

Primary Health Care Initiatives (PHCI) Project
Contract No. 278-C-00-99-00059-00
Abt. Associates Inc.

ANTENATAL CARE

LEARNING OBJECTIVES

- Know the importance of antenatal care in normal and high risk pregnancy
- Identify the obstetric complications as hypertension of pregnancy, anemia, and diabetes, antepartum haemorrhage, previous caesarean sections, grand multiparity, previous intrauterine fetal death.
- Know the examinations and investigations necessary at the initial visit for pregnancy
- Know the problems and risks which should be identified at the antenatal visits
- Communicate with the patient and family about the minor problems associated with pregnancy and the importance of regular antenatal visits.

TEACHING STRATEGIES

- Use lectures to present main points
- Use small group discussion or role play about the importance of antenatal care.
- Discuss the Case Study
- Have participants present several of their own case histories of pregnancies, and practice risk assessment (using the attached form) in small groups

MATERIALS AND EQUIPMENT NEEDED:

- White board or flip chart and markers for summarizing major points
- Overhead Projector, Transparencies

LEARNING POINTS

- Importance of antenatal care in normal and abnormal pregnancies.
- Initial Visit: Important elements in history
 - Age
 - LMP and estimated date of delivery (EDD)
 - Parity, previous abortions,
 - Previous deliveries (caesarean deliveries, breech, twins, premature delivery, normal)
 - Special medical problems (diabetes, hypertension, anemia, heart disease, thyroid disorders, seizures)
 - Bleeding or vaginal discharge during this pregnancy
 - History of medication use, especially current medications
 - History of breastfeeding and current attitudes
- Initial Visit: Important elements in physical examination

- Vital signs, including pre-pregnancy weight
- General condition
- Teeth
- Heart and lungs (murmurs, fluid in lungs, COPD)
- Breasts and nipples (masses, previous infections)
- Abdomen (liver, spleen, masses, hernias)
- Uterine size, measurement, fetal position (if later in pregnancy)
- Complete pelvic examination (vulva, vagina, cervix, uterus, rectum)
- Extremities (edema, varicose veins, hip abnormalities, etc.)
- Appropriate laboratory and other investigations
 - Haemoglobin
 - Blood type and Rh factor
 - Urine for glucose, protein, microscopic exam, culture and sensitivity (when indicated)
 - VDRL
 - Hepatitis and rubella antibodies
 - Cervical smear for Papanicolou
 - Vaginal smear if necessary for abnormal discharge
 - Ultrasound scan for determination of fetal size or abnormalities when indicated
- Risk of pregnancy should be determined following initial visit, and subsequently re-assessed throughout pregnancy (normal or high)
 - Use attached risk classification table (attachment 1)
- Followup antenatal visits:
 - Frequency of visits: In normal pregnancy, every 4 weeks till 28 weeks gestation, then every two weeks till 36 weeks, then weekly till delivery
 - High risk patients should be seen more frequently, every 2 weeks till 28 weeks then weekly till delivery with the physician.
 - During each visit:
 - blood pressure
 - weight
 - urine for sugar, protein and acetone.
 - abdominal examination for fetal size and well being
 - fetal heart tones and movement (not less than 10 movements in 12 hours)
 - any problems since last visit (vaginal discharge, bleeding, edema, etc.)
- Advice about contraception.

PATIENT AND FAMILY COUNSELING

During the course of each pregnancy, the following issues should be discussed, ideally with both the patient and her husband:

- Sexual intercourse (normal frequency unless vaginal infection or bleeding present, or risk of premature birth)
- Avoidance of medications or herbs unless indicated by the physician
- Physical activity (any normal activity which patient normally does)
- Smoking and alcohol use (avoid at all costs)
- Breast feeding (encourage full breast feeding until at least 6 months of age)

- Contraception and birth spacing (begin consideration of which method to use following delivery)
- Place and time of delivery

CASE STUDIES

- I. Amina Khalid, 35 years old, G6 P4 Ab2, attended the antenatal clinic on 5 March. Her LMP was on 23 November 1999; Her EDD is on 30 August 2000. The first three babies were delivered normally at term; she had two abortions in the first trimester followed by evacuation of the uterus. Last baby was delivered by caesarian section for abnormal vaginal bleeding at 35 weeks gestation. She is diabetic for the last 2 years and on oral hypoglycemic drugs.

Topics for discussion regarding this case study

- a. Using the Antepartum Risk Assessment Form, what is her level of risk with this pregnancy?
- b. What is an appropriate plan of management for this patient at this point?
- c. What counseling issues would be most appropriate for this patient at this point?

- II. Fatima Tawalbeh is 24 years old, G2 P1 Ab0 who comes to the antenatal clinic at 12 weeks of pregnancy for the first prenatal visit. The first baby delivered normally at term and was 3.6 kg. She has no complaints at present, and her examination is normal.

Topics for discussion regarding this case study

- a. Using the Antepartum Risk Assessment Form, what is her level of risk with this pregnancy?
- b. What is an appropriate plan of management for this patient at this point?
- c. What counseling issues would be most appropriate for this patient at this point?

CRITICAL ELEMENTS FOR REFERRAL

- Increase in the blood pressure
- Bleeding or abnormal vaginal discharge
- Severe anemia
- Medical illness as diabetes, hypertension, thyroid disease, heart disease etc
- Rh isoimmunization
- Poly or oligohydramnios
- Fetal growth retardation or abnormally large uterus (twins, polyhydramnios)
- Patients needed abdominal delivery

CRITICAL ELEMENTS FOR EVALUATION OF COMPETENCE

- Proper conduction of antenatal and postnatal care

- Appropriate investigations necessary at the booking and postnatal visits.
- Appropriate patient education regarding breast feeding, contraception, smoking, sexual activity
- Contraception and birth spacing
- Knowledge of need of referral.

Attachment 1
Antepartum Risk Assessment Form:

Patient File Number _____ Age _____ Gravida _____

Abortion _____ LMP _____ EDD _____

Reproductive History	RS	Medical or Surgical History	RS	Present Pregnancy	RS
Age <16 or >35	1	Previous gynecologic surgery	1	Bleeding <20 weeks >20 weeks	1 3
Ist visit > 20 weeks	1	Chronic renal disease	1	Anemia <11 gm/100 ml	1
Parity = 0	1	Diabetes	3	Postmaturity	1
Parity > 5	2	Chronic hypertension	3	Hypertension	2
Abortion >2	1	Cardiac disease	3	Premature rupture of membranes	2
History of infertility	1	Gestational diabetes (A)	1	Oligo or Poly hydramnious	2
Antepartum or Postpartum bleeding	1	Epilepsy	1	Intrauterine Growth Retardation	3
Infant >4kgs	1	Psychiatric problem	1	Multiple Pregnancy	3
Infant <2kgs	1	Other significant medical disorders (score 1-3 according to severity)		Abnormal fetal position	3
Toxemia or hypertension	1			Rh-isoimmunization	3
Previous C-Section	2				
Abnormal or difficult labor	2				

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Total Score (Total of three columns) -

* Low Risk: 0-2

High Risk: 3-6

Severe Risk: 7 or more