Normal labour and delivery

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5.1 GENERAL INSTRUCTIONAL OBJECTIVE

The students should understand perinatal anatomy, physiology and psychology that occurs in both mother and baby so that he/she appreciates the principles of management of labour and knows how to supervise a spontaneous delivery.

5.2 SPECIFIC BEHAVIOURAL OBJECTIVES

1. Describe the anatomy of the female pelvis and the fetus relevant to labour and delivery.
2. Describe the uterine physiology and the mechanisms of labour.
3. Conduct a normal third stage of labour, examine the placenta, cord and membranes and describe the findings.
4. Discuss normal placental separation and the drugs affecting uterine muscle activity.
5. Provide emotional support to a woman in normal labour.
6. Recognize the onset of labour and the normal progress of labour by history, abdominal and vaginal examination and record the findings.
7. Assist with the conduct of a normal delivery.
8. Discuss the nutritional and fluid requirements of the mother during labour and be aware of how to assess them clinically.
9. Assess and discuss the condition of the fetus during labour.
10. Demonstrate a knowledge of pain relief with drugs and other measures during labour, and discuss the possible effects on the fetus and mother.
11. Describe the management of an assisted breech delivery.
12. Discuss the indications for and the technique of episiotomy, and the principles of repair of episiotomy or lacerations.
The basis of obstetrics is to care for a woman during her pregnancy, to assist with the delivery of an infant who is born in an optimal condition, and to prevent any complications occurring to either mother or baby during this process. To achieve this skill in practice requires an understanding of the physiological processes and the mechanisms of labour, as well as the techniques of management of labour, delivery, resuscitation of the newborn and the management of the puerperium. This chapter will be involved in providing the basic information necessary for students to understand these processes.

5.4 ANATOMY OF THE FEMALE PELVIS

The obstetric anatomy of the female pelvis is divided into the bony structure of the pelvis and the soft tissues that line the pelvis, including the uterus, cervix, vagina, pelvic fascia, ligaments, muscles and perineum.

The obstetric pelvic bones are divided into three obstetrically significant sections:

1. The inlet or brim is bounded in front by the symphysis pubis, at the sides by the pubic crest, pectineal eminence, ilio-pectineal line, sacro-iliac joint and the ala of the sacrum, and posteriorly by the sacrum itself.
2. The midcavity is the true pelvis, and is that area lying between the pelvic brim or inlet and the pelvic outlet. It is bounded in front by the lower border of the back of the symphysis pubis, by the ischial spines laterally, and by the lower border of the last sacral vertebra posteriorly.
3. The outlet is bounded by the lower border of the symphysis pubis, the ischial tuberosities and the coccyx.

Diameters of the obstetric pelvis

1. The true conjugate diameter of the brim extends from the centre of the back of the symphysis pubis to the sacral promontory. In a normal gynaecoid pelvis, this normally measures about 11.5 cm.
2. The oblique diameters of the pelvic brim extend from the sacro-