Basic Antenatal care





What can antenatal care achieve?





Conditions that can be successfully detected and treated during the antenatal period

| Maternal condition | Worst effect on pregnancy |
|--|--|
| Anaemia | More likely to bleed, smaller babies |
| Hypertension and pre-eclampsia | Convulsions, haemorrhage, maternal deaths, fetus/neonatal death |
| Medical diseases e.g. diabetes mellitus, epilepsy, heart disease | Maternal death; fetus/neonatal death |
| HIV/AIDS | Maternal death; preterm birth, growth impaired babies, HIV infected babies |
| Chronic infections e.g. tuberculosis | Maternal deaths; fetus/neonatal death |
| Urinary tract infections | Maternal kidney infection, preterm labour, fetus/neonatal death |
| Vaginitis and other sexually transmitted infections | Preterm labour, fetus/neonatal death |
| Malnutrition health Decontributed Health Decontributed Health Decontributed Health Decontributed Health Health Decontributed Health Healt | Small babies |

Conditions that can be successfully detected and treated during the antenatal period

| Fetal condition | Worst effect on pregnancy |
|-------------------------------------|--|
| Poor fetal growth | Fetus/neonatal death |
| Post-maturity | Meconium aspiration, fetus/neonatal death |
| Congenital infections e.g. syphilis | Fetus/neonatal death |
| Congenital abnormalities | Fetus/neonatal death |
| Twins, triplets | Preterm labour, fetus/neonatal death |
| Abnormal fetal lie (Breech) | Ruptured uterus, fetus/neonatal death |
| Rhesus isoimmunisation | Anaemic or jaundiced neonate, fetus/neonatal death |

Effective interventions during the antenatal period.

| Problem | Prevention | Screen/diagnose | Treatment | | | | |
|--------------------------------|-----------------------------|----------------------------------|---|--|--|--|--|
| Mother | | | | | | | |
| Anaemia | Iron and folate prophylaxis | Check haemoglobin | Iron and folate or iron injections or blood transfusion | | | | |
| Hypertension/pre- eclampsia | Calcium supplementation | Check blood pressure, urine | Treat hypertension | | | | |
| Syphilis | As for STIs | RPR, VDRL | Penicillin | | | | |
| Vaginitis | As for STIs | Syndromic approach | Appropriate antibiotics | | | | |
| Urinary tract infection | Personal hygiene | Urine dipsticks or urine culture | Appropriate antibiotics | | | | |

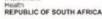


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Effective interventions during the antenatal period.

| Problem | Prevention | Screen/diagnose | Treatment | | | | |
|--|---|--|--|--|--|--|--|
| HIV/AIDS | As for STIs | HIV counselling and testing | Antiretroviral therapy for mother, VTP for neonate | | | | |
| Tuberculosis | TB prophylaxis where indicated | TB symptom screen, sputum specimen | Anti TB drugs | | | | |
| Malaria | Prophylaxis | Blood testing | Anti malarial drugs | | | | |
| Pre-existing medical conditions, Diabetes, heart disease, epilepsy | | History and examination | Refer | | | | |
| Gestational diabetes mellitus | | Family history, previous baby's birth weights, Glycosuria | Investigate, Treat as necessary or refer | | | | |
| Malnutrition | Balanced protein/calorie supplementation, multivitamin supplementation | History, clinical examination (Body/mass index or MUAC) | Refer to social workers, Food supplementation | | | | |



NDP

Effective interventions during the antenatal period.

| Problem | Prevention | Screen/diagnose | Treatment | | | | |
|-----------------------------|---|---|--|--|--|--|--|
| Fetus | | | | | | | |
| Poor fetal growth | Balanced protein/calorie supplementation, Advice on smoking | Uterine growth (serial symphysis-fundus measurements) | Timely delivery | | | | |
| Post-maturity | Accurate gestational age | Calculate gestational age | Induce labour at 41 weeks gestation | | | | |
| Multiple pregnancies | Careful assisted reproduction | Uterine growth, Sonar | Refer | | | | |
| Breech presentation | | Uterine palpation | External cephalic version/ Caesarean section | | | | |
| Congenital abnormalities | Peri-conception folic acid supplementation, Advice on alcohol consumption | Maternal age, previous history, Uterine growth, Sonar abnormalities | Refer to specialists | | | | |
| Rhesus isoimmunisation | Anti –D prophylaxis for Rh negative women in previous pregnancy | Rapid Rh, Coombs test for Rh negative women | Refer Rhesus negative women with anti-D antibodies | | | | |
| Neonatal tetanus | Tetanus Toxoid immunisation | | | | | | |



What are the principles of antenatal care?





The principles of Basic Antenatal Care Plus

- Identification of women with special health conditions and/or those at risk of developing complications using a simple checklist
- Those women with special health conditions or risk factors should be referred to higher levels of care. Care must be taken to ensure identification of all women with special health conditions or risk factors.
- Timing the visits such that the maximum benefit can be obtained, without wasting human resources.



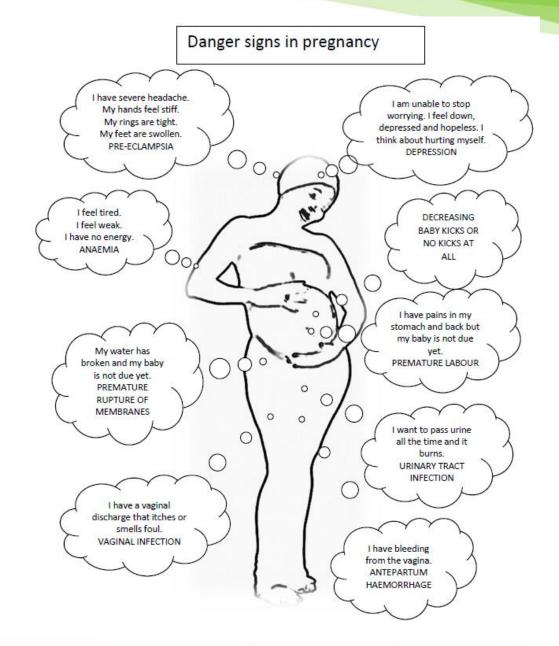


The principles of Basic Antenatal Care Plus

- Performing only examinations and tests that have been proven to be beneficial, and at the most appropriate time
- Wherever possible, rapid easy-to-perform tests should be used at the antenatal clinic or in a facility close to the clinic. The results should be available the same day so treatment can be initiated at the clinic without delay
- Health care providers should make all the pregnant women fell welcome at their clinic, and it should be convenient for the pregnant women to attend the clinic. This implies opening hours of the clinics should be as convenient as possible to the women to come to the clinic.











| COMPLETE USING CARBON PAR | ER. TEAR OUT THIS COPY AND RETAIN IN CLINIC/BANC+ FOLDER | |
|---|---|--|
| | | |
| l,(healthcare worker) have | | GESTATIONAL AGE |
| introduced myself by name to: | EVAMINATION | LNMP DD/MM/YYYY Certain? |
| | EXAMINATION | |
| Name | BP/ mmHg Urine | SONAR |
| Folder number | Height cm Weight kg | BPD HC |
| Date of birth | MUAC CM BMI kg/m ² | AC FL |
| | ThyroidBreasts | Placenta AFI |
| | Heart | Average gestationCRL |
| Age: (yrs) G P Misc | Lungs | Singleton Multiple pregnancy Intra-uterine pregnancy |
| | Abdomen SF Measurement at booking cm | ESTIMATED DATE OF DELIVERY DD/MM/YYYY |
| OBSTETRIC AND NEONATAL *A=Alive; ID= Infant Death, | | Method used to calculate EDD Sonar SF LNMP |
| HISTORY ND=Neonatal Death, | VAGINAL EXAMINATION | |
| IUD=Intra-utenne death | Examination explained and permission obtained | MENTAL HEALTH |
| Year Gestation Delivery Weight Sex Outcome* Complications | Vulva and vagina | Mental health screening: Y N Score |
| | Cervix | Discussed and noted in case record |
| | Uterus | |
| | Pap smear done ү 🕟 Date | Where referred for mental health? |
| | | BIRTH COMPANION |
| | Result | Birth companion discussed and noted on MCR |
| Descriptions of complications: | INVESTIGATIONS | COUNSELLING |
| beachprone or completeness. | Syphilis test Pos Neg Repeat syphilis test Pos Neg | Topic Date 1 Date 2 |
| | Treatment: 1 st 2 nd 3 rd | Fetal movements |
| | | Parental preparedness |
| MEDICAL AND GENERAL HISTORY | Rhesus Pos Neg Antibodies Yes No | Nutrition |
| Hypertension Diabetes Cardiac Asthma TB | Hb g/dl Tetox 1 st 2 nd 3 rd | Danger signs HIV |
| | Urine MCS: Date Result | Mental health |
| Epliepsy Mental health HIV Other | Screening for gestational diabetes 28w | Alcohol |
| If yes, give detail | | Tobacco |
| in yes, give detail | HIV status at booking Unknown Pos On ART Y N | Substances |
| Family history Twins Diabetes TB Congenital | HIV test at booking DD/MM/YY Pos Neg Declined | Domestic violence |
| | | Labour and birth preparedness |
| Details | HIV re-test DD/MM/YY Pos Neg Declined | Breast care |
| Medication | HIV re-test DD/MM/YY Pos Neg Declined | Infant feeding |
| Operations | | FUTURE CONTRACEPTION (PROVIDE DUAL PROTECTION) |
| TB symptom screen pos neg Use of herbai medicine | CD 4 ART initiated on DD/MM/YY | Implant Inject Intra-uterine device Tubal ligation Oral |
| | Viral load: Date Result | All management plans discussed with patient |
| Tobacco Alcohol Substances Use of OTC drugs | Viral load: Date Result | Educational material given on pregnancy and patient rights |
| Psychosocial risk factors | Viral load: DateResult | If tubal ligation selected, adequate counselling was given |
| | Other: | BOOKING VISIT AND ASSESSMENT OF RISK DONE BY |
| | | |









- LMP
- Ultrasound:
 - -1st trimester +/- 3 days
 - -2nd trimester +/- 2 weeks
 - -3^{rd} trimester >3 weeks (too late)
- SF measurement
 - -MacDonald's Rule





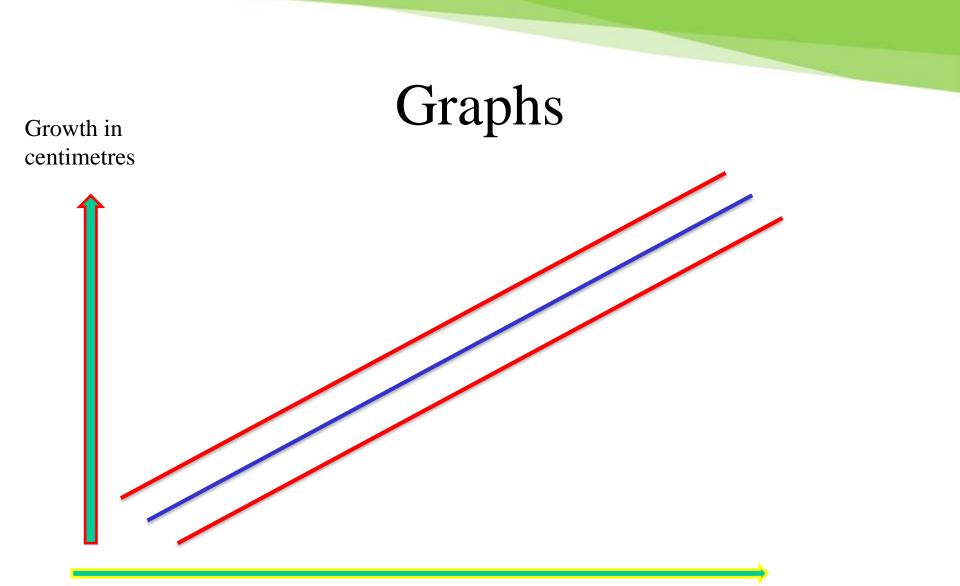


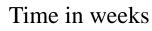
How to measure the SF















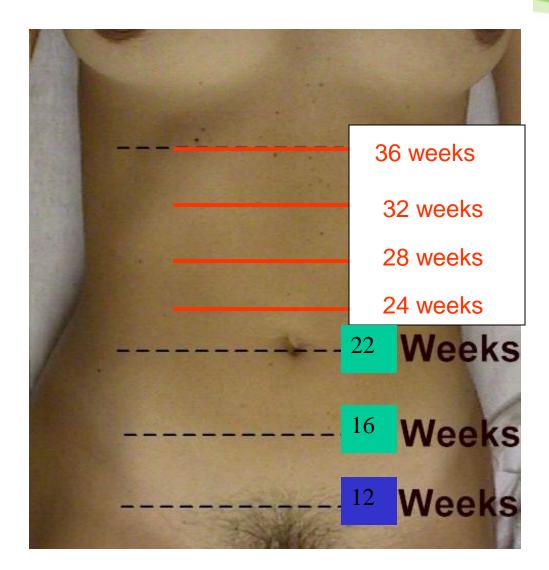
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- Clinical
- Dates (LMP)
- Confirmed by ultrasound <24 weeks (difference less than 2 weeks)
- SF measurement











- If ultrasound available <24 weeks-USE ULTRASOUND!
 - If BMI >35, can use sonar gestation up to 28 weeks





- If ultrasound not available
 - Work out gestation according to dates (in weeks)
 - Measure SF
 - Check on card, on 50%, how many weeks the SF would have made her
 - If difference small (< 4weeks), plot according to dates

SF

- If unsure dates, no ultrasound
 - -Measure SF

–Plot on card, on 50th percentile





Uterus smaller than expected

Wrong dates IUGR Oligohydramnios IUD ROM

→send to Fetal Evaluation Clinic or Doctor's clinic





Uterus bigger than expected

Wrong dates Multiple pregnancy Large fetus Diabetes mellitus Polyhydramnios

→refer to FEC or Doctor's clinic





BANC plus clinic checklist – classifying (first) visit

| Name of patient | Clinic record | 1 | |
|---|-------------------|-----|-----|
| Address | number | | |
| | | | |
| INSTRUCTIONS: Answer all the following questions by placing a | cross mark in the | | |
| Obstetric History | | No | Yes |
| Previous stillbirth or neonatal loss? | | | |
| History of 3 or more consecutive spontaneous miscarriage | es? | | |
| Birth weight of last baby < 2500g? | | | |
| Birth weight of last baby >4500g? | | | |
| Last pregnancy: hospital admission for hypertension or preclampsia/eclampsia? | | | |
| Previous surgery on reproductive tract (e.g. Caesarean se myomectomy, cone biopsy, cervical cerclage) | ection, | | |
| Current pregnancy | | | |
| Diagnosed or suspected multiple pregnancy | | | |
| Age < 16 years | | | |
| 9. Age > 37 years | | | |
| Isoimmunisation [Rh (-) WITH ANTIBODIES] in current or | previous | | |
| pregnancy | | | |
| 11. Vaginal bleeding | | | |
| 12. Pelvic mass | | | |
| Systolic BP ≥140mmHg and/or diastolic BP 90 mmHg or r or known chronic hypertension | nore at booking, | | |
| General medical | | | |
| 14. Diabetes mellitus on insulin or oral hypoglycaemic treatme | ent | | |
| 15. Cardiac disease | | | |
| 16. Renal disease | | | |
| 17. Epilepsy | | | |
| 18. Asthmatic on medication | | | |
| 19. Tuberculosis (currently on treatment) | | | |
| 20. Known 'substance' abuse (including heavy alcohol drinkin | a) | | |
| 21. Any other severe medical disease or condition | | | |
| 22. Mental health screen positive (only if suicide item is endor | rsed) | | |
| 23. Any severe mental health condition: bipolar affective disor | | | |
| schizophrenia, severe depression | | | |
| Please specify | | | |
| A yes to any ONE of the above questions (i.e. ONE shaded box | | | |
| woman is not eligible for the basic component of antenatal care a | | | al. |
| Is the woman eligible (circle) | No | Yes | |
| If NO, she is referred to | | | |
| Date Name | Signature | | |



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BANC plus checklist for subsequent antenatal visits

| | VISIT | S | | | | | | _ |
|---|-------------------------|---------|---------|-----------|----------|---------|----|----|
| First visit for all women at first contact with clinics, regardless of gestational age. If first visit later than recommended, carry out activities up to that time | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| DATE: | | | | | | | | |
| Approximate gestational age (weeks) | <14 | 20 | 26 | 30 | 34 | 36 | 38 | 40 |
| Classifying form indicating eligibility for BANC | | | | | | | | |
| History taken | | | | | | | | |
| Full clinical examination | | | | | | | | |
| Estimated date of delivery calculated | | | | | | | | |
| Blood pressure taken | | | | | | | | |
| Maternal height/weight/MUAC/BMI | | | | | | | | |
| Haemoglobin test | | | | | | | | |
| Rapid syphilis test performed | | Rete | st mon | thly if s | yphilis | negati | ve | |
| Urine tested for protein, sugar | | | | | | | | |
| Rapid Rh performed | | | | | | | | |
| Mental Health Screen | | | | en in e | | | | |
| HIV counselling and testing | | | | thly if H | | | | |
| ART for HIV-infected women | Viral I | | onitori | ng as p | er guid | lelines | | _ |
| Tetanus toxoid given | | Freeded | | | | | | |
| Iron and folate supplementation provided | | | | | | | | |
| Calcium supplementation provided | | | | | | | | |
| Information for emergencies given | | | | | | | | |
| Antenatal record completed and given to woman | | | | | | | | |
| Prepare person for what to bring for labour and delivery (KMC wrap, woollen hat and booties) | | | | | | | | |
| Link and arrange Ward Based Community Outreach Teams home visits | | | | | | | | |
| Asked if fetal movements felt and normal | Do if 1* visit was | - | 1 | 1 | 1 | 1 | 1 | 1 |
| | >20 weeks | | _ | | | | | |
| TB symptom screen Clinical examination for anaemia | | | | | | | | - |
| | | | | | | | | |
| Urine tested for protein | Do if 14 | | | | | | - | - |
| Uterus measured for growth - twins, IUGR | visit was ,>20 weeks | | | | <u> </u> | | | |
| Instructions for delivery/transport to institution | 1 | | | | 1 | 1 | 1 | 1 |
| Recommendations for lactation and contraception | | | | | | | | |
| Detection of here the second of the | | | | | | | | _ |
| Detection of breech presentation and referral | | | | - | | | | |
| Remind woman to bring MCR in labour | | | | | | | | ⊢ |
| Doctor or senior midwife to review gestational age | | | | - | | | | - |
| Give hospital visit date at 41 weeks for induction Initials staff member responsible | | | | | | | | |
| mitiais stan member responsible | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |





| | | | BA | NC plu | is visit | s (wee | eka) | | Concerns/Actions to be taken |
|---|--|--------------------------------------|----|--------|----------|--------|------|----|--|
| Assessment | | 20 | 26 | 30 | 34 | 36 | 38 | 40 | |
| Ask | How are you? | X | Х | X | X | X | X | X | Identify mental health problems |
| | Is the baby moving? | X | Х | X | X | X | X | X | Refer If no movements after 28 weeks |
| | Have you had any bleeding? | X | Х | X | X | | X | | Refer (see chapter on APH) |
| | Have you any concerns/symptoms of? | X | х | X | X | X | Х | Х | |
| | Vaginitis | • | • | | 8 | | | | Risk of ascending infections |
| | Urinary tract infection | | | | | | | | Risk of ascending infections |
| | Cough, no weight gain, night s | Tuberculosis, other chest infections | | | | | | | |
| | Mainutrition | Chronic disease, poverty | | | | | | | |
| | HIV | | | | | | | | Ensure proper management |
| Check antenatal record | | | | | | | | | |
| | Calculate current gestational age | X | X | X | X | X | X | X | Check fetal growth and confirm at 40 weeks |
| | Syphilis testing | х | X | X | X | | X | X | Check result and treat if necessary |
| | Haemoglobin | | | X | | | X | | Check result and treat for anaemia if Hb low |
| | HIV counselling and testing | X | X | X | X | | X | | Check If retested, start ART If HIV positive |
| | HIV care and monitoring | X | X | X | X | | X | | Monitor viral load as per guidelines |
| | Booster dose Tetanus toxold | | | X | | | | | Only if immunising for the first time |
| | Previous visits concerns | х | X | X | X | X | X | х | Have these been solved? |
| <u>Examine</u> (Look, feel, listen) | | | | | | | | | |
| | Pallor | X | X | X | X | | X | | Screen for anaemia, repeat Hb 30 & 38 week |
| | Blood pressure | X | X | X | X | X | X | х | Screen for hypertension |
| | Urine; protein/glucose | X | X | X | X | X | X | Х | Screen for pre-eclampsia and diabetes |
| | Uterine growth (SFH) | X | X | X | X | | X | | Screen for IUGR |
| | Fetal presentation | | | | X | | X | | Screen for abnormal lie, e.g. breech |





| Fill in antenatal record and revise birth plan if needed | | x | x | x | x | x | x | x | |
|---|---|---|---|---|---|---|---|---|---|
| Implement interventions | Iron and folate supplementation for all women | x | x | x | x | | x | | To prevent anaemia |
| | Calcium supplementation to all women | х | х | х | х | | х | | To prevent hypertension |
| | If RPR positive – treat for syphilis | х | х | х | х | х | х | х | To prevent congenital syphilis and stillbirths |
| | Rh negative- send Coombs test | | х | | х | | | | To identify Rh-isoimmunisation |
| | HIV-positive – start/continue ART | х | х | х | х | x | х | х | To support, treat and prevent transmission |
| | In malaria endemic areas: appropriate prophylaxis (see chapter on Malaria) | x | x | x | x | | x | | To prevent malaria |
| General advice | Safe sex | x | x | x | x | | x | | Prevent STIs |
| | Stop tobacco, alcohol | х | х | х | х | | х | | Prevent IUGR and congenital abnormalities |
| | Infant feeding advice | x | x | x | x | | x | | Prepare for feeding choice and vertical transmission reduction |
| | Plan for haemorrhage or warning signs | х | х | х | х | | х | | Early identification of complications |
| | Birth plan | x | x | x | x | x | x | x | Make sure there is a transport plan to get to the institution and which institution is to be used |
| | Contraceptive advice | x | x | x | x | | x | | Plan for future pregnancies and space children |
| Questions and answers | | x | x | x | x | x | x | x | Enable woman to voice concerns |
| Date next follow-up visit | | x | x | x | x | x | x | x | |
| Maintain complete records | | x | x | x | x | x | x | x | Ensure antenatal care and clinic checklist completed |



