

2. Prenatal (Antenatal) Care:

It is defined as the complete health supervision of the pregnant woman in order to maintain, protect and promote the health and well-being of the mother, the fetus and the newborn infant.

Aims of ANC:

- 1- Assessment & management of maternal risk & symptoms
- 2- Assessment and management of fetus risk.
- 3- Diagnosis and management of prenatal complications.
- 4- Prenatal diagnosis and management of fetal abnormality
- 5- Decision regarding timing and mode of delivery
- 6- Parental educating regarding pregnancy and childbirth.
- 7- Parental education regarding child-rearing.

Components of ANC:

- 1-Monitoring health through antenatal examinations.
- 2-Risk screening & assessment.
- 3-Provision of special supplements & immunization.
- 4-Health education.

In order to make antenatal care (ANC) services effective, they must be delivered adequately. **Adequacy** should be in quantity (the first antenatal visit should be made during the first trimester, and at least seven visits well distributed over the pregnancy period should be made), as well as in quality (content of the visits should be up to the internationally accepted standard). Adequate ANC will lead to a reduction of maternal and perinatal morbidity and mortality.

ANC Examinations:

The most important AN visit is the first visit. During this visit we will have to make sure that the lady is actually pregnant. This can be done through a pregnancy test done on a urine sample for the detection of Human Chorionic Gonadotrophin (HCG) during the first 13 weeks. If gestational age is beyond 13 weeks, the gravid uterus can be felt by abdominal examination or visualized with a sonogram.

When the pregnancy is confirmed, a file is opened for the pregnant mother in the AN clinic. It should contain information like name, age, address, employment status, educational level and similar information about the husband.

History: History in ANC consists of 5 components:

- a. General: Past history of hypertension, diabetes mellitus, thyroid disease, viral diseases, heart diseases, blood transfusion, surgical interventions, etc.
- b. Menstrual: Age at menarche, regularity of the cycle, length of the cycle, duration, dysmenorrhea, etc.
- c. Obstetrical: Gravidity, parity, abortions, stillbirths, low birth weight, preterm delivery, difficult labour, Caesarean sections, etc.
- d. Current pregnancy: Date of the last menstrual period (to determine present gestational age and the expected date of delivery), bleeding, vaginal discharge, nausea, vomiting, dysuria, etc.
- e. Family: History of hypertension, diabetes mellitus, twin and thalassaemia.

Physical Examination: Weight, height, blood pressure, sclera, tongue, neck for goitre and enlarged lymph nodes, heart, lungs, breasts, abdominal organomegaly, fundal height (do not forget to compare it with the calculated gestational age by using the date of the LMP), foetal heart, leg oedema and varicose veins. Teeth should be examined by the dentist in the centre.

Investigations: -

- Urine analysis: for sugar, albumin and pus cells. If suspicion of UTI, send for microscopy, culture & sensitivity.
- Blood for haemoglobin and PCV, blood group (ABO and Rh to determine blood type, Rh status and risk of isoimmunization).
- Glucose screening for diabetes; all pregnant women should be tested.
- Rubella Ab titer : base line level is needed in certain circumstances.
- Cervical swab for culture when indicated for N. gonorrhoea
- Prenatal Hbs Ag screening is recommended in special indications:
 - any woman with history of acute or chronic liver disease in the past.
 - blood transfusion on repeated occasion.
 - history of working or treatment in haemodialysis unit.
 - certain occupations with frequent exposure or handling of blood such as medical or surgical setting.
 - household contact with hepatitis B carrier or patient.
 - multiple episodes of STD.
 - history of being rejected as blood donor.

If the test is positive:

- Use double glove delivery
- Give baby immunoglobulin and Hep B vaccine immediately after delivery

- Women who may carry Aids virus should be offered confidential HIV Ab studies .

Other Tests & Procedures if indicated:

1-Amniocentesis :

Carried out at 15-18 weeks gestation . for woman over 35 years, or family history of congenital anomaly, chromosomal abnormality, errors of metabolism or neural tube defects, and for spontaneous abortion.

2-Alfa-feto-protein (AFP) determination in blood:

At 16 -18 weeks gestation, for woman with D.M or in neural tube defects.

3-Oral glucose tolerance Test : performed during 1st trimester if the woman is at high risk for diabetes (+ family history, age >35y, previous birth of large baby, or (+) sugar in urine)

4-Ultrasound examination:

for determination of pregnancy duration, presentation, of fetus & placenta, missed abortion, suspected IUGR or congenital abnormalities.

In the subsequent visits only the followings are done: Weight, blood pressure, general condition, fundal height, legs, and foetal heart. Any complaint should also be dealt with.

Repeat: GUE and HB during the second and third trimesters.

Determine Rh antibody titre for Rh negative mothers.

Avoid: X-Ray and unnecessary medications.

Give: haematinic supplementations and tetanus toxoid.

Counsel: on the place where delivery will take place.

Provide: a card with full information on the pregnancy addressed to the maternity hospital at which delivery will take place.

Instructions: About nutrition, rest, sleep, exercise, clothing, oral health, and the date and frequency of subsequent visits.

Frequency of visits

- If woman is normal, prenatal exams scheduled at intervals of:
 - 4 weeks until 28 weeks

- Then every 2 weeks until 36 weeks and
- Weekly thereafter
- If she belongs to high risk group, visits are more often (1-2 week intervals)
- Minimum requirement: at least 4 visits