

## SYLLABUS FOR PhD IN OBSTETRIC AND GYNAECOLOGICAL NURSING

### Introduction

- Historical and contemporary perspectives.
- Epidemiological aspects of maternal and child health.
- Theories, models and approaches applied to midwifery practice.
- Role and scope of midwifery practice:-Independent Nurse Midwifery practice, standing orders.
- Evidence based midwifery practice.
- Research priorities in obstetric and gynecological nursing.

### Pregnancy:

- Maternal adaptation: Physiological, psychological.
- Assessment:-Maternal and foetal measures.
- Maternal measures: History taking, Examination-general, physical and obstetrical measures, identification of high risk.
- Foetal measures: Clinical parameters, bio chemical, human estriol, maternal serum Alfa Feto Protein, Acetyl choline esterase (AChE), Triple test Amniocentesis, Cordocentesis, and Chronicvillus sampling (CVS).
- Biophysical :-US imaging, Foetal movement count, Ultra Sonography ,Cardio tomography, Contraction stress test(CST),Non stress test(NST) , Amnioscopy, Foetoscopy.
- Radiological examination.
- Interpretation of diagnostic tests and nursing implications.
- Nursing management of the women, minor disorders of pregnancy and management, preparation for child birth and parenthood, importance of institutional delivery, choice of birth setting, importance and mobilizing of transportation, parental counseling, role of nurse and crisis intervention, identification of high risk pregnancy and referral system.
- Alternative/complimentary therapies.
- Essential factors of labour, Stages and onset.
- **First stage:** Physiology of normal labour, Use of partograph: - principles, use and critical analysis, evidence based studies, Analgesia and anaesthesia in labour, Nursing management.
- **Second stage:** Physiology, intra partum monitoring, nursing management, Resuscitation, immediate newborn care and initiate breast feeding (Guidelines of National neonatology forum of India).
- **Third stage:** Physiology and nursing management.
- **Fourth stage:** Observation, critical analysis and nursing management
- **Various child birth practices:** water birth, position change etc
- Evidence based practice in relation to labour intervention, Role of practitioner nurse midwife
- Alternative /complimentary therapies.
- Physiology of puerperium.
- Physiology of lactation, lactation management, exclusive breast feeding, Baby friendly hospital imitative (BFHI).
- Assessment of postnatal women.
- Minor discomforts and complications of puerperium.
- Management of mothers during puerperium: postnatal exercises, Rooming in, bonding, warm chain.
- Evidence based studies.
- Role of practitioner nurse midwife.
- Alternative/complementary therapies.
- Physiology and characteristics of normal newborn
- Physical and behavioural assessment of newborn

- Needs of newborn
- Essential newborn care: Exclusive breast feeding, Immunization, hygiene measures, newborn nutrition.
- Organization of neonatal care, services (levels), transport, neonatal Intensive care unit, organization and management of nursing unit, organization and management of nursing services in NICU.
- Observation and care of newborn.
- Parenting process.

### **High Risk Pregnancy:**

- Risk approach of obstetrical nursing care, concept & goals.
- Screening of high-risk pregnancy, newer modalities of diagnosis.
- Nursing Management of Pregnancies at risk-due to obstetrical complication.
- Pernicious Vomiting. Bleeding in early pregnancy, abortion, ectopic pregnancy, and gestational trophoblastic diseases. Hemorrhage during late pregnancy, ante partum hemorrhage, Placenta praevia, abruptio placenta. Hypertensive disorders in pregnancy, pre-eclampsia, eclampsia, Hemolysis Elevated liver enzyme Low Platelet count (HELLP) .Iso-immune diseases. Rh and ABO incompatibility. Hematological problems in pregnancy. Hydramnios-oligohydramnios. Prolonged pregnancy- post term, post maturity. Multiple pregnancies. Intra uterine infection & pain during pregnancy. Intra Uterine Growth Retardation (IUGR), Premature Rupture of membrane (PROM), intra uterine death.
- Pregnancies at risk-due to pre-existing health problems:
  - Metabolic conditions. Anemia and nutritional deficiencies. Hepatitis, Cardio-vascular disease, Thyroid diseases. Epilepsy, Essential hypertension. Chronic renal failure. Tropical diseases. Psychiatric disorders. Infections Toxoplasmosis Rubella Cytomegalo virus Herpes (TORCH); Reproductive Tract Infection (RTI); STD; HIV /AIDS, Vaginal infections; Leprosy, Tuberculosis.
  - Other risk factors: Age- Adolescents, elderly; unwed mothers, sexual abuse, substance use.
  - Pregnancies complicating with tumors, uterine anomalies, prolapse, ovarian cyst.
- Abnormal labour, pre-term labour & obstetrical emergencies:
  - Etiology, pathophysiology and nursing management of - Uncoordinated uterine actions, Atony of uterus, precipitate labour, prolonged labour. Abnormal lie, presentation, position compound presentation. Contracted pelvis-CPD; dystocia. Obstetrical emergencies Obstetrical shock, vasa praevia, inversion of uterus, amniotic fluid embolism, rupture uterus, presentation and prolapse cord. Augmentation of labour. Medical and surgical induction. Version. Manual removal of placenta.
  - Obstetrical operation: Forceps delivery, Ventouse, Caesarian section, Destructive operations. Genital tract injuries-Third degree perineal tear, WF, RVF.
  - Complications of third stage of labour: Post partum Hemorrhage. Retained placenta.
- Post partum complications:
  - Nursing management of -Puerperal infections, puerperal sepsis, urinary complications, puerperal venous thrombosis and pulmonary embolism. Sub involution of uterus, Breast conditions, Thrombophlebitis. Psychological complications, post partum blues, depression, psychosis.

### **High Risk Newborn:**

- Concept, goals, assessment, principles.
- Nursing management of -Pre-term, small for gestational age, post-mature infant, and baby of diabetic and substance use mothers. Respiratory conditions, Asphyxia neonatorum, neonatal apnoea meconium aspiration syndrome, pneumo thorax, pneumo mediastinum. Icterus

neonatorum. Birth injuries. Hypoxic ischaemic encephelopathy Congenital anomalies. Neonatal seizures, Neonatal hypocalcaemia, hypoglycemia, hypomagnesaemia Neonatal heart diseases, Neonatal hemolytic diseases. Neonatal infections, neonatal sepsis, ophthalmia neonatorum, congenital syphilis, HIV / AIDS. Advanced neonatal procedures. Calculation of fluid requirements.

- Hematological conditions - erythroblastosis fetalis, hemorrhagic disorder in the newborn.
- Organization of neonatal care, services (Levels), transport, neonatal intensive care unit, organization and management of nursing services in NICU.

### **Gynecological problems and nursing management:**

- Gynecological assessment. Gynecological procedures. Etiology, pathophysiology, diagnosis and nursing management of -Menstrual irregularities. Diseases of genital tract, Genital tract infections, uterine displacement. Genital prolapsed, genital injuries, uterine malformation. Uterine fibroid, ovarian tumors, Breast carcinoma, Pelvic inflammatory diseases, reproductive tract malignancies, hysterectomy- vaginal and abdominal.
- Infertility:
  - Primary and secondary causes, Diagnostic procedures.
  - Counseling: Ethical and legal aspects of assisted reproductive technology (ART)
  - Recent advancement in infertility management, Adoption procedures.
  - Role of nurse in infertility management.
- Menopause:
  - Physiological, psychological and social aspects.
  - Hormone replacement therapy, surgical menopause.
  - Counseling and guidance, Role of practitioner nurse midwife.
- Abortion:
  - Types, causes, Legislations, Clinical rights and professional responsibility, Abortion procedures, Complication,
  - Nursing management, Role of practitioner nurse midwife.

### **Pharmacodynamics in obstetrics:**

- Drugs used in pregnancy, labour, post partum and newborn.
- Calculation of drug dose and administration.
- Effect of drugs used.
- Anaesthesia and analgesia in obstetrics.
- Role and responsibilities of midwifery nurse practitioner.
- Standing orders and protocols and use of selected life saving drugs and interventions of obstetric emergencies approved by the MOHFW.

### **Administration and management of obstetrical and gynecological unit:**

- Design & layout. Staffing, Equipment, supplies, Infection control; Standard safety measures.
- Quality Assurance:-Obstetric auditing - records / reports, Norms, policies and protocols.
- Practice standards for obstetrical gynecological unit.

### **Suggested Reading Material:**

- Bennet V Ruth & Brown K Linda, "Myle" text Book for Midwives
- Calander, R & A Miller, 'Obstetrics illustrated' IV edn, Churchill & Livigstone
- Dawn C.S, "Textbook of Obstetrics and Neonatology", Dawn Books, Calcutta.
- Dawn C.S, "Textbook of Gynaecology and contraception", Dawn Books, Calcutta.
- D.C Dutta, "Text book of Obstetrics",
- D.C Dutta, "Text book of Gynaecology"