Session 2012-2013 Year 1 Semester 2

Module 1.08
Having a Baby

Monday 25th February - Friday 8th March 2013

INDICATIVE LEARNING OBJECTIVES

STRUCTURE & FUNCTION IN HEALTH AND DISEASE

- Describe the key features of fetal growth, development, and nutrition (including clinical measurement) during the third trimester and birth, and infant development in the first 8 weeks
- Outline the key features of normal pregnancy including physiological, immunological, biochemical, and anatomical changes to the mother, and the main hormonal controls (the endocrine system) on maintaining pregnancy and developing breast function and producing breast-milk, including the structure and function of the breast
- Relate the changes in pregnancy to the anatomy of the abdominal cavity, revisiting the genitourinary system (including bladder) and lower gastrointestinal tract (colon)
- Outline the pressure effects of pregnancy on the blood supply to the lower limb (position/posture: effects of lying down for the pregnant woman)
- Describe normal labour (and assessing its progress) and normal delivery, with reference to the structure of the infant skull (comparing/contrasting with adult skull) and key changes at birth affecting the infant
- Outline the main components of temperature control, with reference to homeostasis
- Relate the key features of normal labour/delivery, pain, neural tracts and epidural/other pain relief to the structure and function of the relevant parts of the spine and peripheral and central nervous systems
- Outline key features of postnatal recovery

POPULATION PERSPECTIVE

- Describe the birth notification, birth registration, and congenital anomaly registration systems (and possible record linkage) and their uses in planning health care; and review the main features of NHS organization, such as commissioning/primary care/hospital trust/emergency care, and related bodies (and implications of health care (re)organization/ delivery on health inequalities)
- Define and interpret epidemiological measures of fertility (referring to crude and age-specific birth rate; general fertility rate; total period fertility rate) and trends; and review measures of risk (and consider 'number needed to treat' (NNT))
- Compare the main features of cross-sectional (prevalence), cohort, case-control study design, and different data collection methods (questionnaire, interview, focus group, record abstraction); consider evaluating quality of health care (Maxwell criteria: accessibility, acceptability, appropriateness, equity, effectiveness, efficiency; and consider 'sustainability'); and outline clinical audit

INDIVIDUALS, GROUPS & SOCIETY

- Outline the concept of medicalization of pregnancy and birth (related to the purposes and provision of antenatal care, and referring to approaches to health and disease) and psychosocial factors affecting breast-feeding, self-medication, and the use of complementary therapies
- Outline factors affecting the doctor-patient interaction related to pregnancy

- Outline the concepts of illness behaviour and health beliefs in pregnancy (e.g. impact of pregnancy, birth, and parenthood on: the family unit; lifestyle/health choices about smoking, drugs, and alcohol; and women's perceptions of maternity care, privacy, vulnerability, and control in labour and the puerperium) and related cultural variations
- List social implications of 'parenting' (and relate these to the statutory duties, and employment and statutory rights related to pregnancy)

PROFESSIONAL & PERSONAL DEVELOPMENT

- Compare/contrast the role and statutory duties of specified health care professionals in birth/delivery: midwife, obstetrician, paediatrician, general practitioner
- Recognize (related to maternity examples) appropriate attitudes/emotional responses of ethical health care workers, and know how to develop these (and how to seek advice/'report' ethical transgressions)
- Outline how attitudes and emotional responses to complementary therapies might affect the practitioner's approach to a patient requesting these.
- Review the legal issues related to childbirth and parenting
- Review historical aspects of childbirth and maternity care

SCENARIO

Solicitors Sammy and Gracie Cheung live in Juratown (total period fertility rate=2.2), where the commissioners of antenatal care are using cross-sectional study evidence (to evaluate its quality according to 'Maxwell criteria') and cohort study evidence (to check effectiveness of surveillance). At 28 weeks after her 'LMP' and *"feeling so tired",* Mrs Cheung has a routine antenatal check by the Practice midwife, Sr Beth Bardsley, who asks about changes in health, diet, and smoking habits. She measures her blood pressure, orders tests (of good 'validity'), and avoids medicalizing birth options when discussing Mrs Cheung's wishes. *"That sickness has gone, but I've got heartburn and constipation now – are the treatments safe!? ...and ...ooh... I'm getting kicked again... and again! What was that about health/social benefits? Parenting is so scary,"* says Mrs Cheung.

Mrs Cheung tells her mother, Mrs. Lulu Tong, *"how professionally Sr Bardsley runs the clinic, liaising with my GP and obstetrician"*. "*It's so different now from your birth 30 years ago in Hong Kong - high-tech care, but is it sustainable? Anyway, when's maternity leave?*", asks Mrs Tong.

At about '39 weeks' (after weeks of discomfort and sleeping on her side), Mrs Cheung's 'waters' break. *"The baby's coming! The pains are more often*". The hospital midwife, Sr Anita Jersey, examines her, and she is *"3cm dilated, in labour, with engaged head, and strong fetal heartbeat".* She has pethidine, then an epidural. *[Mrs Cheung's experience differs greatly from that of 19th century women, when there was much puerperal fever, and many viewed the hospital as a 'gateway to death'. Her care was subject to an ongoing 'clinical audit cycle' about standards on the ward.]*

Baby Cheung is born within hours. A queasy Mr Cheung worries about her *"funny-shaped head. My skull's not like that"*. Sr Jersey checks the perineum and placenta, noting minimal blood loss. *"Birth is a big event for babies too - many changes. …Keep Baby from losing heat."* In the postnatal ward, Mrs Cheung asks, "*Can I feed her? Why are you taking my temperature? Sammy, where's my aromatherapy?!"*. Wincing, Sr Jersey advises on breastfeeding and post-natal changes. She completes

the birth notification forms. Mrs Cheung raises 'privacy' issues on her patient satisfaction questionnaire. She ticks a box to attend a focus group (as part of 'qualitative research' exploring public understanding of 'risk', e.g. use of 'NNT').

The paediatrician, Dr Janice Mull, knows that Mr Cheung (well aware of the legalities) has already registered the birth. She examines a mildly jaundiced Baby Cheung, finding nothing to notify (aware of risk factors for congenital anomalies from recent case-control evidence). She asks if Mrs Cheung needed Anti-D, and takes blood *[a little distracted by recalling a colleague's recent transgression of good venesection practice, a 'critical incident' yet to be broached with him]*.

At the postnatal check, Sr Bardsley notes how Mrs Cheung's body is returning to normal. Mrs Cheung proudly shows her the Child Health Record Book from the health visitor. Christabel Cheung is due to be weighed and have her development checked at Baby Clinic soon.