Focused Antenatal Care: History and Physical Examination

Module 1

Focused Antenatal Care: History and Physical Examination

Session Objectives:

By the end of session, participants will be able to:

- Define focused antenatal care (FANC)
- Explain the components of FANC
- Explain the steps of antenatal history taking
- Describe the components of an FANC examination
- List laboratory tests recommended during FANC visit
- List danger signs of pregnancy

A Mother's Life Is Important

When a mother dies:
Her children are 10 times more likely to die within two years of her death.

When a mother survives:
Her children will survive. The mother gets to realize her own dreams. Her family will remain intact. She will see her children grow up and contribute to the community. Communities will be stronger.

Women Deliver Series (2006/2007),

Preventable Deaths

- Mothers and newborns are dying from preventable diseases.
- We know how to save their lives.
- But only a fraction of those in need have been reached.
- A woman dies every minute due to pregnancy-related causes.

Millennium Development Goals (MDGs) for Maternal and Child Mortality

- **MGD 5**: Reduce the maternal mortality ratio (MMR) by three-quarters between 1990 and 2015.

  Pakistan's MMR: 276 per 100,000

- **MGD 4**: Reduce the under-five mortality rate by two-thirds between 1990 and 2015.

  Pakistan under-five mortality rate: 87 per 1,000

- **More than 73%** of women are receiving one ANC visit by a skilled birth attendant (SBA).

BUT WHY ARE . . .

- **Only 52% of babies delivered by an SBA?**
- **48% of women delivering at health facilities?**

Source : PDHS 2012-2013

What Does Focused Antenatal Care (FANC) Mean?

- FANC means that providers focus on assessment and actions needed to make decisions and provide care for each woman's individual situation.
- FANC emphasizes quality rather than quantity of visits.
- FANC helps providers identify women who have conditions that require treatment and frequent monitoring.

Focused Antenatal Care Goals

The major goal of FANC is to help women maintain a normal pregnancy, through:

- Identification of preexisting health conditions,
- Early detection of complications arising during the pregnancy,
- Health promotion and disease prevention, and
- Birth preparedness and complication readiness planning.

Components of FANC

Identification of Preexisting Conditions

During each visit, the provider talks with the woman, examines her, and counsels her:

- Chronic conditions such as anemia, diabetes, hypertension, tuberculosis, heart disease, STIs or other infections, malnutrition, and psychosocial issues may require a more intensive level of care, monitoring, and follow-up.

Components of FANC (cont'd)

Early Detection of Complications

During each visit, the provider talks with the woman, examines her, and counsels her:

- Pregnancy-associated conditions such as vaginal bleeding, diabetes, infection, hypertension, abnormal fetal growth/position may require immediate referral and close follow-up.

Components of FANC (cont'd)

Counseling

During each visit, the woman receives counseling about:

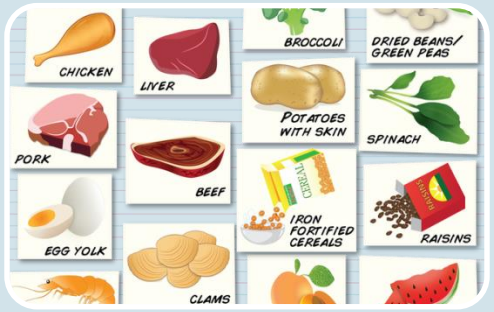
- Health promotion and disease prevention
  - Recognition of danger signs and what to do
- Nutrition
- Immunization
- Family Planning
- Hygiene and infection prevention
- Risk of using tobacco, *gutka*, home remedies
- Iron and folate supplementation

Nutrition

All pregnant women should eat a **balanced diet** of lentils, beans, potatoes, roti, rice, corn, maize, meat, fish, vegetable, fruits, and milk. They should:

- Eat one additional serving of staple food/day;
- Eat small portions more frequently; and
- Not drink tea after meals.

Eat a Variety of Foods!



Rich in iron

Red meat, liver, lentils, peanuts, eggs, spinach with meat

Rich in vitamins

Vitamin A: milk, eggs, all yellow, green and orange fruits and vegetables e.g. sweet potato,carrots, papaya

Vitamin C: citrus fruits (e.g., oranges)

Rich in minerals

Calcium and magnesium:

Lentils, eggs, chickpeas

Hygiene and Self-Care

General hygiene

- Wash hands:
  - Before and after preparing or eating food
  - After using toilet, changing baby's napkin
  - Before handling or feeding baby
- Take bath and change clothes and bedding
- Wash perineum properly and keep clean

Clean food and water

- Use boiled water for drinking
- Cover food to protect from flies and contamination

Hypertension during pregnancy

- Women with hypertension during pregnancy should receive treatment with antihypertensive drugs
- The choice and route of administration of an antihypertensive drug for severe hypertension during pregnancy, in preference to others, should be based primarily on the prescribing clinician's experience with that particular drug, its cost and local availability.
- Calcium supplementation during pregnancy (at doses of 1.5–2.0 g elemental calcium/day) is recommended for the prevention of pre-eclampsia in all women, especially in those at high risk of developing pre-eclampsia.

WHO recommendations for prevention and treatment of pre-eclampsia and eclampsia. Geneva (Switzerland): World Health Organization (WHO); 2011. 38 p.

Hypertension during Pregnancy

Antihypertensive therapy should be considered:

- When the systolic BP 150 mm Hg at least twice in a 24 hour period separated by four hours.
- When diastolic BP 95 mm Hg at least twice in a 24 hour period separated by four hours.
- Following the acute treatment of severe hypertension (170/110)

Commonly used Antihypertensive Drugs

Antihypertensive Drug	Dosage	Precautions
Labetalol	Standard dose: 200-800 mg orally per day in 2-3 divided doses. Maximum dosage: 2,400 mg per day	Should be avoided in women with cardiac conduction abnormalities, systolic heart failure or asthma.
Nifedipine (extended release)	Standard dose: 30-60 mg orally per day Maximum dosage: 120 mg per day	Ensure correct form of nifedipine prescribed; short acting nifedipine is not recommended due to the risk of hypotension. There is concern for severe hypotension if nifedipine is continued with intravenous magnesium.
Methyldopa	Methyldopa Standard dose: 250-1000 mg orally per day in 2-3 divided doses Maximum dosage: 3000 mg per day	May be associated with hepatitis, hemolytic anemia, depression, and sedation.

*Modified from American Congress of Obstetricians and Gynecologists. Chronic hypertension in Pregnancy. Practice Bulletin number 125. Obstetrics and Gynecology 2012; 119 (2 Part 1): 396-407.

Chronic Hypertension in Pregnancy

- High levels of blood pressure maintain renal and placental perfusion in chronic hypertension; reducing blood pressure will result in diminished perfusion. Blood pressure should not be lowered below its pre-pregnancy level.
- If proteinuria or other signs and symptoms of pre-eclampsia are present, consider superimposed pre-eclampsia and manage as pre-eclampsia.
- Refer the woman to a physician if her blood pressure is not controlled.

Medications during Pregnancy

- **Iron and Folic acid** 1tab (60 mg Iron+ 400 mcg folic acid) once daily throughout pregnancy, double the dose if anemic, continue 3 months postpartum.
- **Give Mebendazole** 500mg once at 6 months.
- **Give Calcium** (1000 mg -1300 mg) and **Vitamin D** (200 IU – 800 IU) during second and third trimester. Do not give in first trimester.

Tetanus Toxoid Immunization

- Check the immunization status of the woman and when was the last dose given ?
- If status not known give first dose

Dose	Timings
First dose TT1	First ANC visit
Second doseTT2	4 weeks after TT1
Third dose TT 3	At least 6months after TT2
Fourth doseTT4	At least 1year after TT3
Fifth dose TT5	At least 1 year after TT4

Danger Signs

The pregnant woman must immediately report if she has any of the following signals:

- Vaginal bleeding
- Severe headache/blurring of vision
- Severe abdominal pain
- Respiratory difficulty
- Fever
- Convulsion/loss of consciousness
- Foul-smelling vaginal discharge
- Loss of fetal movement
- Leaking of greenish/brown meconium

Components of FANC (cont'd)

Birth preparedness and complication readiness

A pregnant woman and her family should plan for:

- Delivery by a skilled birth attendant
- The place of birth and transportation
- Items needed for birth
- Saving money for delivery
- Support during and after the birth
- Identification of potential blood donors
- Postpartum family planning

High-Quality FANC

To provide high-quality FANC, providers must:

- Ensure privacy
- Prepare proper equipment
- Use good interpersonal communication skills and a respectful attitude with clients
- Record all findings on ANC card
- Inform clients about findings and encourage clients to ask questions and share concerns

Scheduling and services of ANC

- 1st visit: <16 weeks
- 2nd visit: 24-28 weeks
- 3rd visit: 30-32 weeks
- 4th visit: 36-38 weeks

- Minimum of 4 visits
- Comprehensive care at each visit to improve outcomes
- Unscheduled visits are made when complications occur, follow up or referral is needed, etc.

Source : Pakistan PCPNC

Quick Check

- Ask the pregnant woman upon her arrival whether she currently has or has had any of the following danger signs:
  - Vaginal bleeding
  - Severe difficulty breathing
  - Fever
  - Severe headaches and blurred vision
  - Convulsions
  - Severe abdominal pain or vomiting
- Ensure immediate attention in the event of any danger signs
- Record the information on woman's clinical history

Basic Care Plan

Minimum 4 Visits For The Healthy Client

- Anemia Prevention
- Malaria Prevention (Check for last dose given , give IPT in second/third trimester if needed)
- Check for treatment/prevention HIV/ STIs/Hepatitis B&C
- Deworming
- Tetanus Immunization
- Preparing Birth And Complication Preparedness Plan
- Educate and counsel – nutrition, family planning, infant feeding, hygiene

Provide Key Information on Diabetes Mellitus

- More women than men die from diabetes every year in Pakistan
- 7.1 million people suffer from diabetes, making it the seventh highest population of diabetic patients in the world.
- Pakistan will have the fourth largest diabetic population in the world around 13.8 million people by 2030
- The National Health Survey (2009) reported Pakistan as having one of the lowest control rates of diabetes in the world.

Source : Pakistan PCPNC

Provide Key Information on Diabetes Mellitus (cont'd)

- Diabetes during pregnancy raises the risk of problems for the baby and the mother.
- To help reduce these risks, a diet plan, exercise, testing of blood sugar levels and regular medicines should be followed
- Screen for diabetes at 1s visit and refer to higher level facility if blood glucose level more than 150mg/dl

Provide Key Information on Hepatitis B

- Pakistan remains in the intermediate HBV prevalence area of approximately 4.5 million HBV carriers, with a carrier rate of 34%.
- Hepatitis B is one of the most highly transmitted forms of hepatitis from mother to child
- Inform about mode of transmission
- **All pregnant women should be tested for hepatitis B,** which should be done at the same time as other antenatal tests

Provide Key Information on Hepatitis B (cont'd)

- If a woman tests positive ,counsel on positive test implication ,use universal precautions during delivery
- Refer her to higher level facility for hepatitis B immune globulin, in third trimester.
- Refer newborn for hepatitis B immune globulin at birth, and should be vaccinated with a hepatitis B vaccine at one week, one month, and six months after birth.
- It is safe to breast feed the infant if the newborn is vaccinated within 12 hrs. of birth
- If woman is hepatitis B negative, and not vaccinated offer her for vaccination

Provide Key Information on Hepatitis C

- Hepatitis C Virus a major public health problem all over the world, including Pakistan. Approximately 10 million people are infected with HCV in Pakistan
- Unsafe/unscreened blood transfusion is the major cause of Hepatitis C transmission
- Any woman with risk factors for hepatitis C (such as exposure to transfusions, contaminated needles, or injected drug use) **should be screened for hepatitis C before and during pregnancy.**

Provide Key Information on Hepatitis C (cont'd)

- There is no preventive treatment at this time that can influence the rate of transmission of the virus from mother to infant.
- A pregnant woman with hepatitis will need to be followed by a specialist who can check their liver function tests on a regular basis.
- Transmission of virus through breast milk is unlikely
- Use universal precautions while handling Hepatitis B or C infected clients

Provide Key Information on Vaginal Discharge

- If she has noticed any change (color, smell, consistency) in her vaginal discharge
- If there is any itching around vulva
- Look and examine for vaginal discharge—type, color, smell
- Ask if her husband has any urinary complaint/urethral discharge
- Explain importance of treating both partners

Provide Key Information on Vaginal Discharge (Cont'd)

Commonly seen vaginal discharge :

Type of vaginal discharge	Sign	Treatment	Comments
Candidiasis	Curd like vaginal discharge Severe vaginal itching	**Clotrimazole** vaginal pessary 200mg-oncex6nights OR 500mg once	Teach woman how to insert and was hands before and after insertion
Trichomonas	Abnormal vaginal discharge	**Tab Metronidazole** 400mg x 8 hrly x7days OR 2gm stat	Do not use in first trimester
Chlamydia	Foul smelling abnormal vaginal discharge	Tab Erythromycin 500mgx 6hrly x 7days	

Advise and Counsel on Family Planning

- Ask about plans for having more children. If she and her husband wants more children, advise that waiting at least 2 years before trying to become pregnant again is good for both mother and baby's health.
- Counsel her about different contraceptive methods available (indication, side effects, effectiveness etc.) and give FP brochure/leaflet to take home
- Inform her about methods such as Postpartum IUCD, postpartum sterilization that can be done immediately or within 48hrs of delivery.

Provide Key Information on TB

- If patient complaints of cough >2 weeks/ blood stained sputum/loss of weight refer her to TB Clinic to rule out TB.
- If patient already on anti tuberculosis drugs check her medicines.
- If taking Injection Streptomycin refer her back to TB clinic for change of treatment
- If taking only oral medication re-assure her to continue treatment &prophylaxis for newborn

Provide Key Information on Malaria

- Pregnant women with symptoms of acute malaria are a high risk group, and therefore must receive effective anti-malarial drugs.
- Malaria infection in pregnant women can be more severe (MMR is approximately 50% higher) than in non-pregnant women.
- Malaria can increase the risk for adverse pregnancy outcomes, including premature birth,

  spontaneous abortion, and stillbirth

Provide Key Information on Malaria (cont'd)

- The anti-malarial considered safe in the 1st trimester of pregnancy are quinine, chloroquine, proguanil and sulfadoxine-primethamine.
- Patient should be assured that malaria is curable with complete treatment.
- Plenty of water and fluids are advisable.
- No food is contra indicated in malaria.
- Advise to use insecticide treated bed nets (if available)
- Warn against self-medication and incomplete treatment.
- Patient to report to the nearest health facility/ provider if symptoms persist, reappear or get worse.
- Return to health facility/provider for examination after 15 days.

Antenatal History Taking

History taking during an ANC visit includes:

- Demographic profile (name, age, address, marital status, education, occupation, etc.)
- Menstrual history
- Personal history
- Past medical and surgical history
- Obstetric history
- Family medical history

Antenatal History Taking (cont'd)

History of present pregnancy:

- Last menstrual period
- Calculate expected date of delivery (EDD) using calendar method:

Date of first day of last menstrual period + 7 days – 3 months (e.g., January 1 + 7 days – 3 months = October 8)

- Use gestational age calendar (pregnancy wheel)

Antenatal History Taking (Cont'd)

Obstetrical history:

- Para + gravida
- Age of last born child or abortion
- History of any complication during labor/birth or postpartum complication or abnormalities
- Allergies, immunizations

General Physical Examination

In a general physical exam, providers should:

- Encourage client to empty bladder
- Cover client on examination table
- Wash hands
- Check:
  - Vital signs
  - Clinical signs of anemia (pallor, pale conjunctiva, and nail beds)
  - Breasts
- Report findings to client and record all findings

Obstetrical Examination

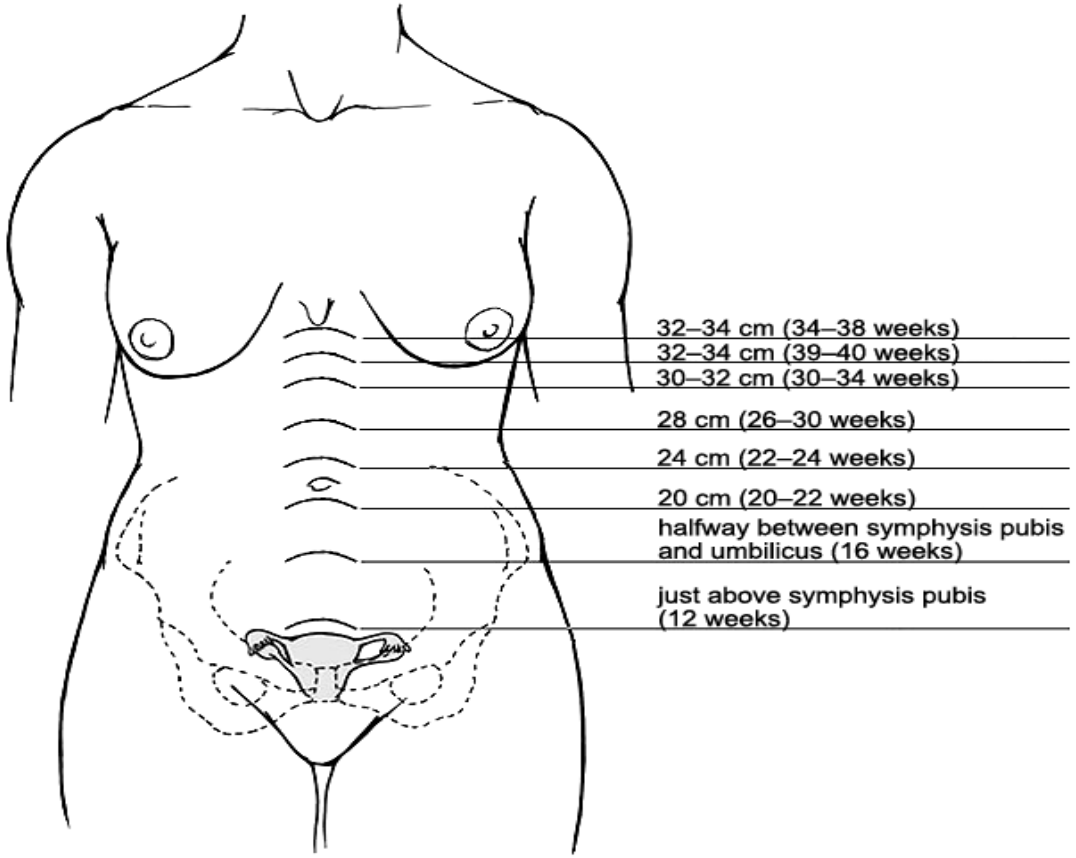
An obstetrical examination includes an assessment of:

- Fundal height (after 12 weeks)
- Fetal heart rate (after 20 weeks)
- Fetal lie and presentation (after 36 weeks)

Measurement of Symphyseal Fundal Height

- Evidence supports either palpation or symphysis pubis–fundus (S–F measurement) at every ANC visit to monitor fetal growth.
- Measurement should start at the variable point (F) and continue to the fixed point (S).
- S–F measurement should be recorded in a consistent manner (in centimeters).

Fundal Height Measurement



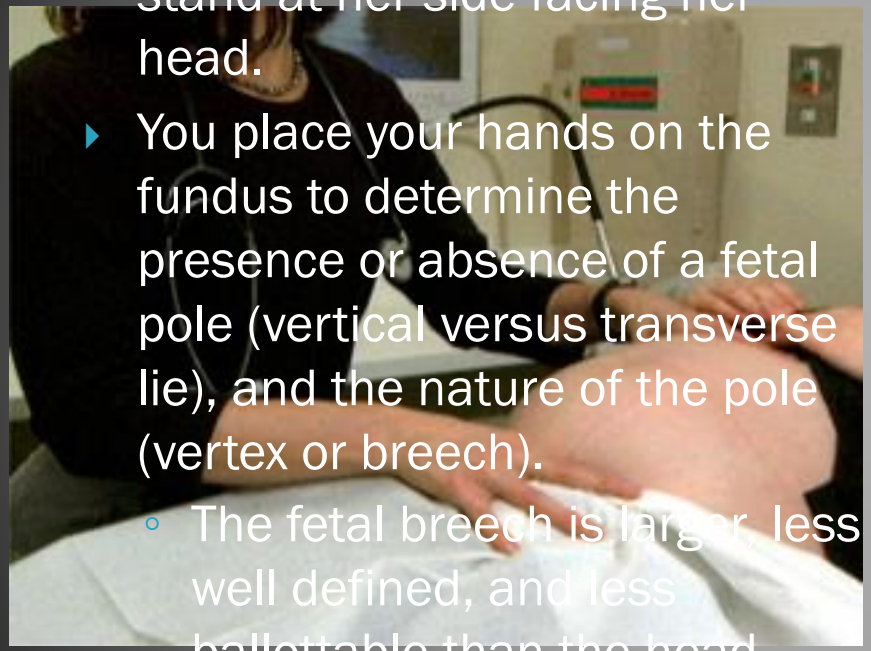
B and Gomez G. Basic Maternal and Newborn Care—Basic Antenatal Care: Course Notebook for Trainers. Baltimore: Jhpiego, 2004.

Fetal Presentation and Descent

- Check presenting part beginning at about 36 weeks.
- Descent of presenting part is important as term approaches.

Leopold's Maneuvers

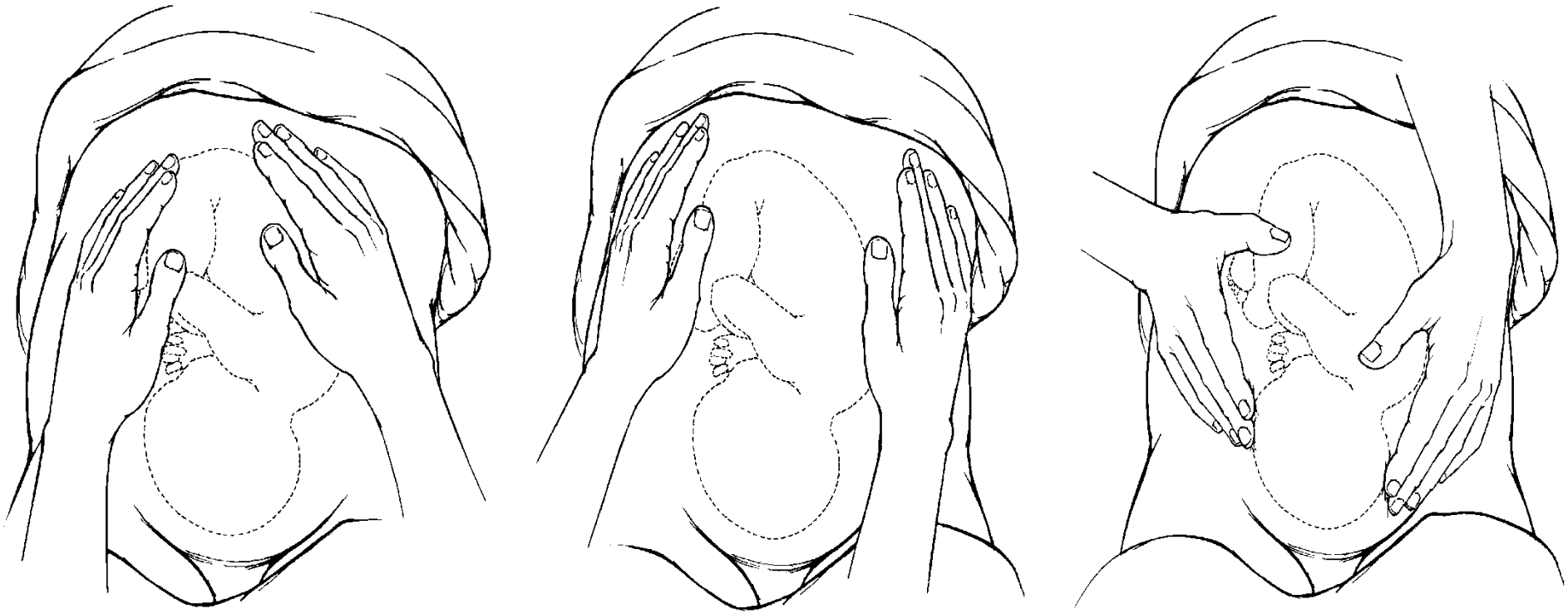
- The patient lies supine and you stand at her side facing her head.
- You place your hands on the fundus to determine the presence or absence of a fetal pole (vertical versus transverse lie), and the nature of the pole (vertex or breech).
  - The fetal breech is larger, less well defined, and less ballottable than the head.



Lie of the Fetus

- Still facing the mother's head, examine the lateral walls of the uterus to determine which side the fetal back and small parts occupy.

Palpation



Reprinted from: Kinzie B and Gomez P. *Basic Maternal and Newborn Care: A Guide for Skilled Providers.* Baltimore: Jhpiego, 2004.

Listening to the Fetal Heart

- Listening to the fetal heart is of no known clinical benefit, but it may be of psychological benefit to mother.
- It should be offered at each visit after about 20 weeks.
- The mother should be asked about fetal movement.
  - Counsel her to count kicks (normal is 10 kicks/day during the last 4 weeks of pregnancy). If she hears less than 10 kicks/day, she should consult her doctor/lady health visitor.

FANC Laboratory Tests

- Hemoglobin
- Blood group, RH Factor
- Urine protein
- Blood glucose
- Hepatitis B,C , HIV & Syphilis Screening

Laboratory Investigations

Investigation	Timings	Remarks
Hemoglobin	First visit	If less than 7 g/dl, refer to DHQ/THQ. If between 7 and 11 g/dl, give double dose for 3 months .Repeat whenever needed.
Blood grouping Rh factor	First visit	If Rh negative, candidate for Anti-D immune globin. Injection Rhogam at 28wks /within 72 hrs of abortion
Blood glucose	First visit Repeat at 26/28 weeks	*If glucose +ve special care Refer if blood glucose > 150mg/dl*
Urine analysis	Each visit	If albumin is positive, investigate for signs of pre-eclampsia. If glucose is positive, provide special care and refer to a specialist.

Summary

Quality focused antenatal care is:

- Based on evidence and rationales;
- Given by a skilled provider in a functioning health care system;
- Provided in a manner that is respectful of the woman, her baby and family, and their culture; and
- Individualized to meet the unique needs of the woman, newborn, and family.

Thanks!