WEEK 1: THE POSTNATAL WOMAN

INTENDED LEARNING OUTCOMES:

- Identify the aims of postnatal care
- Describe the physiological changes of the puerperium
- Explain the principles of health assessment of the mother in the postnatal period following vaginal birth

Key Aims of Postnatal Care:

- To promote the physical recovery from the effects of pregnancy, labour and birth
- To establish good infant-feeding practices and foster good maternal-child relationships
- To strengthen the mother's confidence in herself and her ability to care for her baby in her own social, cultural and family situation

Postpartum Physiology

- 6-8 weeks to reach pre-pregnant state
- Postpartum shivers (25-50% of women) cause unknown, ?thermal imbalances, medications, bacteria in blood

UTERUS

- Contracts immediately --> shrinks --> constricts blood vessels --> prevents bleeding
- At 24hrs pp --> fundus at umbilicus
- 1 week pp --> fundus at umbilicus-symphysis pubis
- 6-8 weeks pp --> fundus returns to normal position
- *larger uterus after c section
- Breastfeeding --> quicker shrinkage (oxytocin)

Uterine Involution

- The role of the myometrium --> myometrial spiral fibres occlude uterine blood vessels, constricting blood supply to the placental site
- Ischaemia: a decreasing blood supply to the uterus (haemostasis to prevent bleeding)
- Autolysis:
- Phagocytosis:
- Decidua: the superficial layer of the decidua becomes necrotic and is shed as lochia in the first few days pp > placental site takes 3 weeks or longer to recover

DECIDUA BASALIS

Sheds as lochia rubra (red) --> lochia serosa (yellow) 2wks --> lochia alba (white)

CERVIX

- Contracts
- 1 week pp 1mm dilated
- No longer a circle, more like a straight slit

VAGINA

- Contracts
- Won't reach pre-pregnant size
- Sex is ok 3-4 weeks pp
- Ovulation/menses return within 6-8 weeks (women NOT breastfeeding) vs. 6 months (women ARE breastfeeding)
- Prolactin blocks sex hormones --> no ovulation
- Rugae of the vagina re-form in the third week but are less prominent
- The labia regress to a less prominent and fleshy state
- Due to fall in oestrogen at delivery -- vaginal epithelium becomes thinner -- many women experience problems with vaginal lubrication immediately after delivery

Soft Tissue Trauma

- Superficial: grazes to the skin where the epidermis has split owing to pressure of distension
- **1st degree:** a tear in the skin and underlying superficial tissues (not including the muscle) -- spontaneous healing
- 2nd degree: when a tear involves perineal muscle damage -- usually sutured to aid healing
- **Episiotomy:** surgical incision to enlarge the introitus to facilitate delivery of the baby (same category as second degree tear)
- **3rd degree:** muscle of the anal sphincter is involved (obstetric repair is essential to restore sphincter activity of the muscle to prevent faecal incontinence)
- **4th degree:** extensive tear, the anal sphincter may become completely divided and the tear continues through the rectal mucosa (specialist surgical repair required)

HORMONE CHANGES

- Oestrogen and progesterone fall to non-pregnant levels within 72hrs of delivery
- Follicle-stimulating hormone (FSH) levels are restored within 3 weeks

RESPIRATORY SYSTEM

- Diaphragm can increase excursion distance once the gravid uterus no longer impedes it --> full ventilation is possible
- Chest wall compliance, tidal volume and respiratory rate return to normal within 1-3 weeks

URINARY SYSTEM

- Bladder changes are associated with increased risk of UTIs
- Trauma to the sphincter of the bladder increases the frequency of stress incontinence (urine leakage occurring with coughing, laughing, exercising etc.)
- By day 10, full bladder function should be observed

GASTROINTESTINAL SYSTEM & DEFECATION

- Tone and pressure of the lower oesophageal sphincter are normal after 6 weeks of delivery
- Reduced GI muscle tone and motility and relaxed abdomen can increase gas distension and constipation immediately after delivery
- First bowel movements usually occur within 2 or 3 days following delivery

WEIGHT CHANGE

- Many women experience weight gain in the first couple of days following delivery --> due to increased ACTH,
 ADH and stress; all increase sodium and water retention
- Weight usually starts to fall from the 4th day after delivery as diuresis increases

Principles of Maternal Postnatal Assessment

M -- Mind

B -- Breasts

A -- Abdomen

<mark>U -- Uterus</mark>

B -- Bladder

B -- Bowels

L -- Loss and Legs

E -- Episiotomy

S -- Support

• Vital signs (temp, pulse, BP) -- women coming from a model of wellness (usually once every 24hrs) -- vitals taken more often if they are high risk (e.g. hypertension, pre-eclampsia) + checking fundus

Mind:

- Explain normal events such as baby blues and watch for signs of postnatal depression
- Ask woman how she is feeling
- Important to ask women about their birth
- Debriefing of traumatic experiences (sit with the woman and ask how she felt with her birth)