



What Is This Module About?

Have you studied the module titled *Healthy Pregnancy Part 1*? This discusses the signs and symptoms of pregnancy, together with some very important guidelines that a pregnant woman should follow to have a healthy pregnancy.

This module is a continuation of that module. This will discuss the changes taking place inside a pregnant woman's womb as the baby develops. It will also discuss what happens during labor and delivery, when the baby comes out.

This module is a very informative and useful guide for pregnant women. It is also a practical reading material for their husbands and other family members who wish to do what they can to help make the pregnancy a smooth and healthy one. The module is divided into two lessons:

Lesson 1 – *The Baby Inside the Womb*

Lesson 2 – *What Happens During Childbirth?*



What Will You Learn From This Module?

After studying the module, you should be able to:

- ◆ describe the changes in each stage of the unborn baby's development;
- ◆ discuss how each developmental stage is important in the unborn baby's growth;
- ◆ identify the signs of labor;
- ◆ differentiate the stages of labor and childbirth; and
- ◆ discuss some methods, techniques and preparations involved in the process of labor and childbirth.



Let's See What You Already Know

Before studying the module, take this simple test first to find out what you already know about the topic.

Read the sentences below carefully. Are they correct or incorrect? If correct, write **C** in the blank. If incorrect, write **I**.

- _____ 1. The pregnant woman can already feel her unborn baby's movements as early as in the fifth month.
- _____ 2. Through an ultrasound, we can detect the unborn baby's gender with 100% accuracy.
- _____ 3. The unborn baby cannot hear or sense what is happening outside the mother's body.
- _____ 4. The unborn baby's face forms in the third month.
- _____ 5. The unborn baby already sucks its thumb while inside the womb.
- _____ 6. The father-to-be should not pay much attention to his pregnant wife's condition.
- _____ 7. No matter what we do, labor will always be a difficult and very painful process for the mother.
- _____ 8. The pregnant woman must have weekly checkups all throughout the pregnancy.
- _____ 9. There are five stages in labor.
- _____ 10. The expectant mother should prepare for labor only on the week of her due date.

Finished? If so, you may compare your answers with those found in the *Answer Key* on page 39. Did you get all the right answers? If yes, very good! You already know much about the topics in this module. Just the same, you may study the module to review what you already know and learn some more interesting facts.

If you made some mistakes, don't worry. That means this module is for you. Study it carefully, and you will learn useful knowledge that you can apply in your daily life—if not now, then sometime in the future.

If you are ready to begin, you may now proceed to the next page for Lesson 1.

The Baby Inside the Womb

How does the baby inside the womb look like? What changes does it go through with the passing of months until it is born? Many mothers-to-be are interested to know the answers to these questions. You may also want to learn the answers, even if you are not really pregnant, for they are very interesting facts that have been established by the science of embryology.

After studying this lesson, you should be able to:

- ◆ describe the changes in each month of the unborn baby's development; and
- ◆ explain the importance of each developmental stage in the growth of the unborn baby.



Let's Read

Let's begin this lesson by reading a short comic strip.

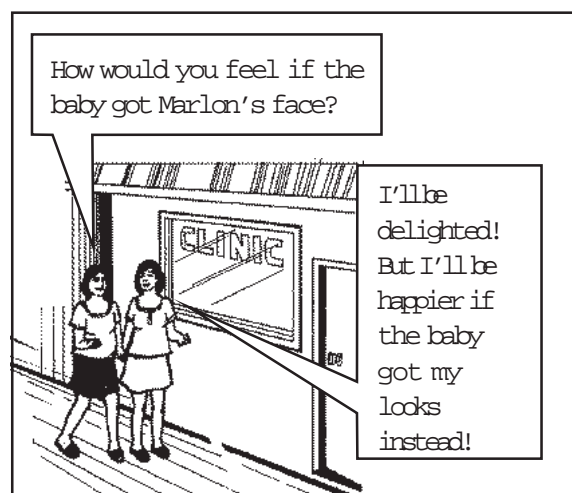
Rita, who is five months pregnant, boarded a jeepney bound for the town plaza. She's scheduled to visit her doctor for her monthly checkup. Doris, who happens to be Rita's classmate in high school, also boarded the same jeepney that Rita took. Both were surprised and happy to see each other....

Doris..Doris Mariano, is that you?!

Rita! What a surprise!

How are you?! It's so good to see you again.

I'm very fine..and still single. Not like you—I see you are pregnant. Don't tell me... did you finally settle down with Marlon?



Let's Review

Based on what you have read, and on what you already know about the topic, answer the questions below. It's okay for you to write down a guess when you're not sure about your answer.

1. Is it possible to know the sex, size, growth and other characteristics of the baby while it is still inside the womb? Explain your answer.

2. What was Rita excited to know about her coming baby?

3. Is it true that if a pregnant woman looks pretty in the course of her pregnancy, she will deliver a baby girl? Explain your answer.

Have you written down your answers? If so, you can check them with those found in the *Answer Key* on page 39.

We can understand why pregnant women like Rita are very excited to find out whether they will have a baby girl or a baby boy. Well, pregnancy does bring with it a lot of excitement! No less delightful is to know how the unborn baby develops inside the womb of the mother, week after week, month by month. This is exactly what we are going to study in the next sections.



Let's Try This

Before actually studying the stages of development of the baby inside the womb, let us first test your present knowledge on the topic. Encircle the correct answer in each number below.

1. An unborn baby grows its hair, eyebrows and lashes during its...
 - a. 3rd month
 - b. 5th month
 - c. 6th month
 - d. 7th month
2. At the third month, the unborn baby's _____ is completely formed.
 - a. legs
 - b. face
 - c. ears
 - d. arms

3. One can detect the _____ of the unborn baby when it reaches the fifth month.
 - a. heartbeat
 - b. personality
 - c. gender/sex
 - d. feelings
4. The baby's face appears like that of an old man's when it reaches its...
 - a. 4th month
 - b. 8th month
 - c. 6th month
 - d. 5th month
5. The pregnant woman starts to feel the movements of her baby by the...
 - a. 3rd month
 - b. 4th month
 - c. 5th month
 - d. 6th month

Well, how did you find the questions? Were they difficult to answer? If yes, don't worry. You'll soon get to know the correct answers. By now, after reading these questions, perhaps you are beginning to see how mysterious and fascinating the world of the unborn child is. Read on to find out more!



Let's Study and Analyze

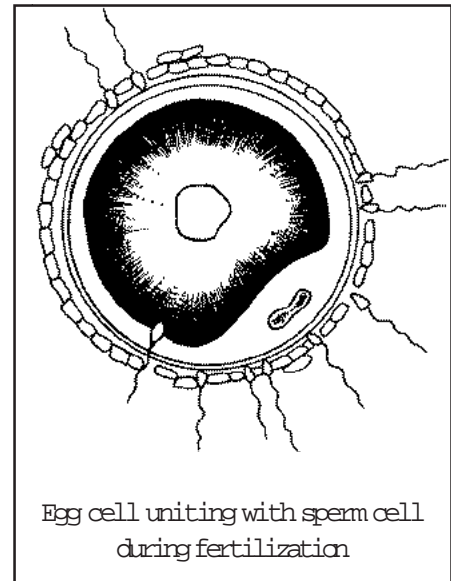
Pregnancy is a very special period in any woman's life. It is when she participates in the miraculous and wonderful act of bringing a new life into this world. What makes it all the more exciting is that the new life comes from her own flesh and her beloved husband's. The new life is the result of the loving union between husband and wife.

One thing that also adds to the excitement of pregnancy is knowing what is happening inside the womb. When pregnant women know how their unborn baby grows and develops through time, they realize all the more how important their role is in the process. They realize that their baby truly needs their sustenance and support before it goes through that very special moment in life called birth.

So, without wasting time, we will now study the monthly stages of the unborn baby's development. This will include the physical changes it goes through, as well as the milestones that pregnant women can look forward to.

Pregnancy begins with the union of the sperm (which comes from the father) and the egg or ovum (which comes from the mother). The product of this union is called the **fertilized ovum**. This is the earliest form of the baby. It is what will later develop into a fetus inside the woman's womb.

The fertilized ovum is very small. It is about the size of a head of a pin. But at this stage, all the physical characteristics of the baby are already imprinted in it. This means that its sex, height, hair color, complexion, etc. are already pre-determined and "recorded" in the fertilized ovum.

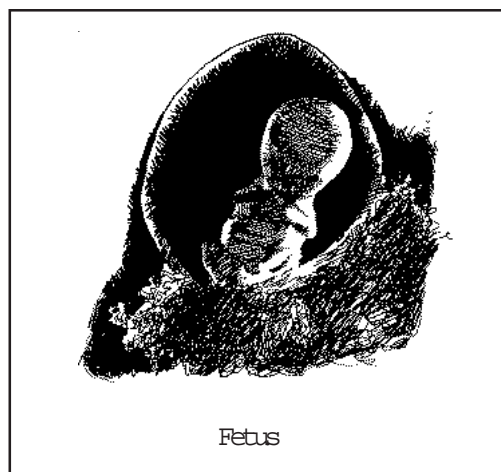


From the third to the fifth week, various organs develop into a definite form. At this stage, the unborn baby is called an **embryo**.



Embryo

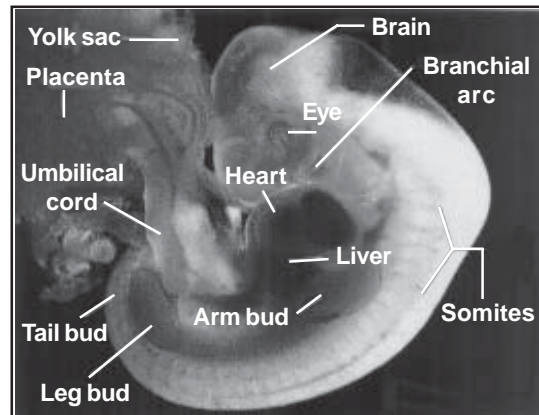
After the fifth week, it becomes a **fetus**. It looks like this.



It is amazing to think that from these tiny beginnings, the fetus later develops into a full-grown baby. Now let's look more closely at its monthly growth and development.

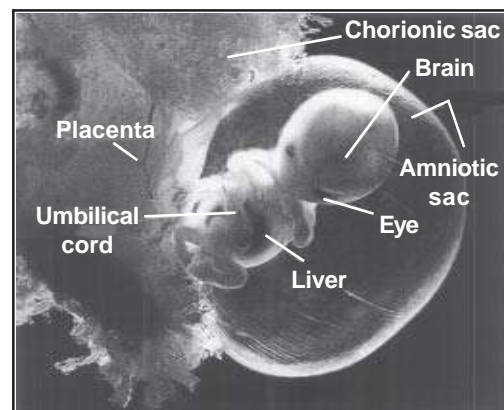
First Month of Pregnancy

At this time, the embryo is about 1/8th of an inch long. Its position is curled as the head touches the "tail." Its spinal column is beginning to develop. The brain and the spinal column are actually already showing.



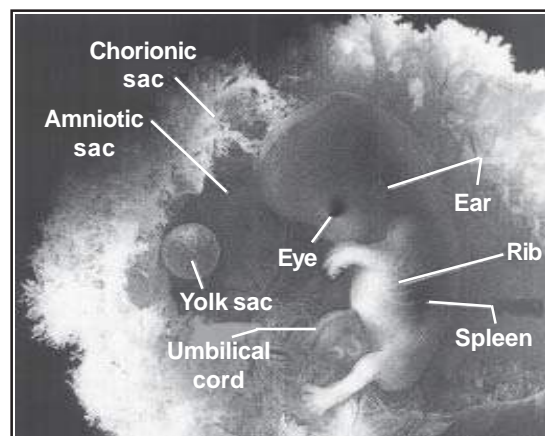
Second Month of Pregnancy

At this time, the fetus is about one inch long. It looks like a fish. The internal organs—heart, liver, lungs, stomach, etc.—are in place. The spine can move. Many parts of the body are already visible, such as the genital organs and the major joints of the shoulders, elbows, hips and knees.



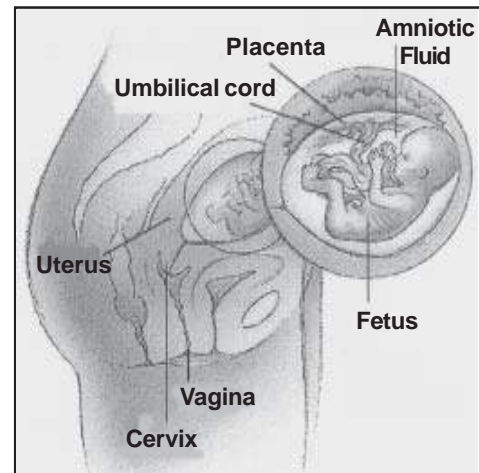
Third Month of Pregnancy

At this time, the unborn baby is about three inches long. The mother will be delighted to learn that the baby's face is already formed, although the eyelids are still closed. There already are limb movements, as the baby starts to grow muscles. In fact, the fingers and toes are now fully formed, complete with nails. It is possible to know whether the baby is male or female by the end of this month.



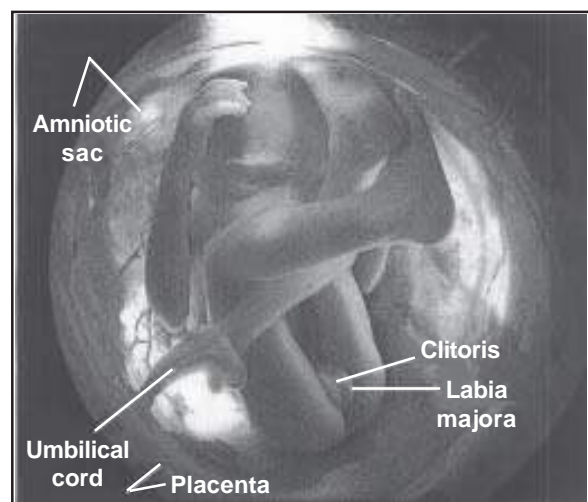
Fourth Month of Pregnancy

By this time, the unborn baby has already grown six inches long. Its muscles gain strength and it can now move actively. But because it is still small, the mother does not feel its movements. The baby's limbs and joints are fully formed. There is hair all over its body, and its eyebrows and eyelashes are growing. With the help of her doctor or obstetrician-gynecologist, the pregnant woman may now listen to the baby's heartbeat using a doppler instrument.



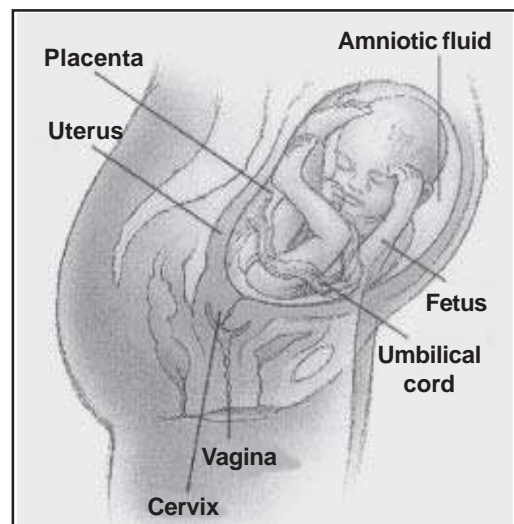
Fifth Month of Pregnancy

Since last month, the baby has grown four inches longer, such that it is now about ten inches long. It is beginning to grow teeth and hair on the head. Its muscles are getting quite strong, and so the mother already feels some movements inside her womb. This is usually the time when doctors recommend an ultrasound test if the parents-to-be wish to know the gender of the unborn baby.



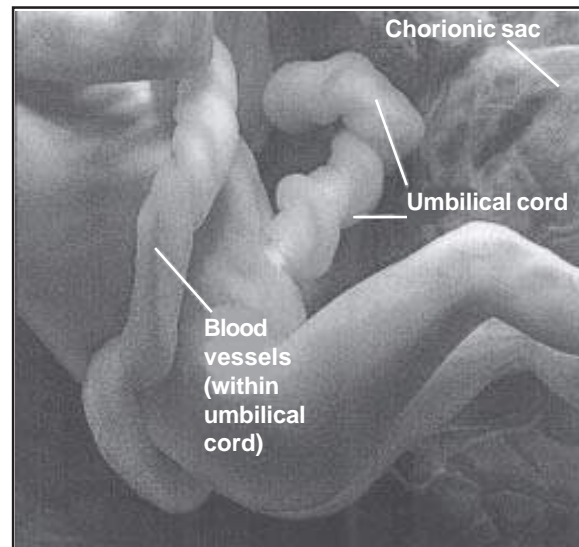
Sixth Month of Pregnancy

The unborn baby is now about 13 inches long. It can now suck its thumb. It even coughs and hiccups from time to time! But in appearance, it looks thin and its skin is wrinkled.



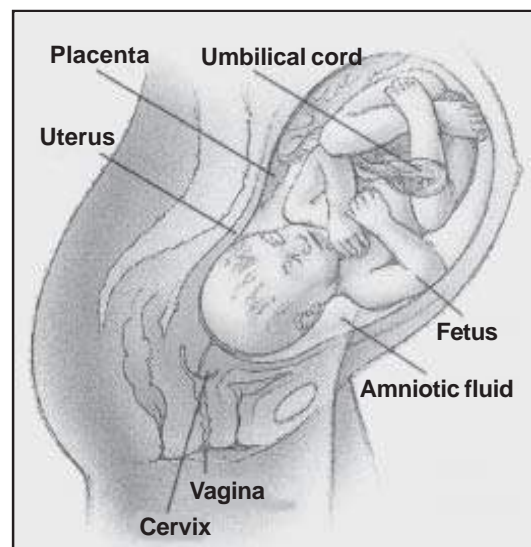
Seventh Month of Pregnancy

At this stage, as childbirth approaches, the unborn baby is about 14½ inches long. It often looks like an old man, with its wrinkled, reddish skin. Its head is now more proportional to its body. (Before, the head looked too big for the body.) Its lungs are fully developing. This means that should the baby be born at this time (or have a premature birth), then it will already be able to breathe somehow.



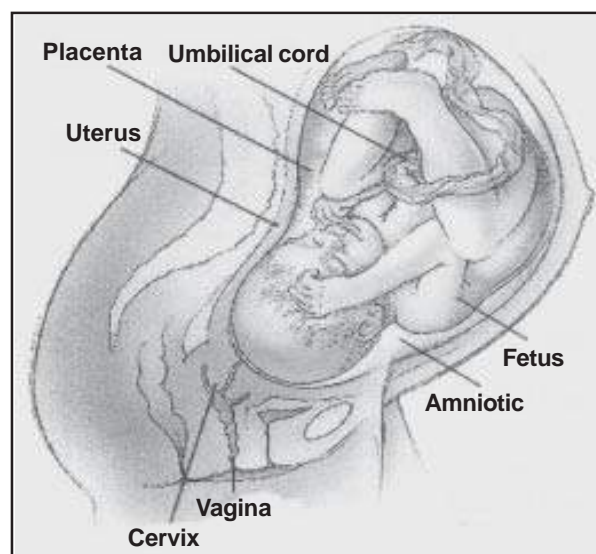
Eighth Month of Pregnancy

At this time, with only a month more to go before childbirth, the unborn baby has grown to about 16 inches long. It can hear sounds outside the mother's body and respond to them. It has greater muscular strength. In most cases, it lies with its head down toward the mother's pelvis. Such position is called the **vertex** position. In only about 10% of pregnancies does the baby lie with its head away from the mother's pelvis, having what is called the **breech** position (*suhi*).



Ninth Month of Pregnancy

This is the final month of pregnancy. The baby is now about 18 inches long. Its hair may have grown to 1–2 inches long, and it has soft nails at the ends of its toes and fingers. Its skin is no longer wrinkled. Due to its size, it fills the mother's uterus. Its movements are actively felt by the mother; sometimes they may feel like “kicks.” The unborn baby settles into his or her position for birth by this time.





Let's Review

Perhaps by this time, you're now able to see why we often use the word "amazing" in relation to how an unborn baby grows inside the mother's womb. To find out how much you have understood our previous discussions, answer the following questions.

1. If the unborn baby is to be born prematurely (meaning before the ninth month), when is the earliest month that it will have a good chance of surviving? Why?

2. When can the mother usually start to feel the "kicks" or movements of her unborn baby? Why?

3. In your opinion, which month of pregnancy must the mother-to-be consider as the most important as far as the development of her unborn baby is concerned? Why?

4. Can you tell which month corresponds to each stage of the unborn baby's development? Write your answers (1 to 9) in the left column of the table below. If you want, you can refer back to the discussion to help you answer this section.

Month-Age	Stage of Development of the Unborn Baby
_____	> The lungs are functional and the baby could breathe should it be born at this month.
_____	> The teeth are forming in the jawbone.
_____	> There is growth of fine hair all over the body.
_____	> The baby can hear sounds outside its mother's body and respond to them.

- _____ > Foundations of the brain and the spinal cord are appearing.
- _____ > Closed eyelids are distinguishable as the face becomes properly formed.
- _____ > The baby fills the uterus and its movements feel like jabs to the mother.
- _____ > All internal organs are in place.
- _____ > The unborn baby begins to suck its thumb, cough and hiccup.

Finished? If so, you can compare your answers with those found in the *Answer Key* on page 40.



Let's Learn

There are “milestones” or important times and events to watch out for during pregnancy. These correspond to some significant changes that the unborn baby goes through. Expectant mothers will want to mark these milestones in their calendar to experience all the more the thrills and joys that usually accompany such milestones.

Some Milestones in Pregnancy

- ◆ The genital organs of the unborn baby are already visible by the second month of pregnancy. The pregnant mother may be able to know her baby's gender when she reaches the end of the third month of her pregnancy. However, most doctors recommend that a pregnant woman wait until she reaches her fifth month of pregnancy if she wishes to know her unborn baby's gender. An ultrasound machine in hospitals is used to detect not just the unborn baby's gender but also its size, placement and other important information.
- ◆ It is possible to listen to the unborn baby's heartbeat. This is done using a doppler instrument starting on the fourth month of pregnancy.
- ◆ The unborn baby begins to move by the fourth month. This movement is called “quickening.” However, pregnant women will usually begin to feel their unborn baby's movements when they reach the fifth month of their pregnancy.
- ◆ By the eighth month, the unborn baby can hear sounds outside its mother's body and respond to them. Knowing this, some mothers talk to their unborn baby or have it listen to good music. At this time, the baby also begins to settle into its position for childbirth. Its position may be normal or vertex (with the head down toward the mother's pelvis), or breech (with feet near the mother's pelvis).



Let's See What You Have Learned

Write **T** in the blanks if the statement is true. Write **F** if the statement is false.

- _____ 1. The pregnant mother can already feel her unborn baby's movements as early as in the fifth month.
- _____ 2. An ultrasound machine is only used to detect the unborn baby's gender.
- _____ 3. A mother-to-be may listen to her unborn baby's heartbeat through a radio.
- _____ 4. Each developing month is important for the unborn baby.
- _____ 5. One can detect the personality of the unborn baby when he or she reaches the third month.
- _____ 6. It is not possible for an unborn baby to respond to the sounds outside the mother's body.
- _____ 7. An unborn baby already learns to suck his or her thumb.
- _____ 8. "Quikening" takes place in the fourth month.
- _____ 9. It is best to find out the unborn baby's gender by the second month.
- _____ 10. The unborn baby's face forms as early as in the third month.

Finished? You may compare your answers with those found in the *Answer Key* on pages 40–41.



Let's Remember

- ◆ Below is a summary of the physical changes that an unborn baby goes through in his or her developing months:

Month-Age	Length	Developmental Changes
1 st month	1/8 inch	The embryo is curled as the head touches the tail. Its brain and spinal cord are showing.
2 nd month	1 inch	The fish-like fetus' spine begins to move. Its genital organs and major joints are visible.
3 rd month	3 inches	The unborn baby's face forms. Its fingers and toes are fully formed with nails. By the end of this month, one can already detect its gender.

Month-Age	Length	Developmental Changes
4 th month	6 inches	The Quickening Stage. The unborn baby's muscles are getting stronger. It moves actively but the mother doesn't feel this yet. Fine hair grows all over its body.
5 th month	10 inches	The unborn baby grows strong and very fast, allowing the mother to feel its movements for the first time. Its teeth are forming and hair is growing on its head.
6 th month	13 inches	The unborn baby begins to thumb-suck, cough and hiccup. It has wrinkled skin and looks thin.
7 th month	14.5 inches	The unborn baby's lungs are fully developed. It could already survive if born at this month.
8 th month	16 inches	The unborn baby is much stronger. It can respond to sounds outside the mother's body. In most cases, it lies with its head down toward the mother's pelvis.
9 th month	18 inches	The unborn baby fills the mother's uterus. This makes the mother feel its "kicks" more strongly. By this stage, it settles its position for birth.

- ◆ It is best for the pregnant mother to wait until the fifth month if she would like to know her unborn baby's gender.
- ◆ *Quickening* happens in the fourth month. It is at this time that the unborn baby begins to move. However, the mother only begins to feel the baby's movements by the fifth month.
- ◆ An *ultrasound machine* is used to detect the gender and other physical characteristics of the unborn child. This is also used to find out pregnancy-related problems. A *doppler* is an instrument used for listening to the heartbeat of an unborn baby.

What Happens During Childbirth?

Around the end of the ninth month, labor usually begins when the pregnant woman experiences slight backaches and abdominal pains. She may then become very excited, thinking that she will soon deliver her baby. She may inform her husband or a friend or relative who watches over her about these pains. But there are cases when the pregnant woman misreads these signs, resulting in what is known as “false labor.” This means that she will not deliver soon after all, even though she experienced some signs that the baby would soon come out. So, how do we really know if it’s truly time to give birth? We will try to answer this question in this lesson.

After studying this lesson, you will be able to:

- ◆ identify the real signs of labor;
- ◆ differentiate the stages of labor and childbirth; and
- ◆ discuss some methods, techniques and preparations involved in the process of labor and childbirth.



Let’s Try This

Find three (3) women—neighbors, friends, family members, etc.—who have already experienced giving birth. Ask them to describe what it was like to go through labor and give birth. Write their comments in the blanks below.

Ms. A _____

Ms. B _____

Ms. C _____

If you yourself have already given birth, try to recall what you had experienced or felt immediately before and while giving birth. Write your answers below.



Let's Learn

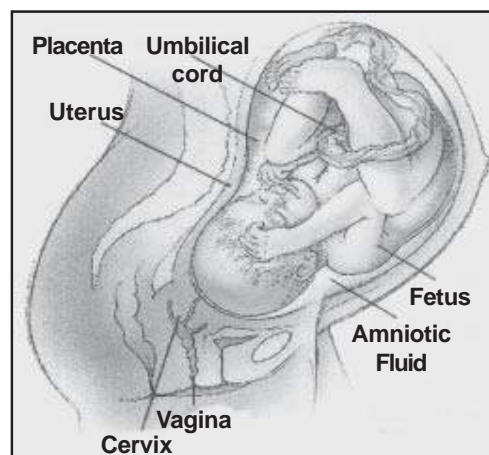
Were you able to do the previous activity? What did you learn from the labor experiences of the women you talked to? Perhaps they gave different comments, but I'm sure they also shared with you some common answers or similar experiences.

Labor and giving birth may be experienced differently by different women, but only slightly so. There are aspects of the experience that are common to all women who give birth. In other words, there are signs and stages that are experienced by all women immediately before and during birth.

Before discussing such signs and stages, let us first define some important terms. "Labor" is simply "hard work" wherein the pregnant woman's uterine muscles contract (tighten) and relax at short intervals. Because of these contractions, the cervix (entrance of the uterus) opens gradually. Now, if the cervix is fully opened, the contractions will help move the baby through the birth canal, known as the vagina. The actual coming out of the baby is called "delivery." Labor and delivery are parts of the entire experience called "childbirth," in which a child is born.

To better understand what we have discussed above, study this illustration showing the parts mentioned. Do you see the cervix and the vagina where the baby passes through during birth? The opening and stretching of these parts are what cause the mother considerable pain during childbirth.

Do you also see the placenta on which the baby lies? And the umbilical cord connected to the baby's navel? Finally, note that the baby is immersed in or surrounded by a warm liquid called the amniotic fluid.



Before labor and actual birth take place, the mother-to-be first experiences certain signs. These signs tell her that birth is imminent, and so she should prepare right away, such as by going to the hospital immediately or, if she will give birth at home, informing her nurse-midwife.

Below are the three signs that labor will soon take place. They may be experienced all at about the same time, or one after the other with long intervals in between.

The Three Signs of Labor

Contractions

The pregnant woman experiences cramp-like pains in the lower portion of her abdomen. At first, these contractions recur between long intervals but are soon felt more frequently. The abdomen will become hard and then soft again, alternately, as the uterus contracts and relaxes. It is a sign of real labor when the contractions continue and intensify, even when the woman changes her position or walks around. Many doctors tell their patient to go to the hospital once the contractions are felt regularly, such as perhaps every ten minutes. On the other hand, it is a sign of false labor when the contractions subside or do not increase in frequency and severity.

The Show

Also called the “bloody show” or the “pink show,” this refers to the appearance of bloody discharge and mucus on the woman’s panties or underwear. This results from the effacing (thinning) and dilation (opening) of the cervix, which cause blood vessels to rupture. The “show” could mean that labor will take place within 24 hours or in the next few days.

Bursting of the Bag of Waters (Rupture of Membranes)

The pregnant woman will experience a sudden flow or a slight trickle of water through her vagina. The secretion may be blood-stained or it may have the color of rice water. It usually indicates that the cervix has fully opened and the membranes have ruptured, releasing amniotic fluid.

Now, try to recall the *Let’s Try This* activity on pages 15-16. Go back to the responses of the women you interviewed. Check if these match with the labor signs discussed above.

It is important to note that there are a few cases in which the pregnant woman delivers without seeming to pass through the labor stage. She also does not seem to experience any of the three signs discussed. When this is the case, there is a good possibility that she may undergo a Caesarian section (C-section) to ensure that she will deliver her child safely.



Let's Review

Fill in the blanks with the correct answers. Choose the answers from the words or phrases inside the box.

bursting of the bag of waters

contractions

hard work

fetus or baby

birth canal

cervix

1. When childbirth is near, the pregnant woman experiences vaginal secretions stained with blood. This “bloody show” comes from the _____.
2. When nearing childbirth, the pregnant woman experiences a sudden flow or trickle of water through her vagina due to the _____.
3. The pregnant woman experiences cramp-like pains in the lower part of her abdomen. These are called _____.
4. Contractions will help move the baby through the vagina or the _____.
5. The meaning of “labor” in childbirth is simply _____.

When you are done, you may compare your answers with those found in the *Answer Key* on page 41.

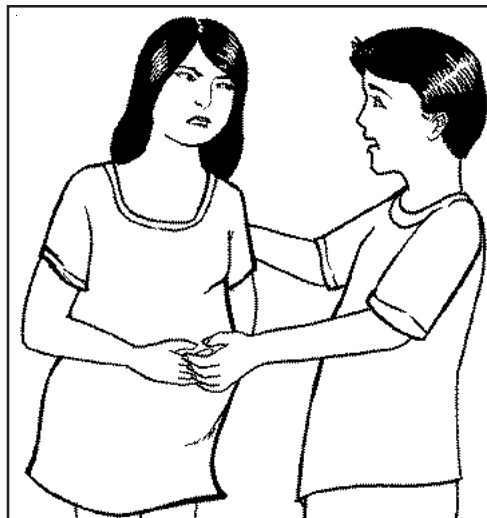


Let's Read

Read the dialogue below of Tina, her husband Cesar, and a nurse at the hospital. Tina is on her ninth month of pregnancy and is expected to deliver at any time.

TINA: Ces, I think the time has come!
My contractions are really getting painful and close together.

CESAR: Well, you may be right. You've been having contractions for about two hours now. You say they are coming more closely now? Let us time the intervals between contractions, just like Dr. Valdez advised in your last prenatal checkup.



TINA: Okay, here comes another one!

Cesar looks at his watch to note the time of the contraction. After 11 minutes...

TINA: Oh, I feel another contraction coming! It's really painful this time! I'm scared!

CESAR: Don't be scared. Everything will be alright, and I won't leave your side.

Cesar looks at his watch to note the time again. Another 10 minutes pass.

TINA: *(Experiencing another contraction.)* And here comes another one!

CESAR: *(Looking at his watch.)* Okay, we're now sure that the contractions come around every 10 minutes. We should head for the hospital immediately. I'm positive that you are going through labor now.

Cesar takes the bag they have prepared to bring with them to the hospital. Then he assists Tina as they take a taxi to the hospital. At the hospital, they check in and the nurses inform Dr. Valdez that her patient is in. Both Tina and Cesar are given hospital gowns to wear. One nurse attends to Tina and times the intervals between her contractions.

NURSE: Please don't worry too much, ma'am. Everything will be fine. What you're experiencing are contractions that are coming about eight minutes apart now. The contractions are normal. They are actually helping you deliver your first baby. Now, let me check your blood pressure and temperature.

NURSE: *(After few minutes)* Your blood pressure is okay. Body temperature is also normal. Everything is coming along fine. Please try to relax, ma'am. You have nothing to worry about. Dr. Valdez will be with you in a few minutes for your internal examination.

CESAR: Thanks so much, Nurse Joy!

NURSE: You're welcome, sir. If you need anything, just call on us at the station.

The nurse leaves the room.



Let's Review

Did you enjoy the short dialogue? Answer the questions below based on what you have read. Write your answers in the blanks.

1. From Tina's story, what was the sign that she was going to give birth very soon?

2. What did Nurse Joy do to Tina?

3. Why do you think Dr. Valdez still needs to examine Tina internally?

Have you finished answering the questions? If so, you can check if you got the right answers by comparing what you wrote with those in the *Answer Key* on page 41.



Let's Read

Remember the dialogue that you have just read? It illustrates one of the signs of labor, namely regular contractions. In addition to this, it showed two other important things related to childbirth. First, it mentioned the necessity of preparing certain things that the pregnant woman should take with her to the hospital when she will give birth. These things should be placed in a bag, and prepared ahead of time because we never know when labor might suddenly come. Second, the dialogue also showed the importance of the presence and support of the husband, partner, friend or relative of the mother-to-be when she will give birth.

Let us first discuss what should be taken to the hospital by the pregnant woman who will soon undergo labor. Let's see if you already know something about this. Look at the list below and on the next page. Put a check mark (✓) in the blank next to the things that should be prepared beforehand and taken to the hospital for birth-giving. Put an X-mark (X) beside the things that do not need to be taken to the hospital.

_____ face towel

_____ jewelry

_____ underwear

_____ breast pump

_____ high-heeled shoes

_____ shirt with front opening

_____ breast pads	_____ baby's toys
_____ camera	_____ diapers
_____ mother's going-home outfit	_____ toiletries
_____ calendar	_____ your phone directory
_____ cassette tapes	_____ baby's clothes
_____ water	_____ plates and bowls
_____ slippers	_____ tissue
_____ hand mirror	_____ comb
_____ paper	_____ bedsheets
_____ rubber shoes	_____ spoons and forks
_____ towel	_____ perfume
_____ money	_____ baby's bath

Well, have you finished? Have you checked the items that should be taken to the hospital by the woman who will give birth? Let's see if you got them right. Below are the things that should be prepared beforehand and packed in a bag so they can be easily taken to the hospital when the right time comes.

Checklist of Things to Take to the Hospital When Giving Birth

Important Items:

- ◆ Toiletries, including powder, makeup, toothpaste, toothbrush, shampoo, lotion, hairbrush, hand mirror, and other things that the mother-to-be will need during her stay in the hospital
- ◆ Sanitary (maternity) napkins
- ◆ Underwear including nursing bra
- ◆ A going-home outfit for the mother-to-be (something loose enough to accommodate her still large belly and with a front opening so she can breastfeed)
- ◆ A going-home outfit for the newborn baby, including a kimono-type or wrap-around suit, T-shirt, receiving blanket, mittens, booties and diapers
- ◆ A washcloth or face towel for sponging down with during childbirth
- ◆ Snacks for the father-to-be or the friend or relative accompanying the pregnant woman
- ◆ A camera to record the happy event
- ◆ Heavy socks, in case the mother-to-be's feet become cold
- ◆ A watch or clock with a second hand for timing contractions
- ◆ Money to pay doctor and hospital bills

Optional Items:

- ◆ A radio or cassette player, if the mother-to-be would like music to relax her during childbirth
- ◆ Powder, lotions or oils that she might want to be massaged with during labor
- ◆ A small paper bag, which is useful in case the mother-to-be hyperventilates while doing certain breathing exercises
- ◆ Sugarless candies or lollipops to keep her mouth moist during labor
- ◆ Books, magazines, playing cards and other distractions that might make her more comfortable in the hospital (such as after delivery)
- ◆ Personal phone directory, in case the new parents would like to call friends and relatives immediately about the birth

Remember that these items must be prepared and packed in a bag ahead of time. Some women will want to have them ready as early as in the seventh month of pregnancy, in case there might be a preterm childbirth. However, most mothers-to-be prepare these items in the eighth or ninth month, when delivery is more likely to take place.



Let's Think About This

Most people tend to think of pregnancy and childbirth as the sole concern of the mother-to-be. We tend to say, “Well, it’s the business of the expectant woman because she is the one—and nobody else—who carries the child and gives birth.” Do you agree with this statement? Explain your answer.

The above statement may be partly true, but doctors today encourage husbands or partners to become very much involved in their wife’s pregnancy as well as in the actual process of giving birth. Today, the trend is to have the husband, or any close relative or friend, to become a *coach* to the woman who is giving birth. As a coach, he is present during childbirth and actively provides support and whatever assistance he can give to help his laboring wife. As such, he actively shares in the pain, excitement, and finally, the joy and accomplishment of childbirth.

How do you think can the husband be an active participant or coach in his wife’s pregnancy and childbirth? How can he give support to his expectant wife? Write your ideas in the blanks on the next page.

Now, compare what you have written down with what you will read in the next section.



Let's Learn

What Expectant Fathers Can Do

Pregnancy is a very exciting and joyful period in any woman's life. At the same time, it is also a very demanding time for her. Fortunately, there are many ways through which her difficulties can be made much easier. For example, having a supportive husband helps a lot.

It happens that a father sometimes feels left out during his wife's pregnancy. He need not feel that way. Instead, he can take a very active role in the pregnancy by providing much needed support for his expectant wife. How? He can:

- ◆ help his wife find a suitable doctor and a clinic or hospital where she can have her monthly prenatal checkups
- ◆ accompany his wife when she visits her obstetrician-gynecologist for the monthly checkups. He can be there especially when his wife has an ultrasound or when she listens to the baby's heartbeat for the very first time.
- ◆ help see to it that his wife gets the proper food, vitamins, rest and exercise needed during pregnancy
- ◆ be more understanding, considerate, patient and loving, bearing in mind that his wife is going through a very challenging time
- ◆ take childbirth classes with her
- ◆ free his wife's mind from financial worries by securing the needed money for the childbirth

As mentioned, a father may be an active coach to his wife during labor and the actual birth process. He can:

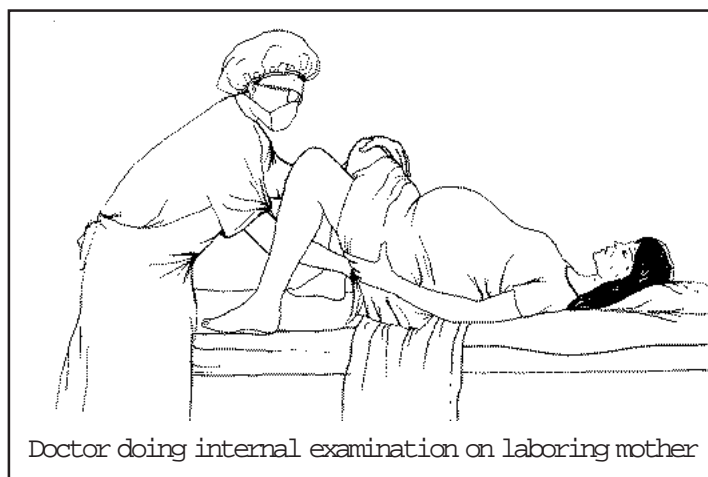
- ◆ help prepare the items and the bag that they will take to the hospital
- ◆ help his wife decide whether the signs of labor are real or false (for example, by timing the intervals between contractions)
- ◆ take care of the hospital arrangements for the childbirth
- ◆ be calm and encourage his wife to be calm also, assuring her that everything will be alright
- ◆ help make his wife's labor easier and more comfortable, such as by giving her something to drink when needed, massaging her back, guiding her in the breathing exercises, etc. (The husband will be able to do all these when he attends childbirth classes together with his wife.)



Let's Read

Do you remember the dialogue between Cesar and Tina on pages 18-19? Tina was having frequent and regular contractions, signalling that labor was beginning. And so they headed straight to the hospital, where Tina would deliver with the help of her obstetrician-gynecologist, Dr. Valdez. Let us now read the continuation of the story.

DR. VALDEZ: *(After doing an internal examination on Tina)* Well, Tina, it looks like this is the real thing. Your cervix is 3 centimeters dilated. This means that you are going through the first stage of labor. Just relax, for everything seems to be in order. It's good that your husband is here to provide support.



CESAR: Yes, doctor. We both decided that when Tina gives birth, I will be there all the way to help out as much as I can.

TINA: I'm glad you are here, Ces, for this pain is really terrible! The contractions are becoming more painful. Also, my back is aching like hell!

CESAR: Would you like me to massage your back a bit?

TINA: Yes, please!

Cesar proceeds to gently massage Tina's back while she is lying on her side. Dr. Valdez leaves them alone. Tina continues to have contractions. After about two hours...

DR. VALDEZ: Well, how are you doing, Tina?

TINA: (*Sweating*) Not very well, Dr. Valdez. My contractions are coming more frequently. They last longer and are more painful, too. In fact, I can hardly talk during a contraction.

DR. VALDEZ: Sounds like you have progressed to the second stage of labor, Tina. Let me do another internal exam so we'll know for sure.

Dr. Valdez examines Tina internally.

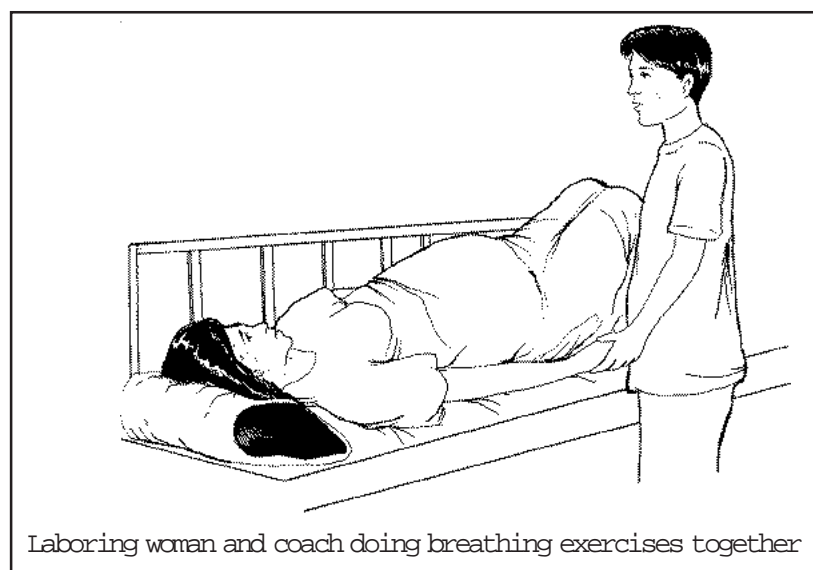
DR. VALDEZ: I was right. Good work, Tina. Though you are experiencing pain, your labor is progressing beautifully. You are now 7 centimeters dilated. With luck, you may deliver your baby in about 2 hours or so.

CESAR: That's great! We won't have to wait very long before our baby comes.

TINA: I feel a strong contraction coming, Ces!

CESAR: Okay, let's now do the breathing exercises together. Look at me and breathe slowly with me.

Tina and Cesar do the breathing exercises together to make the contraction more bearable.





Let's Learn

Have you finished reading the second part of the dialogue? Did you like it? It mentioned two stages of labor that Tina went through. Actually, there are three stages of labor in all. In the dialogue, Tina has yet to go through the third one. Then, after labor comes the actual delivery of the baby, followed at last by the delivery of the placenta. To summarize, below are the stages of childbirth.

1. Labor
 - ◆ First Stage of Labor
 - ◆ Second Stage of Labor
 - ◆ Third Stage of Labor
2. Pushing and Delivery
3. Afterbirth, or Delivery of the Placenta

We will now discuss these one by one.

First Stage of Labor

This is also called the *latent stage* of labor. Among the three stages, this first one lasts the longest. It is also the least intense or least painful phase. It may last for many hours (usually two to six hours), or even for days. During it, the cervix starts to dilate or open up to about 3 centimeters. Contractions may be regular or irregular, ranging between 5 to 20 minutes apart.

Depending on the contractions she is experiencing, the woman may be able to move about just like she usually does and perform her routine activities. In fact, some women go through this first stage without knowing that they are in labor already. In other cases, the woman may need to lie down because of the intensity of the pain of the contractions.

Go back to the dialogue between Tina and Cesar. What were the indications that Tina was going through the first stage of labor?

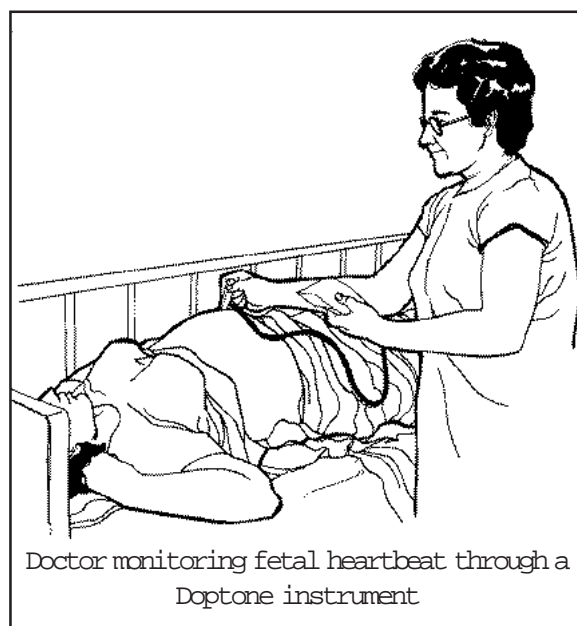
If you answered that she was having regular contractions and her cervix was 3 cm dilated, then you are correct!

Second Stage of Labor

This is also called the *active stage* of labor. On the average, it lasts about 2 to 3½ hours. Its duration is often longer for first-time mothers than for those who have given birth before.

The contractions become stronger, longer and more frequent, occurring about three to four minutes apart. The cervix will dilate up to about 7 centimeters. The woman should already be in the hospital, or, if she will have a home delivery, her nurse-midwife should already be present. She needs all the support she can get because she is experiencing great discomfort at this time. In addition to the painful contractions, she may also be experiencing backaches, leg discomfort, fatigue, and more bloody show. She may also feel very restless and tend toward panicking. Her coach must try to calm her and make her as comfortable as possible. Breathing exercises will help in making the contractions more manageable.

The doctor or hospital staff will continue to monitor the dilation of her cervix, as well as her blood pressure and other vital signs. Often, a fetal monitor is also used to check if the baby is doing alright. An example of this monitor is the portable Doptone.



Third Stage of Labor

This is also called the *advanced active* or *transitional phase*. It is the most tiring part of labor. Fortunately, it doesn't last very long, the average being between 15 minutes to an hour.

The contractions become very strong, usually coming every two to three minutes. The cervix dilates up to 10 centimeters. (When this measurement is reached, the woman can start pushing her baby out.) She can continue doing breathing exercises.

Pushing and Delivery

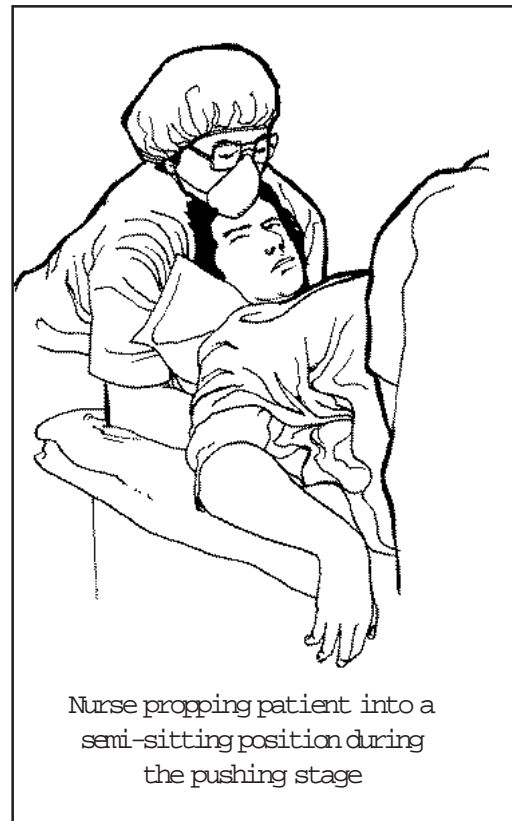
After labor, which has three stages, comes the most awaited part of childbirth—the actual coming out of the baby. This begins once the cervix has dilated fully to 10 centimeters. When this happens, the mother is usually transferred from the labor room of the hospital into the delivery or birthing room.

This stage takes about 30 minutes to one hour, although there are cases when it lasts but 10 minutes, and others when it extends up to two, three hours or even longer.

Note that during labor, the baby was naturally guided down the birth canal through the involuntary contractions of the uterus. Now, the mother must help in the process very actively by pushing out the baby.

The mother should get into a pushing position, guided of course by her doctor or obstetrician-gynecologist. A semi-sitting position, with pillows placed behind the mother's back, has been found to be very effective. A semi-squatting position is also recommended. Each push by the mother should be coordinated with the instructions of the doctor or nurse, so that the baby can be expelled as efficiently and quickly as possible.

In normal deliveries, the first part of the baby to come out is its head. Once the head emerges, the doctor or nurse removes excess mucus from its nose and mouth to help it breathe. Then they assist in bringing out the shoulders, torso and the rest of the baby's body. Next, the umbilical cord is cut. The baby is then cleaned up, and brought to the mother for some quick bonding.



In most breech deliveries, wherein the baby's feet are positioned near the birth canal, there is a great possibility that the baby will be delivered through Caesarian section.



Vertex (normal) position

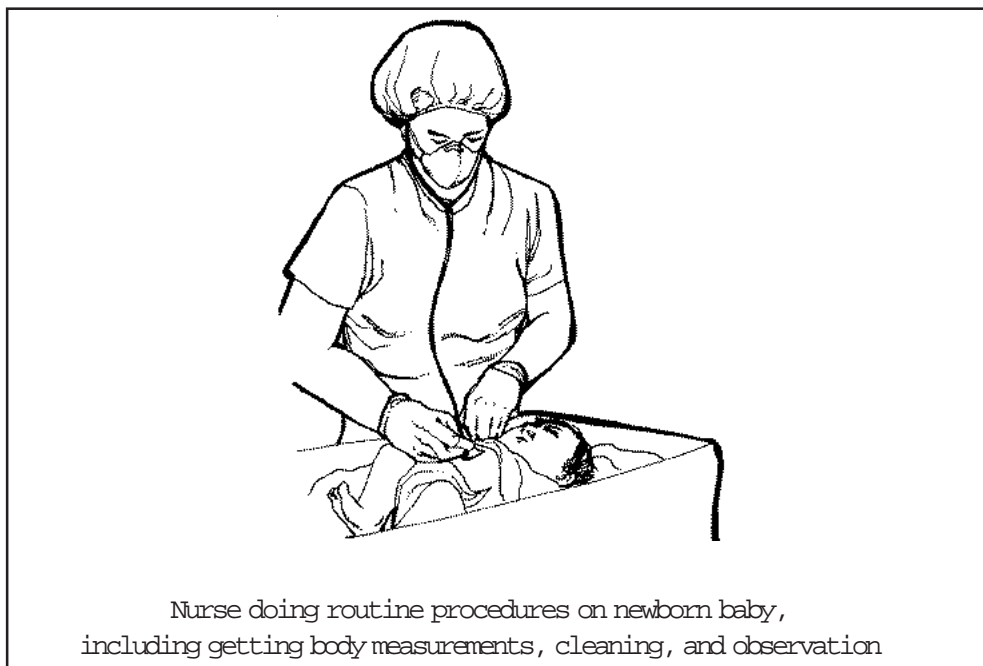


Breech position

Afterbirth

At this stage, the worst is over! The baby has been born, and the mother can now start relaxing a bit. But there is still some work to do, as she continues to experience mild contractions that will push out the placenta. The placenta had been her baby's life support while it was still inside the womb.

After delivering the placenta, the doctor repairs tears or *episiotomy* at the site of the childbirth. At the same time, the hospital staff does several routine procedures on the newborn baby, including weight and height measurements, foot printing, observation of heart rate, breathing, etc. They may also determine the baby's Apgar score, which indicates the general condition of the newborn baby. This score is based on such things as the baby's general appearance, respiration and crying.



Let's Review

You have learned quite a lot about childbirth in the previous section. Now it's time to check if you have understood what you have read.

Write **T** in the blanks if the statement is true. Write **F** if the statement is false. If you are not sure of your answer, you may reread any of the previous discussions.

- _____ 1. There are three stages of childbirth, namely labor, pushing and delivery, and afterbirth.
- _____ 2. The baby passes through the placenta as it is born.
- _____ 3. A lying-down position for the mother has been found as the best position for pushing and delivery.

- _____ 4. The husband should just wait outside the labor room because he can do nothing to help his laboring wife.
- _____ 5. Afterbirth is the stage when the placenta is delivered.
- _____ 6. The cervix has fully dilated when it opens to about 10 inches.
- _____ 7. The shortest and most exhausting part of labor is during the third stage.
- _____ 8. When the baby comes out, this signals the end of the birthing process.
- _____ 9. Contractions may be painful, but it is nature's way of pushing the baby down the birth canal.
- _____ 10. A breech position means that the baby's head is positioned near the mother's vagina.

When done, you may compare your answers with those in the *Answer Key* on pages 41–42.



Let's Talk About This

In the early part of this lesson, on pages 15-16, you asked three women about their labor and childbirth experiences. Now talk to those three women again, this time asking them the questions below. Write their answers in the blanks provided.

1. While you were pregnant, did you have monthly prenatal checkups or visits to your doctor or obstetrician-gynecologist? Why or why not?

Ms. A _____

Ms. B _____

Ms. C _____

2. Have you heard of or attended any childbirth preparation classes, such as Lamaze? Please tell me about it.

Ms. A _____

Ms. B _____

Ms. C _____

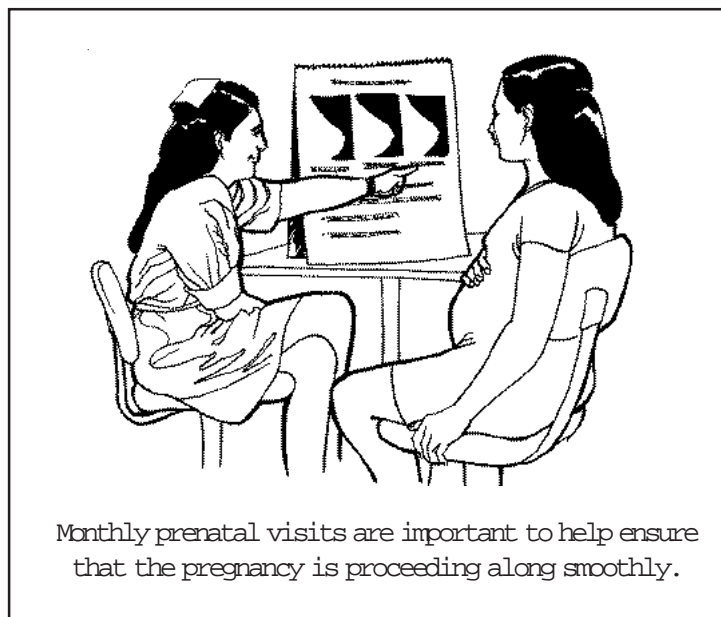
Have you finished the activity? Have you written down the answers you got from your interviewees? Keep these answers in mind as you read the rest of this lesson.



Let's Think About This

The importance of prenatal checkups

- ◆ During the first seven months of pregnancy, the woman must visit her doctor or obstetrician-gynecologist once every month for checkups. Through such checkups, the doctor can monitor the woman's health and help ensure that the unborn baby is growing normally. Should there be any problem, the doctor will be able to detect it and tell what needs to be done to correct it.
- ◆ Regular checkups are important every two weeks in the eighth month, and once every week in the ninth month, until the baby is born. By this time, the doctor can carefully examine the size and position of the baby. This will also allow the doctor to check the pregnant woman's cervix to see if it is softening or thinning in preparation for childbirth.



In the previous *Let's Talk About This* activity, did you find out if your interviewees had regular checkups during their pregnancy? If they did, that's very good. If they did not, what were the reasons why? Maybe it's because they did not realize the importance of prenatal checkups. You can discuss with them what you have just learned about the importance of monthly prenatal checkups.

Childbirth preparation classes

Besides having monthly checkups, some mothers-to-be also enrol in childbirth classes. While these are not absolutely necessary, they do help a lot in making the woman more prepared for childbirth. Usually, the father-to-be also attends such classes, so that he can learn all about labor and delivery, and participate actively in the process of childbirth.

There are different kinds of childbirth classes, depending on the method being taught. These days, the three most popular childbirth methods are *Grantly Dick-Read*, *Lamaze*, and *Bradley*. These methods are all named after the people who invented various techniques to help the woman cope better with childbirth. The techniques teach proper breathing, how to manage pain, how fathers can act as coaches during childbirth, and related concepts. Below is a short description of each method.

◆ ***Grantly Dick-Read Method***

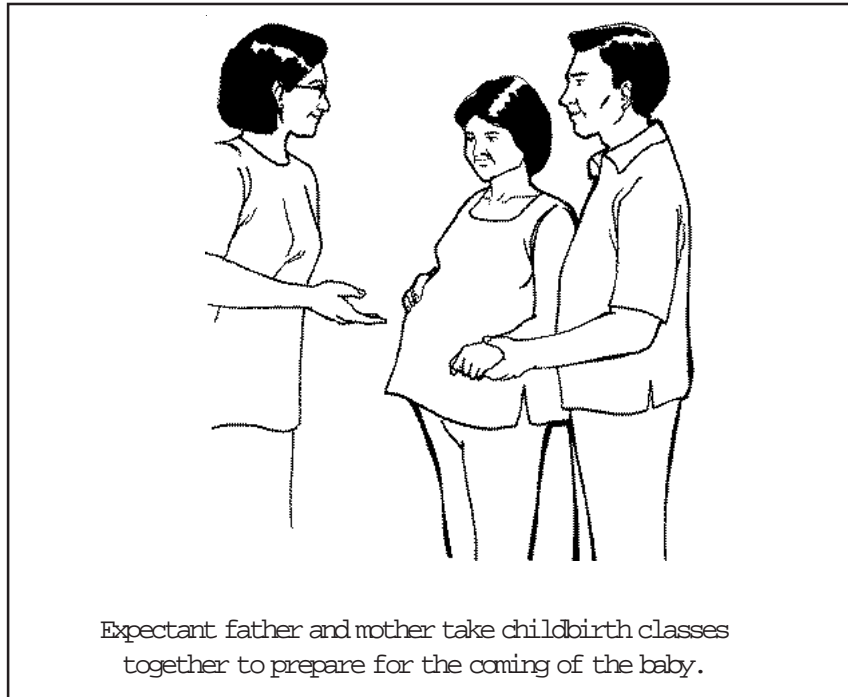
This method, introduced way back in the 1940s, gives prenatal education and teaches relaxation techniques. The idea is that when a woman knows what happens during pregnancy and childbirth, this will help remove the mystery associated with the event, and in turn reduce the fear, tension and pain she experiences during childbirth. A couple (both husband and wife) can start taking classes beginning in the fourth month of pregnancy.

◆ ***Lamaze Method***

Also called the *psychoprophylactic method*, this is similar to the Grantly Dick-Read method. It mainly uses prenatal education and relaxation techniques to make childbirth easier and more manageable. In addition, it also uses the idea of "conditioning." Through training and practice, the mother is conditioned to give a useful response when experiencing labor contractions instead of giving an unproductive response. The method also makes use of such tools as breathing techniques, emotional support, relaxing music, touch and massage, imagery, attention-focusing and meditation to help the mother along the process of childbirth. A coach (the father or any trusted friend or relative) trains together with the mother to assist her during labor and delivery.

◆ **Bradley Method**

This method focuses on good diet and exercise to make pregnancy easy and to prepare the muscles for birth and the breasts for nursing the baby. It uses a different set of breathing and concentration techniques from that used in the Lamaze method. Training in the Bradley method begins as soon as pregnancy is confirmed and continues after the baby is born. About 94% of those who took Bradley classes manage to go through childbirth without any need for medications such as pain relievers.



Let's Review

Complete the sentences on the next page by filling in the blanks. You may choose the answers from the box below.

prenatal checkups	Bradley	obstetrician-gynecologist
umbilical cord	Lamaze	bag to take to the hospital
6th month	placenta	bursting of the bag of waters
7th month	7 cm	childbirth classes
8th month	10 cm	pushing and delivery

1. The doctor who specializes in pregnancy and childbirth is called a/an _____.
2. The woman can start pushing when the dilation of the cervix reaches _____.
3. The three signs that labor has begun are contractions, _____ and bloody show.
4. Monthly visits to the doctor or _____ are necessary to ensure that the pregnancy is proceeding smoothly.
5. Prenatal checkups should be done every two weeks during the _____ of pregnancy.
6. The parents-to-be can start preparing the bag of things they should take to the hospital as early as in the _____ of pregnancy.
7. Immediately after the baby is born, its _____ is cut.
8. Items including baby's clothes, mother's going-home outfit, diapers and toiletries should be prepared and packed in the _____.
9. The last stage of childbirth is the delivery of the _____, which has been the fetus' life support inside the womb.
10. The _____ method is also called the psychoprophylactic method; it uses mental conditioning, relaxation techniques and prenatal education.

Finished? You can compare your answers with those found in the *Answer Key* on page 42.

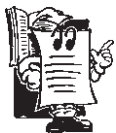


Let's Remember

Good work! You have almost finished this last lesson. You have studied a great deal about pregnancy and childbirth. By now, your knowledge on the topic surpasses what most people know about it. Congratulations for your hard work and patience. Now, to help you remember the important points you have studied, read the lesson summary below. Afterwards, you can also read a summary of the entire module for a quick review.

- ◆ There are three main signs of labor. These are contractions, the “bloody show,” and the bursting of the bag of waters. These labor signs tell the pregnant woman that childbirth has started to take place.
- ◆ Upon experiencing the labor signs, the pregnant woman will go through the three stages of labor. Labor ends when the cervix has dilated up to 10 centimeters.

- ◆ Pushing and delivery come immediately after labor. During this phase the woman uses her abdominal muscles to push the baby down the birth canal or vagina.
- ◆ The last phase of childbirth is the delivery of the placenta.
- ◆ The husband can do a lot to help his wife cope with the difficulties of pregnancy and childbirth.
- ◆ There are ways to prepare for a successful childbirth. The pregnant woman (and her husband) may begin packing the things that need to be taken to the hospital as early as in the seventh month of her pregnancy.
- ◆ Having regular prenatal checkups is important to help ensure that everything is proceeding normally in the pregnancy.
- ◆ The parents-to-be may take childbirth preparation classes to enrich their knowledge and further ensure the success of the childbirth process.
- ◆ The most popular methods being taught in childbirth classes are the Grantly Dick-Read, Lamaze and Bradley methods.



Let's Sum Up

Below is a summary of the important points discussed in this module.

- ◆ In the nine months that the baby is inside the womb, it develops and goes through certain physical changes. From being a *fertilized ovum*, to being an *embryo* and then a *fetus*, the unborn baby goes through many amazing changes that mirror the wonder of creation and pregnancy.
- ◆ There are milestones or important times and events that the mother-to-be can watch out for during pregnancy. For example, beginning in the fourth month, she can listen to her unborn baby's heartbeat with the help of a doppler instrument. As early as in the fifth month, she can take an ultrasound scan to determine the gender of her baby. At this time, she can also begin to feel the movements of her baby.
- ◆ The pregnant woman should treat each month of pregnancy as equally important insofar as the development of her baby is concerned. She should take the necessary precautions, including seeing her obstetrician-gynecologist regularly, eating the proper foods, and having enough rest and exercise.
- ◆ The husband should try as much as possible to be actively involved in his wife's pregnancy and childbirth, providing support and understanding which the woman needs badly during pregnancy.

- ◆ Both husband and wife can take childbirth classes to prepare them better for labor and childbirth. Some methods of childbirth studied in these classes are the Grantly Dick-Read, Lamaze and Bradley methods.
- ◆ As early as in the seventh month of pregnancy, the woman can already start preparing and packing the things that she should take to the hospital for childbirth.
- ◆ Childbirth involves three stages: labor, pushing and delivery, and afterbirth.
- ◆ The start of labor is known through three signs, namely contractions, “bloody show,” and the bursting of the bag of waters.



What Have You Learned?

This test is the final part of the module. It will determine how much you have learned from studying the module. If you are ready, you can begin answering Part A below.

- A. Read the situations below. Then identify which month of pregnancy corresponds to the situation by writing the number of the month (1st to 9th) in the blanks provided. (Give yourself 1 point for every correct answer.)
- a. Lilia is going to have an ultrasound scan in the hospital. She will be able to know the gender of her unborn baby because she is already in her ____ month of pregnancy.
 - b. Amina is listening for the first time to the heartbeat of her unborn baby. Her doctor uses a doppler instrument to let Amina hear the heartbeat. She is in the ____ month of pregnancy.
 - c. Sarah has been told by her doctor that at this time, her unborn baby looks like a fish and is only about an inch long. This is Sarah’s ____ month of pregnancy.
 - d. Fatimah has just confirmed that she is pregnant. Already, she is thinking of buying baby clothes. Her husband tells her not to be too excited, as this is just her ____ month of pregnancy. The baby is still very small, not having reached a length of one inch yet.
 - e. Riza is amazed to learn that by now, her unborn baby can hear the voices of the people talking around her. She is thinking of getting earphones and placing them over her abdomen so that her baby can listen to some good music. Riza is now in her ____ month of pregnancy.
 - f. Mariton’s doctor just told her that her baby’s lungs are now developing. Should she have a premature delivery, her baby would have a good chance of surviving. Mariton is in her ____ month of pregnancy.

- g. Aiza can hardly believe it! Although she is only in her ____ month of pregnancy, her doctor tells her that the baby inside her already has a fully formed face. In fact, the baby also has fully formed fingers and toes by this time.
- h. Only a few more weeks (or days) and the baby will arrive! Yasmin can hardly wait. Secretly, she is wishing that her pregnancy would be over soon because the baby feels very heavy and its kicks sometimes hurt. This is Yasmin's ____ month of pregnancy.
- i. Lolit's husband has been doing a lot of reading on pregnancy. He is as excited as she is about their coming baby. He just told her that at this time, their unborn baby can suck its thumb, cough and hiccup. Lolit is in her ____ month of pregnancy.

B. Answer the following questions using your own words. Write your answers in the blanks.

1. How are labor and childbirth different? (2 points)

2. Why are regular prenatal checkups important?(2 points)

3. Name the three signs of labor. (3 points)

4. Give at least three things that must be packed and taken to the hospital for childbirth. (3 points)

5. Discuss why the father-to-be must be supportive and understanding of his pregnant wife. (2 points)

6. What is the difference between a vertex and a breech position? (2 points)

7. What happens during afterbirth? (2 points)

Compare your answers with those in the *Answer Key* on pages 42–44.

If your score is:

20–25 Very good! You have learned a lot from this module. You can now proceed to the next module. Congratulations!

15–19 Good. You just need to review the correct answers to the items you missed.

10–14 Reread the parts of the module which you did not understand very well.

0–9 You must study the entire module again to better understand its important contents.



Answer Key

A. Let's See What You Already Know (*page 2*)

1. C
2. I. An ultrasound reading of the baby's gender often has a high degree of accuracy, but there is still a chance that it may be wrong.
3. I. While still inside the womb, the baby can hear and sense what is happening outside its mother's body. This is why expectant mothers are advised to avoid loud, startling noises and situations that bring stress and tension.
4. C
5. C
6. I. The father-to-be should be very supportive and understanding of his pregnant wife. He can do a lot to make the pregnancy—as well as the actual childbirth—easier and less stressful for his wife.
7. I. There are methods and techniques that can ease the pain and difficulty of childbirth. In fact, using these methods, many mothers have managed to go through childbirth without using painkillers and anesthesia.
8. I. She should have monthly checkups up to the seventh month of pregnancy. In the eighth month, she should have checkups every two weeks. And in the ninth month, she should have weekly checkups.
9. I. There are three stages in labor.
10. I. She can prepare for labor as early as she wants. Reading about labor and childbirth is already one way to prepare, and this can be done as early as in the first month of pregnancy.

B. Lesson 1

Let's Review (pages 4–5)

1. Yes, the unborn baby's sex and other physical characteristics may be known. Doctors use certain machines or instruments to know these, such as the ultrasound machine.
2. Rita was eager to know her baby's gender and how it looks like.
3. There are actually no medical studies proving that if a woman looks pretty or blooming while pregnant, she will deliver a baby girl. It is, however, a belief among many Filipinos that a glowing and pretty pregnant woman will have a baby girl, while one who doesn't look so good will have a baby boy.

Let's Review (pages 11–12)

1. The fetus may be born safely as early as in the seventh month. By this time, its lungs are fully developing. It would be able to breathe somehow should it be born prematurely. However, as it still hasn't fully developed, it would need intensive medical attention—it would possibly need an incubator and respirator. These are very expensive and can be rather stressful to both baby and parents.
2. The pregnant woman will feel the “kicks” of her unborn baby starting in the fifth month. At this stage, the baby's muscles are growing stronger.
3. The woman must consider every month of her pregnancy as highly important insofar as the baby's development is concerned. In all nine months, she should eat the proper foods and take the needed supplements or vitamins. She should also ensure that she gets the needed rest, exercise and doctor's advise.

4.	Month-Age	Stage of Development of the Unborn Child
	7	> The lungs are functional and the baby could breathe should it be born at this month.
	5	> The teeth are forming in the jawbone.
	4	> There is growth of fine hair all over the body.
	8	> The baby can hear sounds outside its mother's body and respond to them.
	1	> Foundations of the brain and the spinal cord are appearing.
	3	> Closed eyelids are distinguishable as the face becomes properly formed.
	9	> The baby fills the uterus and its movements feel like jabs to the mother.
	2	> All internal organs are in place.
	6	> The unborn baby begins to suck its thumb, cough and hiccup.

Let's See What You Have Learned (page 13)

1. **T**
2. **F.** The ultrasound machine can also detect the size and position of the unborn baby. Its findings can indicate if the baby is growing properly or if something needs to be done to correct its growth.
3. **F.** A doppler instrument, not a radio, is used to listen to the baby's heartbeat.

4. **T**
5. **F.** It is difficult—and perhaps impossible—to detect the personality of the baby while it is still inside the womb. What can be detected are its gender, size, position and other physical characteristics.
6. **F.** By the eighth month, the unborn baby can already respond to external sounds and events.
7. **T**
8. **T**
9. **F.** Doctors advise that if she is interested, the pregnant woman should have an ultrasound test to find out her baby's gender in the fifth month or later.
10. **T**

C. Lesson 2

Let's Review (page 18)

1. cervix
2. bursting of the bag of waters
3. contractions
4. birth canal
5. hard work

Let's Review (page 20)

1. Tina was having contractions that were coming regularly, at around every 10 minutes. As she was already in her ninth month of pregnancy, she and Cesar correctly thought that she would soon go into labor.
2. The nurse took Tina's blood pressure and body temperature.
3. Dr. Valdez, Tina's obstetrician-gynecologist, must examine Tina so that they will know if her cervix was dilated or opened. This is another important indication of labor.

Let's Review (pages 29–30)

1. **T**
2. **F.** The baby passes through the vagina or birth canal, not the placenta. The placenta is the baby's life support while it is still in the womb.

3. **F.** A semi-sitting or semi-squatting position is most effective for pushing and delivery.
4. **F.** A husband can assist in his wife's labor and delivery, but he must first be trained to do so by attending childbirth classes.
5. **T**
6. **F.** The full dilation of the cervix is reached at 10 centimeters, not 10 inches.
7. **T**
8. **F.** After the baby comes out, the placenta must also be delivered.
9. **T**
10. **F.** A breech position means that the baby's head is farthest away from the mother's birth canal.

Let's Review (pages 33–34)

1. obstetrician-gynecologist
2. 10 cm
3. bursting of the bag of waters
4. prenatal checkups
5. 8th month
6. 7th month
7. umbilical cord
8. bag to take to the hospital
9. placenta
10. Lamaze

D. What Have You Learned? *(pages 36–38)*

- | | |
|-----------|--------|
| A. a. 5th | f. 7th |
| b. 4th | g. 3rd |
| c. 2nd | h. 9th |
| d. 1st | i. 6th |
| e. 8th | |

- B. 1. Childbirth is the whole process of giving birth, which includes labor. Childbirth begins with labor, which is followed by pushing and delivery, and then last comes afterbirth. These three are the stages of childbirth. Labor is simply “hard work” exerted mostly by the uterus, which contracts and relaxes to push the baby down the birth canal. The contractions of labor are a natural process that forms part of childbirth.
2. Regular prenatal checkups or visits to the obstetrician-gynecologist are important so that he/she can help ensure that everything is going well with the pregnancy. The doctor can monitor the pregnancy monthly through the checkups. He/She can advise the pregnant woman about nutrition and the important dos and don'ts of pregnancy, and answer any questions or concerns that the expectant mother might have. If something is going wrong, he/she can also detect and help correct it through medical means.
3. The three signs of labor are: contractions, the “bloody show,” and the bursting of the bag of waters. These three may be experienced all at once, but usually they come one after the other. They help tell that labor is starting.
4. The expectant woman (with the help of her husband or a friend or relative) should pack the following in a bag and have it ready to be taken to the hospital for childbirth:
- ◆ Toiletries
 - ◆ Sanitary (maternity) napkins
 - ◆ Underwear including nursing bra
 - ◆ A going-home outfit for the mother-to-be
 - ◆ A going-home outfit for the newborn baby
 - ◆ A washcloth
 - ◆ Snacks
 - ◆ A camera
 - ◆ Heavy socks
 - ◆ A watch or clock with a second hand for timing contractions
 - ◆ Money to pay doctor and hospital bills
- (Any three of the above are correct.)
5. Pregnancy is usually a difficult period for the wife. Thus, she needs all the help, support and understanding she can get from her husband and other relatives. For example, she may go through morning sickness, mood swings, cravings and physical problems that may make her feel sick, irritable and/or uncomfortable. Her husband should try to help her cope with these. Moreover, her husband can also coach her during the actual childbirth to make the process easier as well as to strengthen their bond.

6. The normal birth position for the baby is the vertex position, in which its head lies down toward the vagina. Meanwhile, the breech (*suhi*) position is one in which the feet lie near the vagina, while the head is positioned upward, away from the vagina.
7. The afterbirth is the third stage of childbirth. It refers to the delivery of the placenta, which had been the baby's life support what it was still inside the womb.



Glossary

Afterbirth The stage of childbirth during which the placenta is delivered through the natural contractions of the uterus

Apgar Score A measure of the newborn baby's general condition, evaluated about one minute after birth, and again five minutes after birth. It is based on the baby's Appearance (color), Pulse (heartbeat), Grimace (reflex), Activity (muscle tone) and Respiration, hence the acronym APGAR. The perfect Apgar score is 10; scores above 7 indicate that the baby is in good condition.

Bag of waters The closed sac containing amniotic (serous) fluid that surrounds the embryo

Bradley A method that teaches diet and exercise for pregnant women, in addition to relaxation and childbirth techniques

Childbirth The entire process in which the baby is born; it has three stages namely labor, pushing and delivery, and afterbirth

Coach A person, usually the husband, who assists in the childbirth after undergoing training in a childbirth preparation class such as Lamaze or Bradley

Contraction The hardening, tightening or tensing of the uterus as a result of the squeezing together of uterine muscles

Doppler An instrument used to listen to the baby's heartbeat

Dilate To open

Doptone An instrument that monitors the baby's condition during childbirth

Embryo The term for the unborn baby at its still undeveloped stage, usually during its first month after conception

Embryology The science or branch of biology which studies embryos and their development

Episiotomy A surgical cut or tear made along the vagina or perineum to enlarge the opening through which the baby will pass

Fertilization The union of a sperm and an egg cell (ovum), which forms the fertilized ovum that later develops into an embryo

Fetus The term for the unborn baby when it reaches about two months after conception

Grantly Dick-Read A early method of childbirth which teaches relaxation techniques and prenatal education

Imminent Taking place soon; near; impending

Labor “Hard work” done mostly by the uterus as it alternately contracts and relaxes to push the baby down the birth canal; this is the first stage of childbirth

Lamaze A method of childbirth which gives prenatal education and teaches relaxation, conditioning, breathing and other techniques to make childbirth easier

Obstetrician-gynecologist A doctor who specializes in childbirth and the female reproductive system

Placenta A vascular organ that lies between the fetus and the mother’s uterus; it serves as the baby’s life support while it is still inside the womb



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