



PROGRAM SUPPORT NOTES

Pregnancy and Childbirth: The Real Story (Secondary Edition)

Program Support Notes by:
Elizabeth-Anthony Lee SRN,
Grad.FAMe
Brigid Brignell BA, BSc

Produced by:
VEA Pty Ltd

Commissioning Editor:
Darren Gray Cert IV TAA

Executive Producer:
Edwina Baden-Powell B.A, CVP.
Sandra Frerichs B.Ed, M.Ed.

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For Teachers

Introduction

Pregnancy and Childbirth is an educational video explaining the three trimesters in detail. The program investigates the early stages of pregnancy, including maternal health and fetal development, with interviews with two midwives, Jan Ireland and Kelly Langford, and obstetrician, Dr Lionel Steinberg. Mothers are interviewed and explain their experiences and how they felt throughout their pregnancy.

The final chapter discusses the birthing options and shows one mother's experience of giving birth.

Please note: This program contains a live birth scene in the final chapter. Viewer discretion advised.

Timeline

00:00:00	First trimester: embryo development
00:03:38	First trimester: maternal health
00:08:06	Second trimester: 13-28 weeks
00:14:02	Third trimester: 28-40 weeks
00:16:34	The birth
00:23:52	Credits
00:25:04	End Program

Extras

00:00:00 – 00:14:19	Jodi's video diary
00:00:00 – 00:01:48	Jodi's birth story
00:00:00 – 00:02:36	Lisa's birth story

Related Titles

Sexual and Asexual Reproduction

Recommended Resources

<http://www.virtualmedicalcentre.com/healthandlifestyle/birthing-types/105>

<http://www.pregnancy.com/>

<http://www.bubhub.com.au/loungepregnancy.php>

<http://ben-wakeling.suite101.com/advantages-and-disadvantages-of-a-home-birth-a192320>

Student Worksheet

Initiate Prior Learning

1. As a class, discuss what you already know about pregnancy. Do you or anyone in your class know someone who is currently pregnant? If so, what have you learned about pregnancy through that person?
2. What sort of information have you learned about pregnancy and childbirth via the media, for example films and television? As a class discuss how accurate you think this information might be.
3. The health of the mother during pregnancy is very important to the developing baby. What sorts of health issues and concerns are you aware of relating to pregnancy and childbirth? Consider such things as:
 - what the mother puts into her body and how this might affect the development of the baby
 - what tests might be done during pregnancy and the purpose of these tests
 - what types of health professionals and other sources a mother (or partner) might use to find out more information about their pregnancy.
4. With a partner, create a mind map about pregnancy and childbirth. You might like to include information such as: how long an average pregnancy lasts, particular experiences the mother might have (both physical and emotional), dietary recommendations and types of births.

Active Viewing Guide

First trimester: embryo development

1. Why is the first trimester the most important, according to Dr Steinberg?

2. How is the estimated delivery date calculated?

3. At what stage of the first trimester (i.e. number of days/weeks) are each of the following terms used to describe the developing baby?

a) blastocyst

b) embryo

c) zygote

4. Why is a diet rich in folate necessary?

5. At what stage in the first trimester does the placenta develop?

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First trimester: maternal health

6. Around 10 weeks, a pregnant woman has several tests performed. Name three things she might be tested for at this stage.

7. When is the first ultrasound performed, and what are they looking for?

8. What are some of the physical changes women experience during pregnancy?

9. Why do you think it's important to identify which pregnancies are high risk as early as possible (i.e. during the first trimester)?

Second trimester

10. Name one of the key milestones that take place during the second trimester.

11. What does the placenta do?

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12.a) At approximately what stage is an ultrasound done in the second trimester?

b) Name one of the things they are checking at this stage.

13. Midwives routinely check the fundal height. Explain:

- what is being measured
- how it is measured
- what this measurement indicates.

14. Define:

a) lanugo

b) vernix

Third trimester

15. Why would you advise a parent to attend antenatal classes?

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16. What can a lack of protein and calories late in pregnancy lead to?

17. At what stage of the pregnancy does the baby move into position ready for the birth?

The birth

18. What are the different types of birth deliveries?

19. If caesarean section is performed what are some possible complications?

20. For a woman having a hospital birth, what are some of the indicators it's time to go into the hospital?

Extension Activities

1. Create a timeline for the key developmental stages of a baby during pregnancy, from conception through to birth. Include diagrams or photographs as part of your timeline. Chose a creative method to present the timeline, such as a poster, using free online presentation software (e.g. TimeToast), a blog written from the perspective of the baby, or another method of your choice.
2. Research one aspect of health relating to pregnancy and childbirth, such as:
 - nutritional needs during pregnancy
 - dietary restrictions advised during pregnancy
 - alcohol or drug use (including smoking) during pregnancy
 - health considerations while breastfeeding.

Prepare a poster to be displayed in a doctor's surgery waiting room, explaining to pregnant women (and women considering becoming pregnant) and their partners the potential risks and/or benefits to the mother and developing baby.

3. Choose one of the birthing options discussed in this program:
 - home birth
 - birth centre
 - hospital
 - active birth
 - calm birth
 - water birth
 - caesarean

Research and assess the advantages and disadvantages for that option. Prepare a leaflet aimed at expectant mothers to help them make an informed decision about their birthing options.

Suggested Student Responses

Active Viewing Guide

1. Why is the first trimester the most important, according to Dr Steinberg?
The first trimester is when all the organ systems start to develop, e.g. brain, heart, gut, skeletal system.
2. How is the estimated delivery date calculated?
The expected delivery date is calculated from the first day of the last period.
3. At what stage of the first trimester (i.e. number of days/weeks) are each of the following terms used to describe the developing baby?
 - a) blastocyst
From 7 days
 - b) embryo
From weeks 6 to 9
 - c) zygote
From conception
4. Why is a diet rich in folate necessary?
A diet rich in folate helps reduce the incidence of neural tube defects such as spina bifida and anencephaly, two of the more common defects.
5. At what stage in the first trimester does the placenta develop?
Week 7
6. Around 10 weeks, a pregnant woman has several tests performed. Name three things she might be tested for at this stage.
Answers will vary but may include: blood tests for blood group, a blood count, iron levels, rubella, hepatitis B and hepatitis C, syphilis, HIV; urine tests for bladder infections; other optional tests such as thyroid testing, iodine secretion, vitamin D and infectious diseases like parvovirus, toxoplasmosis (in mothers to be who keep cats), cytomegalovirus.
7. When is the first ultrasound performed, and what are they looking for?
12 weeks, Down Syndrome
8. What are some of the physical changes women experience during pregnancy?
Morning sickness, extreme tiredness, mood swings, breasts become tender.
9. Why do you think it's important to establish early (i.e. during the first trimester) which pregnancies are high risk?
Answers may vary, but may include: to assess whether further tests are needed; to give the pregnant woman extra support or medical attention.
10. Name one of the key milestones that take place during the second trimester.
Answers may vary, but may include: baby becomes a viable fetus, the baby's movements are felt, and the woman's belly starts to grow.

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11. What does the placenta do?

The baby receives oxygen and nutrients from the placenta which also expels carbon dioxide and waste substances through the placental tissue. Other substances - including viruses, medication, drugs, alcohol and nicotine that may be in the mother's blood stream - will cross over into the baby's blood.

12.a) At approximately what stage is an ultrasound done in the second trimester?

18 to 20 weeks

b) Name one of the things they are checking at this stage.

Position of the placenta; structure of the baby to make sure the organ systems are developing properly.

13. Midwives routinely check the fundal height. Explain

- what is being measured
- how it is measured
- what this measurement indicates.

The size of the uterus is being measured. It is measured from the symphysis pubis (join in the pubic bone) to the top of the fundus (top of the belly). This measurement indicates the growth rate of the baby (roughly 1 cm per week of gestation).

14. Define:

a) lanugo

Fine hair covering the baby in the uterus

b) vernix

White waxy cream covering the baby

15. Why would you advise a parent to attend antenatal classes?

Answers may vary but may include: educate the parents about what to expect during pregnancy, birth and during the early post natal period; to socialize with other people going through the same experience.

16. What can a lack of protein and calories late in pregnancy lead to?

A balanced diet rich in protein, minerals, vitamins and calories is important for a healthy pregnancy and baby. Lack of protein and calories in the third trimester can affect brain development.

17. At what stage of the pregnancy does the baby move into position ready for the birth?

36 to 40 weeks

18. What are the different types of birth deliveries?

Hospital births, home births; vaginal delivery C-section, water birth, active birth, calm birth.

19. If caesarean section is performed what are some possible complications?

Bleeding and infection, blood transfusion difficulties with subsequent pregnancies.

20. For a woman having a hospital birth, what are some of the indicators it's time to go into the hospital?

If they're worried, if their waters break, if their contractions are five minutes apart for an hour or if they need pain relief.