and the mother.

17.4.1 Hygiene

For the baby-

- (a) **Cleaning the newborn baby:** A newborn child's skin is often wrinkled, and is covered with a white cheese like substance and some fine hair. Wipe it with clean cloth soaked in warm water. Do not scrub as both these are protective in nature and fall off after some time.
- (b) **Care of the cut cord:** The developing foetus is joined to the placenta by a cord called umbilical cord. The baby is separated from the placenta by cutting the cord on its birth. (Your naval is the point from where your cord was cut). The most important way to protect the freshly cut cord from infection is to keep it dry. Air must get to it to help it dry out. If the home is very clean and there are no flies, leave the cut cord uncovered. If there are flies and dust, cover the cord lightly.

For the Mother- The woman must ensure that her room is kept clean, well-lit and ventilated. She must also have a bath regularly and keep the stitches clean and dry to prevent any infection.



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17.4.2 Immunization

The baby needs to be immunized against preventable infectious diseases. As a mother, you must find out the proper immunization schedule for your baby so that you can take your baby for immunization at the right time. Immunization is done free of cost at all government hospitals and health centres. Table 17.1 describes the National Immunization Schedule for babies. It also lists the immunization schedule for a pregnant woman.

Table 17.1: National Immunization Schedule

Vaccine	Disease Prevented	Age				
		Birth	6 weeks	10 weeks	14 weeks	9-12 months
Primary vaccination						
BCG	TB	✓				
Oral polio	Polio	✓	✓	✓	✓	
DPT	Diphtheria, Pertissis, Tetnus		✓	✓	✓	
Hepatitis B*	Jaundice		✓	✓	✓	
MMR	Measles, Mumps, Rubela					✓
Booster Doses						
DPT + Oral polio		16 to 24 months				
DT		5 years				
Tetanus toxoid (TT)		At 10 years and again at 16 years				
Vitamin A		9, 18, 24, 30 and 36 months				
Pregnant women						
Tetanus toxoid: 1 st dose		As early as possible during pregnancy				
2 nd dose		1 month after 1 st dose				
Booster		Within 3 years				



ACTIVITY 17.5

Look at the National Immunization Schedule for babies given below. Make a vaccination card for a baby in your family/neighbour and mark the dates on which the baby is taken to a health centre for the vaccinations.



INTEXT QUESTIONS 17.3

- Fill in the blank with the appropriate word (s).
 - Care of a woman during pregnancy is called care.
 - A new born baby is likely to sleep for hours.
 - Immunization is offered free at hospitals and health centres.
 - A woman should get herself immunized for as early as possible during pregnancy.
 - and polio are given to a baby at the time of birth.
- List the vaccines recommended for a new born baby under the National Immunization Schedule. State the diseases that they prevent.

17.4.3 Nutrition

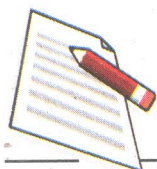
It is best for the baby to be put to the mother's breast from the first hour after the birth. It is the right of every child, to be breast-fed. A mother's breast produces yellowish fluid called 'colostrum' for the first few days. Colostrum is very important for the health of the baby. Sometimes mothers believe that this milk is bad or dirty and do not feed the baby. They thus deprive the baby of a lot of antibodies which protect the baby from infections. Colostrum also has a lot of proteins in it. Only breast milk is best for the baby for the first 6 months. However, after 4 months, other supplementary foods can be started along with breast milk.

Breast-feeding or bottle-feeding: Which one is better?

Breast milk is by far the best food for a baby. Babies who are fed on breast milk are healthier, grow stronger and have good immunity. Sometimes babies may have to be given other milk through a bottle due to various reasons, as when the mothers are working or if there is lack of adequate milk produced by the mother. The mothers may have to then make a difficult choice between breast-feeding and



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bottle-feeding their babies. If possible, they should still try to make an effort to breast feed the baby as it has important advantages for both the baby as well as the mother. Some of them are given in Table 17.2.

Table 17.2: Comparison between breast-feeding and bottle-feeding

Characteristic	Breast-feeding	Bottle-feeding
Nutrient content	Breast milk contains adequate proportions of all the nutrients that a baby needs. It can be easily digested.	The nutrients may be made adequate by fortifying powdered milk. If fresh milk is used, there may be an imbalance in dilution, making it difficult to digest.
Hygiene	Breast milk is clean and reduces chances of the baby getting diarrhoea.	Bottles need to be sterilized properly; otherwise the baby may catch infections and become ill.
Temperature	The temperature of breast milk is always right. It can directly go from the mother's breast to the child's mouth.	The temperature of milk has to be adjusted.
Protective quality	Breast milk contains antibodies that protect the baby from certain illnesses.	This milk does not contain any protective agents.
Emotional bond between the mother and baby	Breast-feeding helps in developing a special bond between the mother and child.	The baby can be bottle fed by any other person, so it may not form any special bond between the mother and child.

For the Mother

Mothers should not forget to have an adequate and balanced diet while they are breast feeding so that they are able to produce milk in appropriate amount and quality for their baby. Mothers who are working may have a problem in continuing breast-feeding their child. Government of India has now extended the leave from work with salary to all women to look after their babies in the first few months of their life. This is called maternity leave and is of 6 months duration. Now fathers who are in government employment can also get paternity leave of 15 days to look after their wives and the baby. For those who work in organizations where this facility is not available, one solution could be for mothers to extract (take out) their breast milk and store it in clean, sterilized bottles. The baby's caretaker can then feed the baby this milk like any other milk. This will at least help the baby to get

the nutritional and protective benefits of the mother's milk. However it is important to maintain a high degree of hygiene and care during this procedure.



Figure 17.8: (a) A nursing woman breast-feeding her baby



(b) Extracting breast milk in a cup



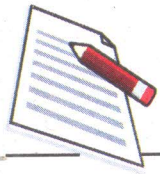
ACTIVITY 17.6

Find out if the Government has made any special laws to protect the rights of the female foetus/ child.



INTEXT QUESTIONS 17.4

1. State whether the following statements are true or false. Give reasons for the same.
 - (i) The cut cord of a newborn baby should be left exposed to dry up. (True/ False)
Because _____
 - (ii) Colostrum is good for the baby. (True/ False)
Because _____
 - (iii) The mother should not breast feed the baby for first few days after birth. (True/ False)
Because _____
 - (iv) Breast-fed babies are stronger and healthier. (True/ False)
Because _____
 - (v) Mothers who are breast feeding need a nutritious diet. (True/ False)
Because _____



Notes

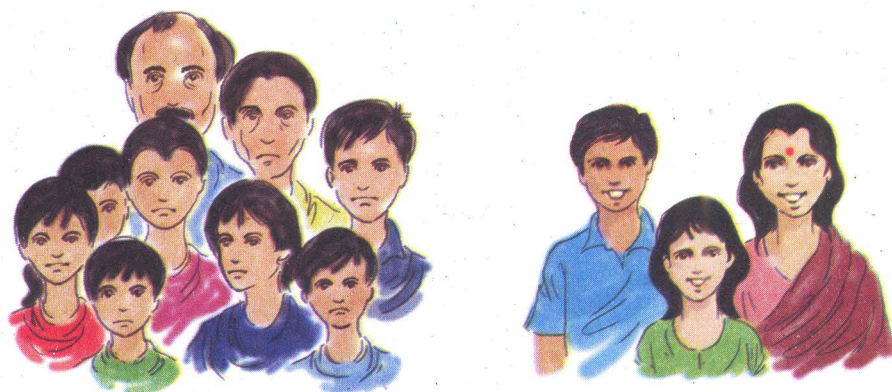
17.5 PLANNING THE FAMILY

It is the right of both the parents to decide when and how many children they want to have. Married couples can talk to elders, friends or counsellors about the pros and cons of having a small family and methods to control birth. However, it is their final decision to decide when to start their family and how many children to have.

Family planning is often written about in magazines and newspapers and seen in documentaries or advertised on radio, television and cinema halls. Have you ever wondered what 'family planning' is and why planning the family is so important? Planning your family means that the parents can decide when to start their family that is have their first baby. It also means that there should be an adequate age gap between two children in a family. It is very important to plan a family so that both mother and children stay healthy and raising children is a stress free process for the parents.

You may have seen some families who have a large number of children born one after the other, as against others who have only one or two children. Do you see any difference in these two families? With so many pregnancies, the mother's health is affected. With the birth of a second child immediately after the first, she is unable to give proper attention and care to the older one. She becomes irritable and scolds and beats her children often. Such children feel very insecure and unloved. Even the father feels helpless and often frustrated as he is not able to offer much help to the mother or the babies.

In a small family, the mother has more time and energy to look after all the needs of her child and spend time together so that the child feels loved and secure. A small family can also spend more money to meet the needs of the children such as education, entertainment and professional training.



(a) Unplanned family

(b) Planned family

Figure 17.9

As discussed earlier, the birth of a baby is usually welcomed. However, there may be cases where an unplanned pregnancy occurs. This may be due to carelessness on the part of the couple or due to sexual experimentation by adolescents under peer pressure or sexual molestation. In such cases, only the woman has the right to decide whether she wants to continue with her pregnancy and give birth. She will need all the support of her family to decide whether to abort the baby or give birth to it, keeping in view her own circumstances and the social environment around her. In all such cases, the woman should take the initiative to consult a medical doctor and counsellor.



Notes

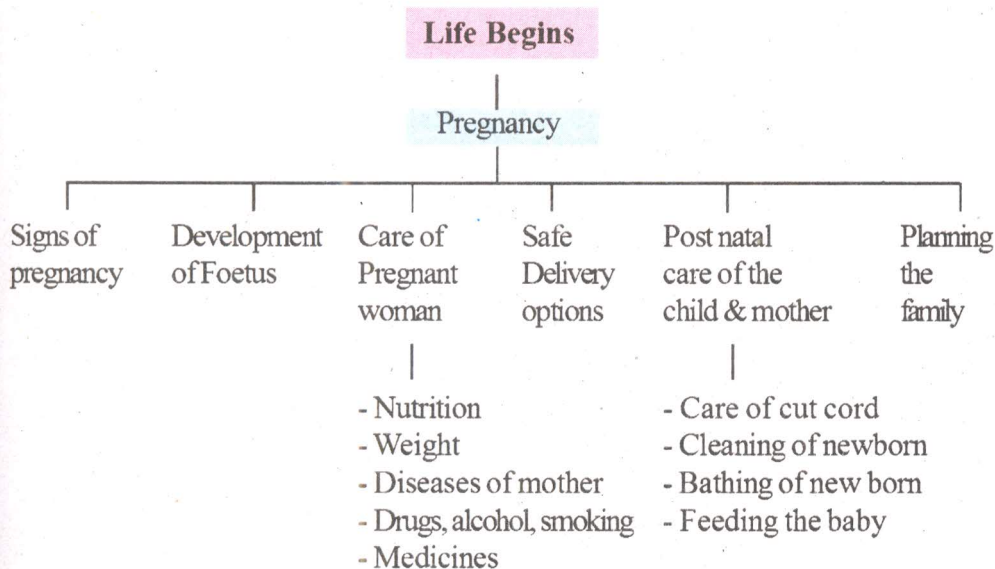


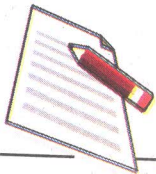
INTEXT QUESTIONS 17.5

1. Reena and Abhay have three children in a span of three years of marriage whereas Ayesha and Firoz started their family after three years of marriage and have only one child. Explain, giving appropriate reasons which couple has taken the right decision.
2. Ritu is a 15 year old unmarried girl who has become pregnant. What advice will you give to her family and friends to help her cope with the situation?



WHAT YOU HAVE LEARNT





Notes



TERMINAL EXERCISES

1. How does a woman come to know that she has become pregnant?
2. What do you think would be the consequences of conceiving a baby by a young woman who is under 18 years of age?
3. Trace the development of the foetus from the first to third trimester of pregnancy.
4. List four things a woman and her family can do to ensure the birth of a healthy and happy child.
5. What do you understand by the term fourth trimester?
6. Identify two practices to care for a mother and her baby after delivery. Why are these practices important?
7. Why is it important for a child to be breast fed right from birth? Give two reasons in support of your answer.
8. Prepare a short talk giving reasons for the need to give special care to a pregnant woman and the role of her family in doing so.
9. A couple should plan a small family. Give reasons.



ANSWERS TO INTEXT QUESTIONS

- 17.1**
1. (i) b, (ii) b, (iii) a
 2. March 22, 2010
 3. Ill effects: Complications during delivery, birth of a physically/mentally disabled child, risk to life of mother and child, miscarriages.
 4. Might be pregnant: Meena, Sheela,
Consult a doctor: Mary, Pinky
Not pregnant: Jaswinder
- 17.2**
1. (a) To prevent acidity and gastric discomfort
(b) To prevent heartburn/ gastric discomfort/ morning sickness
(c) To prevent infections during delivery
(d) To remain fit and active
(e) To check whether adequate foetal growth is taking place.



2. (a) (i) Sudden jerks can result in fall and can harm the foetus – can cause abortion.
- (ii) The woman needs to be given as much rest as possible.
- (iii) She should be made to feel comfortable.
- (b) Clothes recommended: Slightly loose fitting kurta-salwar, top-trousers, saree can be worn. The clothes should not put undue pressure on the woman's abdomen and should allow her to move around freely.

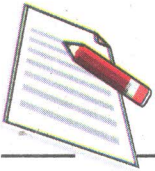
17.3 1. i) prenatal ii) 16 iii) government iv) tetanus v) BCG

2. Vaccine-BCG Disease prevented - TB
- Vaccine- Oral Polio Disease prevented - Polio
- Vaccine- DPT Disease prevented - Diphtheria, Pertussis, Tetanus
- Vaccine- Hepatitis B* Disease prevented - Jaundice
- Vaccine- MMR Disease prevented - Measles, Mumps, Rubella

- 17.4 1. (i) True. If the cord is covered, it will not dry up quickly and this can result in infections.
- (ii) True. Colostrum provides immunity and is also very nutritious.
- (iii) False. The mother should put the baby to her breast within one hour of delivery so that the child can get the benefit of having colostrum too.
- (iv) True. Breast milk is nutritionally adequate, prevents infection, improves immunity and results in better bonding of the baby with the mother; thus making the babies stronger and healthier.
- (v) True. Nursing mothers have to produce milk for their babies and therefore, need to consume larger amount of nutrients in their diets.

17.5 1. **Ayesha and Firoz have taken a right decision.**

Reason: They have taken time to understand their new family and adjust to the new environment and only after that, they had a baby. They will be able to devote adequate time to their baby and take care of all its needs. Ayesha will be more patient as her own health status will be in a stable condition. If she is a professional, she will also be able to devote time to her work.

**Notes**

Reena has conceived immediately after marriage deterioration of her and has also had two more children in quick succession which could affect her health and nutritional status. Besides their children may not get enough nutrition and attention from her. This could make their children irritable and more susceptible to infections and disease. Reena and Abhay may also feel more irritable and guilty as they will not be able to devote adequate time to all their young children with their high demands.

2. Advice to family and friends:

- (i) Family, friends and Ritu may rationally discuss the pros and cons of the situation and come to a mutually agreeable decision.
- (ii) If the final decision is to abort the child then it should be under proper medical supervision. Ritu should be given emotional and physical support.
- (iii) If pregnancy has to be taken to full term, then friends and family should keep Ritu happy; make her feel comfortable and normal; encourage her to face life bravely; they should not allow Ritu to feel guilty; should encourage her to take nutritious meals; go for regular medical check-ups; and continue with her studies.