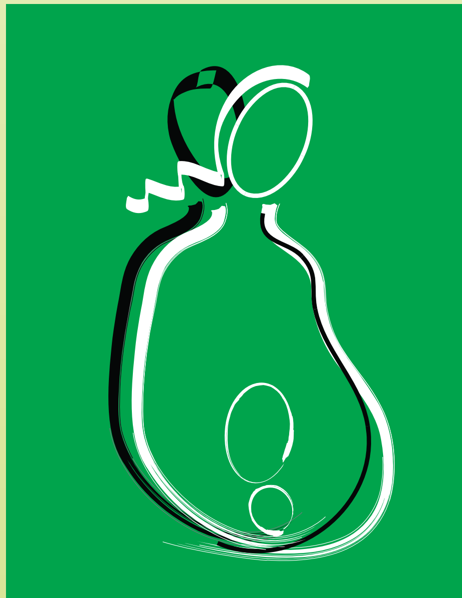
Pakistan
Pregnancy, Childbirth, Postpartum and Newborn Care:
A guide for essential practice



ADAPTED From PCPNC Guidelines of

World Health Organization

The World Bank Group

Pakistan
Pregnancy, Childbirth, Postpartum and Newborn Care: A guide for essential practice

Society of Obstertrisians and Gynecologists of Pakistan

Government of Pakistan

WHO Library Cataloguing-in-Publication Data

Pregnancy, childbirth, postpartum and newborn care : a guide for essential practice.

At head of title: Integrated Management of Pregnancy and Childbirth.

1.Labor, Obstetric 2.Delivery, Obstetric 3.Prenatal care 4.Perinatal care — methods 5.Postnatal care - methods 6.Pregnancy complications - diagnosis 7.Pregnancy complications - therapy 8.Manuals I.World Health Organization.

ISBN 92 4 159084 X (NLM classification: WQ 175)

First edition 2003
Second edition 2006
Reprinted with changes 2009
Pakistan Adapted edition 2012

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Printed in Pakistan

FOREWORD

During the past two decades, Pakistan has witnessed a reduction in maternal and child mortality ratios between 1990 and 2010; however the progress in reducing child mortality during the last decade was stagnant as neonatal mortality rate has declined by only 27% during the same period. Of 481 surveyed, neonatal deaths in the four years preceding the Pakistan Demographic and Health Survey (2006/07), 37% occurred on day zero (0), 46% on days 0 and 1; and 75% during the first week of life. Maternal mortality in Pakistan is of the highest in the East Mediterranean Region and in South Asia. It's very alarming, that if the maternal and child mortality ratios remained stagnant, Pakistan will be distant from achieving the MDGs 4&5 by 2015.

PDHS shows that, more than one third of maternal deaths are due to postpartum hemorrhage followed by puerperal sepsis and eclampsia, while eight percent is attributed to inadequate medical care such as treatment failure or complications of medical procedures. On the other hand, pre-maturity, neonatal sepsis and birth asphyxia are the main underlying causes of neonatal deaths. These deaths could have been prevented and more lives would have been saved if health problems were early detected and timely managed using simple technologies and safe practices.

Health Care Providers (HCP), at the primary health care level and at first referral facilities, have the greatest role in saving these lives, if they are well trained.

With this background and with the leadership of the Society of Obstetricians and Gynecologist of Pakistan (SOGP), Departments of Health and support of WHO Country Office of Pakistan, the Global Guide: Pregnancy, Child birth, Postnatal and Newborn Care of “IMPAC tool kit” was adapted and a training package was developed through an extensive process including different stakeholders. .

This guide: ***Pakistan Pregnancy, Child birth, Postpartum and Newborn Care (PPCPNC),*** along with the training package, aims at enabling HCP to use the best practices to early detect and effectively manage problems affecting mothers and newborns during pregnancy, child birth, postnatal and neonatal periods. The package includes: six modules for facilitators & participants, Participant's workbook, clinical practice guide and course director guide. It targets skilled birth attendants: general medical practitioners, lady health visitors, nurse midwives.

As more than seventy percent of deliveries take place at home in Pakistan, further adaptation is required for community midwives as an intermediate phase while efforts are enhanced to increase the coverage of facility delivery.

This material will be used in this format in a series of training courses before it is translated. Note: it was recommended by experts and participants of the field test, to keep the cover of the Generic Guide as recognition to developers and for easy reference to the generic material if required.

WHO Representative

President SOGP

UNFPA Representative

UNICEF Representative

ACKNOWLEDGEMENTS FOR THE ADAPTED PCPNC GUIDE

This Pakistan Pregnancy Childbirth Postpartum Newborn Care Guide is the result of a significant collaboration among many health care professionals, and has undergone extensive review, field-testing and revision.

Prof Lubna Hassan President SOGP led the efforts to complete the package. Member of SOGP Task Force and MNCH Colleagues of World Health Organization contributing to the development and field-testing of this Adapted guide and training materials.

The Pakistan Pregnancy Childbirth Postpartum Newborn Care guide was reviewed through several meetings by all members of the SOGP Task Force and other co-opted members. The guide was adapted within the National context for Pakistan.

We gratefully acknowledge the effort and time spent earlier in 2007 by hundreds of OB/GYN specialists and pediatricians in countrywide seminars for the adaptation of this guide by Prof Lubna Hassan, Prof. Ghazala Mehmood and Prof. Jamal

During the adaptation process, various meetings were convened for expert's suggestions including a three-day consultative meeting in Bhurban from 28-30 Oct 2011 and one-day endorsement seminar in Islamabad on 21 January 2012. WHO acknowledge the support and suggestions provided by the participants of this workshop including the representatives of Department of Health from all five provinces, Program Coordinators of MNCH program from all five province and FATA, SOGP Task Force and other stakeholders in maternal and newborn health.

We would like to thanks WHO Team for their contributions, especially Dr. Sumaia Alfadil and Dr. Jasim Anwar during the whole adaption process.

Finally, our sincere appreciation to Prof Dr Lubna Hassan and her team including Dr Arzoo Bangash for their tireless efforts and contributions in making this adaptation possible.

Signature by WR Pakistan

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GLOSSARY AND ACRONYMS

INTRODUCTION

The aim of Pregnancy, childbirth, postpartum and newborn care guide for essential practice (PCPNC) is to provide evidence-based recommendations to guide health care professionals in the management of women during pregnancy, childbirth and postpartum, and post abortion, and newborns during their first week of life, including management of endemic diseases like malaria, TB and anaemia etc.

All recommendations are for skilled attendants working at the primary level of health care, either at the facility or in the community. They apply to all women attending antenatal care, in delivery, postpartum or post abortion care, or who come for emergency care, and to all newborns at birth and during the first week of life (or later) for routine and emergency care.

The PCPNC is a guide for clinical decision-making. It facilitates the collection, analysis, classification and use of relevant information by suggesting key questions, essential observations and/or examinations, and recommending appropriate research-based interventions. It promotes the early detection of complications and the initiation of early and appropriate treatment, including timely referral, if necessary.

Correct use of this guide should help reduce the high maternal and perinatal mortality and morbidity rates prevalent in many parts of the developing world, thereby making pregnancy and childbirth safer.

The guide is not designed for immediate use. It is a generic guide and should first be adapted to local needs and resources. It should cover the most serious endemic conditions that the skilled birth attendant must be able to treat, and be made consistent with national treatment guidelines and other policies. It is accompanied by an adaptation guide to help countries prepare their own national guides and training and other supporting materials.

The first section, How to use the guide, describes how the guide is organized, the overall content and presentation. Each chapter begins with a short description of how to read and use it, to help the reader use the guide correctly.

The Guide has been developed by the Department of Reproductive Health and Research with contributions from the following WHO programmes:

- Child and Adolesscent Health and Development
- HIV/AIDS
- Nutrition for Health and Development
- Essential drugs and Medicines Policy
- Vaccines and Biologicals
- Communicable Diseases Control, Prevention and Eradication (tuberculosis, malaria, helminthiasis)
- Gender and Women's Health
- Mental Health and Substance Dependence
- Blindness and Deafness

INTRODUCTION TO THE ADAPTED PCPNC GUIDE

The WHO PCPNC guide addresses the essential evidence-based core competencies that a skilled birth attendant must have in order to be able to save the lives of mothers & their babies. The guide has been reviewed and adapted to the needs of Pakistan.

There was a unanimous consensus among the members of the Task Force and the subsequent meeting of experts from all four provinces and AJK and FATA that the adapted document must reflect the contextual reality of Pakistan, our disease spectrum and our financial constraints.

The major departure from the global guide, for Pakistan, is in the area of HIV which is addressed by the PCPNC guide as it should be for a generalized epidemic. Keeping in mind the fact that the new Pregnancy, Childbirth, Postpartum and Newborn Care Course. Based on the adapted PCPNC guide will soon be the National Training Course, it was imperative to carefully and strategically integrate HIV/PPTCT in accordance to the current country HIV situation that is a low prevalence in the general population with a concentrated epidemic in certain high risk groups. We have adhered to A country specific approach for a concentrated epidemic which will have a low (Or medium) cost but high impact.Some of the salient areas that needed Adaptation Are listed:

1. HIV screening is not a part of basic antenatal tests for all women but is added in the basic antenatal package in selected high risk districts with pre and post test counseling (pre-test can be part of group health education and post test should be individual). These high risk districts can be determined by provinces but the following criteria could be articulated:

- Concentration of people living with HIV and AIDS (e.g. migrants)
- Substantial numbers of one or overlapping risk groups (e.g. IDUs, sex workers)

In general, screening strategies around BHU level needs more articulation.

- Obstetric care for HIV positive pregnant women including ARVs is provided at tertiary or DHQ level hospitals with OB departments trained in PPTCT, and preferably in same institution as AIDS treatment care and support centers, e.g FCC in Peshawar Khyber Pakhtunkhwa.
- General prevention information, stigma and discrimination and universal precautions should be part of the guideline and is retained and will be taught to all health cadres.

2. Antenatal interventions, such as detection and treatment of anemia and detection and management of Diabetes, RH incompatibility HEPATITIS B & C offer improvements in health without necessarily any equivalent reduction in the risk of maternal death. There is now broad agreement that the focus of antenatal care interventions should be on improving maternal *health,* this being both an end in itself and necessary for improving the health and survival of mothers and their infants.

There are potential benefits to made from some of the elements of antenatal care, and these benefits may be most significant in a developing country such as Pakistan, where morbidity and mortality levels among reproductive-age women are high. The antenatal period clearly presents opportunities for reaching pregnant women with a number of interventions that may be vital to their health and well-being and that of their infants. Some relevant antenatal screening tests have been added, Including:

Blood group–RH Status: This is a widely available test. Keeping in mind that 15% of our population is RH negative the obstetric implications of RH incompatibility are significant in Pakistan and is a cause of a substantial number of families with recurrent pregnancy/Infant loss.

Diabetes Mellitus is common about 4% of the population suffers from diabetes which contributes to morbidity and at times mortality of both mother and the newborn baby so screening for Diabetes Mellitus has been added to the basic tests.

Hepatitis B and Hepatitis C are also rampant in our pregnant population although it may not have direct implications for MMR & PNM. The antenatal period can be used as an entry point to immunize against hepatitis B and increase awareness about Hepatitis C.

3. Recognizing that the global guide was published in 2006. There were some very obvious omissions like:

- Use of misoprostol in abortions and postpartum hemorrhage
- Manual Vacuum Aspiration
- Partograph

In the global document it is assumed that the participants who deliver babies have certain basic skills this is not true of our target group. In Pakistan, along with teaching them the evidence based treatments through the Guide, certain essential skills will be taught /demonstrated to compliment the guideline.

For the most part we have remained true to the structure and format of the original document.

Pakistan Pregnancy, Childbirth, Postpartum and Newborn Course based on the revised adapted PCPNC guide has also been developed.

HOW TO READ THE GUIDE

Content

The Guide includes routine and emergency care for women and newborns during pregnancy, labour and delivery, postpartum and post abortion, as well as key preventive measures required to reduce the incidence of endemic and other diseases like malaria, anaemia, Hepatitis B Hepatitis C, Diabetes Mellitus, HIV/AIDS and TB, which add to maternal and perinatal morbidity and mortality.

Most women and newborns using the services described in the Guide are not ill and/or do not have complications. They are able to wait in line when they come for a scheduled visit. However, the small proportion of women/newborns who are ill, have complications or are in labour, need urgent attention and care.

The clinical content is divided into six sections which are as follows:

- Quick check (triage), emergency management (called Rapid Assessment and Management or RAM) and referral, followed by a chapter on emergency treatments for the woman.
- Post-abortion care.
- Antenatal care.
- Labour and delivery.
- Postpartum care.
- Newborn care.

In each of the six clinical sections listed above there is a series of flow, treatment and information charts which include:

- Guidance on routine care, including monitoring the well-being of the mother and/ or baby.
- Early detection and management of complications.
- Preventive measures.
- Advice and counselling.

In addition to the clinical care outlined above, other sections in the guide include:

- Advice on Hepatitis B , Hepatitis C & HIV, prevention and treatment.
- Support for women with special needs.
- Links with the community.
- Drugs, supplies, equipment, universal precautions and laboratory tests.
- Examples of clinical records.
- Counselling and key messages for women and families.

There is an important section at the beginning of the Guide entitled Principles of good care A1-A5 This includes principles of good care for all women, including those with special needs. It explains the organization of each visit to a healthcare facility, which applies to overall care. The principles are not repeated for each visit.

Recommendations for the management of complications at secondary (referral) health care level can be found in the following guides for midwives and doctors:

- Managing complications of pregnancy and childbirth (WHO/RHR/00.7)
- Managing newborn problems.

Documents referred to in this Guide can be obtained from the Department of Making Pregnancy Safer, Family and Community Health, World Health Organization, Geneva, Switzerland. E-mailmpspublications@who.int.

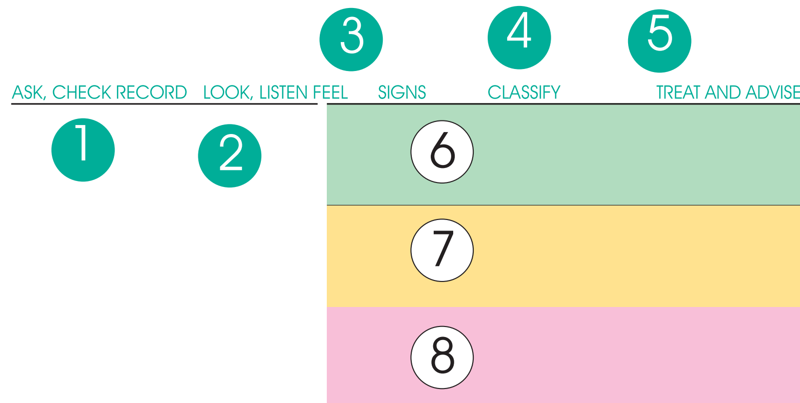
Other related WHO documents can be downloaded from the following links:

- Medical Eligibility Criteria 3rd edition: http://www.who.int/reproductive-health/publications/mec/mec.pdf.
- Selected Practice Recommendations 2nd edition: http://www.who.int/reproductive-health/publications/spr/spr.pdf.
- Guidelines for the Management of Sexually Transmitted Infections: http://www.who.int/reproductive-health/publications/rhr_01_10_mngt_stis/guidelines_mngt_stis.pdf
- WHO consultation on technical and operational recommendations for scale-up of laboratory services and monitoring HIV antiretroviral therapy in resource-limited settings. http://www.who.int/hiv/pub/prev_care/en ISBN 92 4 159368 7
- Integrated Management of Adolescent and adult illness http://www.who.int/3by5/publications/documents/imai/en/index.html
- Beyond the numbers reviewing maternal deaths and complications to make pregnancy safer WHO Geneva 2004
- FIGO consensus statement on uterine evacuation 2012
- Strengthening Midwifery Tool Kit Module 4 Competencies for midwifery Practice, 2011
- Strengthening Midwifery Tool Kit Module 8 Monitoring and assessment of continued competency for midwifery practice, 2011
- Safe abortion Technical and policy guideline for health systems, Second edition, 2012
- WHO guideline for the management of post partum haemmorhage and retained Placenta, 2009
- National PPTCT guideline, 2011
- PGS Consensus Statement on management of Hepatitis B Virus Infection, 2003
- Malaria case management, desk guide for clinicians and health care providers, directorate of malaria control ministry of health, islamabad, October 2007
- Guidelines for Diagnosis and Management of Tuberculosis in Pakistan

STRUCTURE AND PRESENTATION

This Guide is a tool for clinical decision-making. The content is presented in a frame work of coloured flow charts supported by information and treatment charts which give further details of care.

The framework is based on syndromic approach whereby the skilled attendant identifies a limited number of key clinical signs and symptoms, enabling her/him to classify the condition according to severtiy and give appropriate treatment. Severity is marked in color: red for emergencies, yellow for less urgent conditions which nevertheless need attention, and green for normal care.



Flow charts

The flow charts include the following information:

1. Key questions to be asked.
2. Important observations and examinations to be made.
3. Possible findings (signs) based on information elicited from the questions, observations and, where appropriate, examinations.
4. Classification of the findings.
5. Treatment and advice related to the signs and classification.

“Treat, advise” means giving the treatment indicated (Performing a procedure, prescribing drugs or other Treatments, advising on possible side-effects and how to Overcome them) and giving advice on other important Practices. The treat and advise column is often cross-referenced to other treatment and/or information charts. Trun to these charts for more information.

Use of colour

Colour is used in the flow charts to indicate the severity of a condition.

6. Green usually indicates no abnormal condition and therefore normal care is given, as outlined in the guide, with appropriate advice for home care and follow up.
7. Yellow indicates that there is a problem that is less urgent but might usually require referal.
8. Red highlights an emergency which requires immediate treatment and, in most cases, urgent referral to a higher level health facility.

Key sequential steps

The charts for normal and abnormal deliveries are presented in a framework of key sequential steps for a clean safe delivery. The key sequential steps for delivery are in a column on the left side of the page, while the column on the right has interventions which may be required if problems arise during delivery. Interventions may be linked to relevant treatment and/or information pages, and are cross-referenced to other parts of the Guide.

Treatment and information pages

The flow charts are linked (cross-referenced) to relevant treatment and/or information pages in other parts of the Guide. These pages include information which is too detailed to include in the flow charts:

- Treatments.
- Advice and counselling.
- Preventive measures.
- Relevant procedures.

Information and counselling sheets

These contain appropriate advice and counselling messages to provide to the woman, her husband and family. In addition, a section is included at the back of the Guide to support the skilled attendant in this effort. Individual sheets are provided with simplified versions of the messages on care during pregnancy (preparing a birth and emergency plan, clean home delivery, care for the mother and baby after deliver, breastfeeding and care after an abortion) to be given to the mother, her husband and family at the appropriate stage of pregnancy and childbirth.

These sheets are adapted from the generic guide and may in time be translated into Urdu or regional language as a booklet or a filp chart presented in a generic format.

ASSUMPTIONS UNDERLYING THE GUIDE

The Guide has been adapted for Pakistan according to the local setting, capacity and organization of services, resources and staffing.

Population and endemic conditions

- High maternal and perinatal mortality
- Many adolescent pregnancies
- Prevalence of endemic conditions:
  - → Anaemia
  - → Stable transmission of falciparum malaria
  - → Hookworms (Necator americanus and Ancylostoma duodenale)
  - → Concentrated epidemic of Sexually transmitted infections, including HIV/AIDS high risk group but low prevalence in general population
  - → Intermediate epidemic of Hepatitis B & Hepatitis C
  - → High incidence of Diabetes Mellitus & Rh incompatibility
  - → Vitamin A and iron/folate deficiencies.

Health care system

The Guide assumes that:

- Routine and emergency pregnancy, delivery and postpartum care are provided at the primary level of the health care, e.g. at the facility near where the woman lives. This facility could be a health post, health centre or maternity clinic. It could also be a hospital with a delivery ward and outpatient clinic providing routine care to women from the neighbourhood.
- A single skilled attendant is providing care. She may work at the health care centre, a maternity unit of a hospital or she may go to the woman's home, if necessary. However there may be other health workers who receive the woman or support the skilled attendant when emergency complications occur.
- Human resources, infrastructure, equipment, supplies and drugs are limited. However, essential drugs, IV fluids, supplies, gloves and essential equipment are available.
- If a health worker with higher levels of skill (at the facility or a referral hospital) is providing pregnancy, childbirth and postpartum care to women other than those referred, she follows the recommendations described in this Guide.
- Routine visits and follow-up visits are "scheduled" during office hours.
- Emergency services ("unscheduled" visits) for labour and delivery, complications, or severe illness or deterioration are provided 24/24 hours, 7 days a week.
- Women and babies with complications or expected complications are referred for further care to the secondary level of care, a referral hospital.
- Referral and transportation are appropriate for the distance and other circumstances. They must be safe for the mother and the baby.
- Some deliveries are conducted at home, attended by traditional birth attendants (TBAs) or relatives, or the woman delivers alone (but home delivery without a skilled attendant is not recommended).
- Links with the community and traditional providers are established. Primary health care services and the community are involved in maternal and newborn health issues.
- Referal System must be strengthened to have an impact
- Other programme activities, such as management of malaria, tuberculosis and other lung diseases, treatment for HIV, and infant feeding counselling, that require specific training, are delivered by a different provider, at the same facility or at the referral hospital. Detection, initial treatment and referral are done by the skilled attendant.
- Universal Antenatal screening of HIV is not recommended, however, there are designated PPTCT sites all over the country for referral of HIV pregnant women

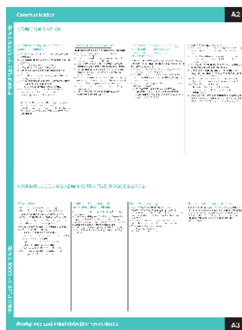
Knowledge and skills of care providers

This Guide assumes that professionals using it have the knowledge and skills in providing the care it describes. Other training materials must be used to bring the skills up to the level assumed by the Guide.

Adaptation of the Guide

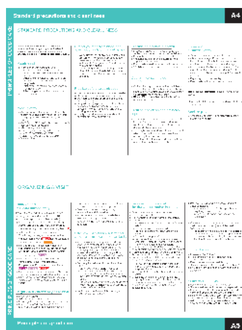
It is essential that this generic Guide is adapted to national and local situations, not only within the context of existing health priorities and resources, but also within the context of respect and sensitivity to the needs of women, newborns and the communities to which they belong.

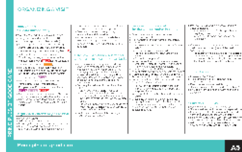
PRINCIPLES OF GOOD CARE



A2 COMMUNICATION

A3 WORKPLACE AND ADMINISTRATIVE PROCEDURES





A4 STANDARD PRECAUTIONS AND CLEANLINESS

A5 ORGANIZING A VISIT

These principles of good care apply to all contacts between the skilled attendant and all women and their babies; they are not repeated in each section. Care-givers should therefore familiarize themselves with the following principles before using the Guide. The principles concern:

- Communication A2.
- Workplace and administrative procedures A3.
- Standard precautions and cleanliness A4.
- Organizing a visit A5.

COMMUNICATION

Communicating with the woman (and her companion)

- Make the woman (and her companion) feel welcome.
- Be friendly, respectful and non-judgmental at all times.
- Use simple and clear language.
- Encourage her to ask questions.
- Ask and provide information related to her needs.
- Support her in understanding her options and making decisions.
- At any examination or before any procedure:
  - → seek her permission and
  - → inform her of what you are doing.
- Summarize the most important information, including the information on routine laboratory tests and treatments.

Verify that she understands emergency signs, treatment instructions, and when and where to return. Check for understanding by asking her to explain or demonstrate treatment instructions.

Privacy and confidentiality

In all contacts with the woman and her husband:

- Ensure a private place for the examination and counselling.
- Ensure, when discussing sensitive subjects, that you cannot be overheard.
- Make sure you have the woman's consent before discussing with her husband or family.
- Never discuss confidential information about clients with other providers, or outside the health facility.
- Organize the examination area so that, during examination, the woman is protected from the view of other people (curtain, screen, wall).
- Ensure all records are confidential and kept locked away.
- Limit access to logbooks and registers to responsible providers only.

Prescribing and recommending treatments and preventive measures for the woman and/or her baby

When giving a treatment (drug, vaccine, bednet, condom) at the clinic, or prescribing measures to be followed at home:

- Explain to the woman what the treatment is and why it should be given.
- Explain to her that the treatment will not harm her or her baby, and that not taking it may be more dangerous.
- Give clear and helpful advice on how to take the drug regularly:
  - → for example: take 2 tablets 3 times a day, thus every 8 hours, in the morning, afternoon and evening with some water and after a meal, for 5 days.
- Demonstrate the procedure.
- Explain how the treatment is given to the baby. Watch her as she does the first treatment in the clinic.
- Explain the side-effects to her. Explain that they are not serious, and tell her how to manage them.
- Advise her to return if she has any problems or concerns about taking the drugs.
- Explore any barriers she or her family may have, or have heard from others, about using the treatment, where possible:
  - → Has she or anyone she knows used the treatment or preventive measure before?
  - → Were there problems?
  - → Reinforce the correct information that she has, and try to clarify the incorrect information.
- Discuss with her the importance of buying and taking the prescribed amount. Help her to think about how she will be able to purchase this.

WORKPLACE AND ADMINISTRATIVE PROCEDURES

Workplace

- Service hours should be clearly posted.
- Be on time with appointments or inform the woman/women if she/they need to wait.
- Before beginning the services, check that equipment is clean and functioning and that supplies and drugs are in place.
- Keep the facility clean by regular cleaning.
- At the end of the service:
  - → discard litter and sharps safely
  - → prepare for disinfection; clean and disinfect equipment and supplies
  - → replace linen, prepare for washing
  - → replenish supplies and drugs
  - → ensure routine cleaning of all areas.
- Hand over essential information to the colleague who follows on duty.

Daily and occasional administrative activities

- Keep records of equipment, supplies, drugs and vaccines.
- Check availability and functioning of essential equipment (order stocks of supplies, drugs, vaccines and contraceptives before they run out).
- Establish staffing lists and schedules.
- Complete periodic reports on births, deaths and other indicators as required, according to instructions.

Record keeping

- Always record findings on a clinical record and home-based record. Record treatments, reasons for referral, and follow-up recommendations at the time the observation is made.
- Do not record confidential information on the home-based record if the woman is unwilling.
- Maintain and file appropriately:
  - → all clinical records
  - → all other documentation.

International conventions

The health facility should not allow distribution of free or low-cost suplies or products within the scope of the International Code of Marketing of Breast Milk Substitutes. It should also be tobacco free and support a tobacco-free environment.

STANDARD PRECAUTIONS AND CLEANLINESS

Observe these precautions to protect the woman and her baby, and you as the health provider, from infections with bacteria and viruses, including Hepatitis B, Hepatitis C & HIV.

Wash hands

- Wash hands with soap and water:
  - → Before and after caring for a woman or newborn, and before any treatment procedure
  - → Whenever the hands (or any other skin area) are contaminated with blood or other body fluids
  - → After removing the gloves, because they
  - → may have holes After changing soiled bedsheets or clothing.
- Keep nails short.

Wear gloves

- Wear sterile or highly disinfected gloves when performing vaginal examination, delivery, cord cutting, repair of episiotomy or tear, blood drawing.
- Wear long sterile or highly disinfected gloves for manual removal of placenta.
- Wear clean gloves when:
  - → Handling and cleaning instruments
  - → Handling contaminated waste
  - → Cleaning blood and body fluid spills
- Drawing blood.

Protect yourself from blood and other body fluids during deliveries

- → Wear gloves; cover any cuts, abrasions or broken skin with a waterproof bandage; take care when handling any sharp instruments (use good light); and practice safe sharps disposal.
- → Wear a long apron made from plastic or other fluid resistant material, and shoes.
- → If possible, protect your eyes from splashes of blood.

Practice safe sharps disposal

- Keep a puncture resistant container nearby.
- Use each needle and syringe only once.
- Do not recap, bend or break needles after giving an injection.
- Drop all used (disposable) needles, plastic syringes and blades directly into this container, without recapping, and without passing to another person.
- Empty or send for incineration when the container is three-quarters full.

Practice safe waste disposal

- Dispose of placenta or blood, or body fluid contaminated items, in leak-proof containers.
- Burn or bury contaminated solid waste.
- Wash hands, gloves and containers after disposal of infectious waste.
- Pour liquid waste down a drain or flushable toilet.
- Wash hands after disposal of infectious waste.

Deal with contaminated laundry

- Collect clothing or sheets stained with blood or body fluids and keep them separately from other laundry, wearing gloves or use a plastic bag. **DO NOT** touch them directly.
- Rinse off blood or other body fluids before washing with soap.

Sterilize and clean contaminated equipment

- Make sure that instruments which penetrate the skin (such as needles) are adequately sterilized, or that single-use instruments are disposed of after one use.
- Thoroughly clean or disinfect any equipment which comes into contact with intact skin (according to instructions).
- Use bleach for cleaning bowls and buckets, and for blood or body fluid spills.
- Soak instruments in 0.5% Chlorine Solution for decontamination Immediately After use for 10 minutes

Clean and disinfect gloves

- Wash the gloves in soap and water.
- Check for damage: Blow gloves full of air, twist the cuff closed, then hold under clean water and look for air leaks. Discard if damaged.
- Soak overnight in bleach solution with 0.5% available chlorine (made by adding 90 ml water to 10 ml bleach containing 5% available chlorine).
- Dry away from direct sunlight.
- Dust inside with talcum powder or starch.

This produces **disinfected** gloves. They are not sterile.

Good quality latex gloves can be disinfected 5 or more times.

Sterilize gloves

- Sterilize by autoclaving or highly disinfect by steaming or boiling.

ORGANIZING A VISIT

Receive and respond immediately

Receive every woman and newborn baby seeking care immediately after arrival (or organize reception by another provider).

- Perform Quick Check on all new incoming women and babies and those in the waiting room, especially if no-one is receiving them B2.
- At the first emergency sign on Quick Check, begin emergency assessment and management (RAM) B3-B7 for the woman, or examine the newborn J1-J11.
- If she is in labour, accompany her to an appropriate place and follow the steps as in Childbirth: labour, delivery and immediate postpartum care D1-D29.
- If she has priority signs, examine her immediately using Antenatal care, Postpartum or Post-abortioncare charts C1-C19 E1-E9 B18-B22.
- If no emergency or priority sign on RAM or not in labour, invite her to wait in the waiting room.
- If baby is newly born, looks small, examine immediately. Do not let the mother wait in the queue.

Begin each emergency care visit

- Introduce yourself.
- Ask the name of the woman.
- Encourage the companion to stay with the woman.
- Explain all procedures, ask permission, and keep the woman informed as much as you can about what you are doing. If she is unconscious, talk to the companion.
- Ensure and respect privacy during examination and discussion.
- If she came with a baby and the baby is well, ask the companion to take care of the baby during the maternal examination and treatment.

Care of woman or baby referred for special care to secondary level facility

- When a woman or baby is referred to a secondary level care facility because of a specific problem or complications, the underlying assumption of the Guide is that, at referral level, the woman/baby will be assessed, treated, counselled and advised on follow-up for that particular condition/ complication.
- Follow-up for that specific condition will be either:
  - → organized by the referral facility or
  - → written instructions will be given to the woman/baby for the skilled attendant at the primary level who referred the woman/ baby.
  - → the woman/baby will be advised to go for a follow-up visit within 2 weeks according to severity of the condition.
- Routine care continues at the primary care level where it was initiated.

Begin each routine visit (for the woman and/or the baby)

- Greet the woman and offer her a seat.
- Introduce yourself.
- Ask her name (and the name of the baby).
- Ask her:
  - → Why did you come? For yourself or for your baby?
  - → For a scheduled (routine) visit?
  - → For specific complaints about you or your baby?
  - → First or follow-up visit?
  - → Do you want to include your companion or other family member (parent if adolescent) in the examination and discussion?
- If the woman is recently delivered, assess the baby or ask to see the baby if not with the mother.
- If antenatal care, always revise the birth plan at the end of the visit after completing the chart.
- For a postpartum visit, if she came with the baby, also examine the baby:
  - → Follow the appropriate charts according to pregnancy status/age of the baby and purpose of visit.
  - → Follow all steps on the chart and in relevant boxes.
- Unless the condition of the woman or the baby requires urgent referral to hospital, give preventive measures if due even if the woman has a condition "in yellow" that requires special treatment.
- If follow-up visit is within a week, and if no other complaints:
  - → Assess the woman for the specific condition requiring follow-up only
  - → Compare with earlier assessment and re-classify.
- If a follow-up visit is more than a week after the initial examination (but not the next scheduled visit):
  - → Repeat the whole assessment as required for an antenatal, post-abortion, postpartum or newborn visit according to the schedule
  - → If antenatal visit, revise the birth plan.

During the visit

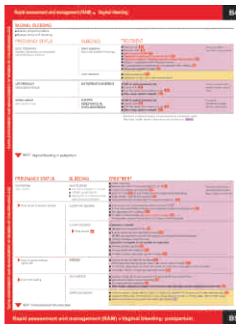
- Explain all procedures,
- Ask permission before undertaking an examination or test.
- Keep the woman informed throughout. Discuss findings with her (and her husband).
- Ensure privacy during the examination and discussion.

At the end of the visit

- Ask the woman if she has any questions.
- Summarize the most important messages with her.
- Encourage her to return for a routine visit (tell her when) and if she has any concerns.
- Fill the Home-Based Maternal Record (HBMR) and give her the appropriate information sheet.
- Ask her if there are any points which need to be discussed and would she like support for this.

B2 QUICK CHECK

B3 RAPID ASSESSMENT AND MANAGEMENT (RAM) (1)
Airway and breathing
Circulation and shock



B4 RAPID ASSESSMENT AND MANAGEMENT (RAM) (2)
Vaginal bleeding

B5 RAPID ASSESSMENT AND MANAGEMENT (RAM) (3)
Vaginal bleeding: postpartum

B6 RAPID ASSESSMENT AND MANAGEMENT (RAM) (4)
Convulsions
Severe abdominal pain
Dangerous fever

B7 RAPID ASSESSMENT AND MANAGEMENT (RAM) (5)
Priority signs
Labour
Other danger signs or symptoms
Non-urgent

B9 AIRWAY, BREATHING AND CIRCULATION
Manage the airway and breathing
Insert IV line and give fluids

B10 BLEEDING (1)
Massage uterus and expel clots
Apply bimanual uterine compression
Apply aortic compression
Give oxytocin
Give ergometrine

B11 BLEEDING (2)
Remove placenta and fragments manually
After manual removal of the placenta

B12 BLEEDING (3)
Repair the tear
Empty bladder

B13 ECLAMPSIA AND PRE-ECLAMPSIA (1)
Important considerations in caring for a woman with eclampsia and pre-eclampsia
Give magnesium sulphate

B14 ECLAMPSIA AND PRE-ECLAMPSIA (2)
Give diazepam
Give appropriate antihypertensive

B15 INFECTION
Give appropriate IV/IM antibiotics

B16 MALARIA
Give artemether or quinine IM
Give glucose IV

B17 REFER THE WOMAN URGENTLY TO THE HOSPITAL
Refer the woman urgently to the hospital
Essential emergency drugs and supplies for transport and home delivery

B19 EXAMINATION OF THE WOMAN WITH BLEEDING IN EARLY PREGNANCY AND POST-ABORTION CARE

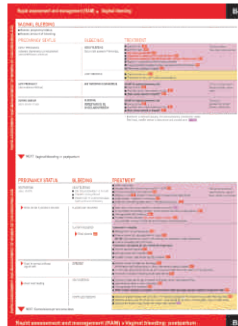
B20 GIVE PREVENTIVE MEASURES

B21 ADVISE AND COUNSEL ON POST-ABORTION CARE
Advise on self-care
Advise and counsel on family planning
Provide information and support after abortion
Advise and counsel during follow-up visits

QUICK CHECK, RAPID ASSESSMENT AND MANAGEMENT OF WOMEN OF CHILDBEARING AGE

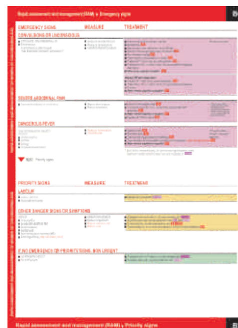
B2 QUICK CHECK

B3 RAPID ASSESSMENT AND MANAGEMENT (RAM) (1)
Airway and breathing
Circulation and shock



B4 RAPID ASSESSMENT AND MANAGEMENT (RAM) (2)
Vaginal bleeding

B5 RAPID ASSESSMENT AND MANAGEMENT (RAM) (3)
Vaginal bleeding: postpartum



B6 RAPID ASSESSMENT AND MANAGEMENT (RAM) (4)
Convulsions
Severe abdominal pain
Dangerous fever

B7 RAPID ASSESSMENT AND MANAGEMENT (RAM) (5)
priority signs
Labour
Other danger signs or symptoms
Non-urgent

- Perform Quick check immediately after the woman arrives **B2**.
  If any danger sign is seen, help the woman and send her quickly to the emergency room.

- Always begin a clinical visit with Rapid assessment and management (RAM) **B3-B7**.
  → Check for emergency signs first **B3-B6**.
  If present, provide emergency treatment and refer the woman urgently to hospital.
  Complete the referral form **N2**.
  → Check for priority signs. If present, manage according to charts **B7**.
  → If no emergency or priority signs, allow the woman to wait in line for routine care, according to pregnancy status.

QUICK CHECK

A person responsible for initial reception of women of childbearing age and newborns seeking care should:

- assess the general condition of the careseeker(s) immediately on arrival
- periodically repeat this procedure if the line is long.

If a woman is very sick, talk to her companion.

ASK, CHECK RECORD	LOOK, LISTEN, FEEL	SIGNS	CLASSIFY	TREAT
■ Why did you come? → for yourself? → for the baby? ■ How old is the baby? ■ What is the concern?	**Is the woman being wheeled or carried in or:** ■ bleeding vaginally ■ convulsing ■ looking very ill ■ unconscious ■ in severe pain ■ in labour ■ delivery is imminent	If the woman is or has: ■ unconscious (does not answer) ■ convulsing ■ bleeding ■ severe abdominal pain or looks very ill ■ headache and visual disturbance ■ severe difficulty breathing ■ fever ■ severe vomiting.	**EMERGENCY FOR WOMAN**	■ Transfer woman to a treatment room for Rapid assessment and management B3-B7. ■ Call for help if needed. ■ Reassure the woman that she will be taken care of immediately. ■ Ask her companion to stay.
		■ Imminent delivery or ■ Labour	**LABOUR**	■ **Transfer the woman to the labour ward.** ■ **Call for immediate assessment.**
	Check if baby is or has: ■ very small ■ convulsing ■ breathing difficulty	If the baby is or has: ■ very small ■ convulsions ■ difficult breathing ■ just born ■ any maternal concern.	**EMERGENCY FOR BABY**	■ Transfer the baby to the treatment room for immediate Newborn care J1-J11. ■ Ask the mother to stay.
		■ Pregnant woman, or after delivery, with no danger signs ■ A newborn with no danger signs or maternal complaints.	**ROUTINE CARE**	Keep the woman and baby in the waiting room for routine care.

IF emergency for woman or baby or labour, go to B3.
IF no emergency, go to relevant section

RAPID ASSESSMENT AND MANAGEMENT (RAM)

Use this chart for rapid assessment and management (RAM) of all women of childbearing age, and also for women in labour, on first arrival and periodically throughout labour, delivery and the postpartum period.Assess for all emergency and priority signs and give appropriate treatments, then refer the woman to hospital.

FIRST ASSESS EMERGENCY SIGNS	MEASURE	TREATMENT	
Do all emergency steps before referral			
AIRWAY AND BREATHING			
■ Very difficult breathing or ■ Central cyanosis	■ Count respiratory	■ Manage airway and breathing B9 . ■ Refer woman urgently to hospital * B17.	*This may be pneumonia, severe anaemia with heart failure, obstructed breathing, asthma.*
CIRCULATION (SHOCK)			
■ Cold moist skin or ■ Weak and fast pulse	■ Measure blood pressure ■ Count pulse	If systolic BP less than90 mmHg or pulse more than110 per miunte: ■ Position the woman on her left side with legs higher than chest. ■ Insert an IV line B9. ■ Give fluids rapidly B9. Use anti-shock garments if available and woman is delivered. ■ If not able to insert peripheral IV, use alternative B9 . ■ Keep her warm (cover her). ■ Refer her urgently to hospital * B17.	*This may be haemorrhagic shock, septic shock.*

* But if birth is imminent (bulging, thin perineum during contractions, visible fetal head), transfer woman to labour room and proceed as on D1-D28 .

NEXT: Vaginal bleeding

VAGINAL BLEEDING

- **Assess pregnancy status**
- **Assess amount of bleeding**

PREGNANCY STATUS	BLEEDING	TREATMENT	
EARLY PREGNANCY **not aware of pregnancy, or not pregnant (uterus NOT above umbilicus)**	**HEAVY BLEEDING** Pad or cloth soaked in less than5 miuntes.	■ Insert an IV line B9. ■ Give fluids rapidly B9. ■ Give 0.2 mg ergometrine ** IM/IV B10. ■ If ergometrine not available give 10 IU oxytocin IM / Slow IV. B10. ■ If oxytocin not available give 3 tablet Misoprostol orally / sublingual if bleeding continues B10. ■ Repeat 0.2 mg ergometrine IM/IV if bleeding contiunes. ■ If suspect possible complicated abortion, give appropriate IM/IV antibiotics B15. ■ **Refer woman urgently to hospital** B17.	*This may be abortion, menorrhagia, ectopic pregnancy.*
	LIGHT BLEEDING	■ Examine woman as on B19. ■ If pregnancy not likely, refer to other clinical guidelines.	
LATE PREGNANCY (uterus above umbilicus)	**ANY BLEEDING IS DANGEROUS**	**DO NOT do vaginal examination, but:** ■ Insert an IV line B9. ■ Give fluids rapidly if heavy bleeding or shock B9. ■ **Refer woman urgently to hospital*** B17.	*This may be placenta previa, abruptio placentae, ruptured uterus.*
DURING LABOUR before delivery of baby	**BLEEDING MORE THAN 100 ML SINCE LABOUR BEGAN**	**DO NOT do vaginal examination, but:** ■ Insert an IV line B9. ■ Give fluids rapidly if heavy bleeding or shock B9. ■ **Refer woman urgently to hospital*** B17.	*This may be placenta previa, abruptio placenta, ruptured uterus.*

* **But if birth is imminent (bulging, thin perineum during contractions, visible fetal head), transfer woman to labour room and proceed as on D1-D28.**

****DO NOT give ergometrine in pregnant women with hypertension or known heart disease.**

NEXT: Vaginal bleeding in postpartum

PREGNANCY STATUS	BLEEDING	TREATMENT
POSTPARTUM (baby is born)	**HEAVY BLEEDING** ■ Pad or cloth soaked in less than5 minutes ■ Constant trickling of blood ■ Bleedingmore than250 ml or delivered outside health centre and still bleeding	■ Call for extra help. ■ Massage uterus until it is hard and give oxytocin 10 IU IM B10. ■ If oxytocin not available, give misoprostol B10. ■ Insert an IV line B9 and give IV fluids with 20 IU oxytocin at 60 drops/minute. ■ Empty bladder. Catheterize if necessary B12. ■ Check and record BP and pulse every 15 minutes and treat as on B3. *This may be uterine atony, retained placenta, ruptured uterus, vaginal or cervical tear.*
▸ **Check and ask if placenta is delivered**	**PLACENTA NOT DELIVERED**	■ When uterus is hard, deliver placenta by controlled cord traction D12. ■ If unsuccessful and bleeding continues, remove placenta manually and check placenta B11. ■ Give appropriate IM/IV antibiotics B15. ■ If unable to remove placenta, refer woman urgently to hospital B17. During transfer, continue IV fluids with 20 IU of oxytocin at 30 drops/minute.
	PLACENTA DELIVERED ▸ **Check placenta B11**	**If placenta is complete:** ■ Massage uterus to express any clots B10. ■ If uterus remains soft, give ergometrine 0.2 mg IV B10. **DO NOT** give ergometrine to women with eclampsia, pre-eclampsia or known hypertension. ■ Continue massaging uterus till it is hard. **If placenta is incomplete (or not available for inspection):** ■ Remove placental fragments B11. ■ Give appropriate IM/IV antibiotics B15. ■ If unable to remove, refer woman urgently to hospital B17.
▸ **Check for perineal and lower vaginal tears**	**IF PRESENT**	■ Examine the tear and determine the degree B12. If third degree tear (involving rectum or anus), refer woman urgently to hospital B17. ■ For other tears: apply pressure over the tear with a sterile pad or gauze and put legs together. Do not cross ankles. ■ Check after 5 miuntes, if bleeding persists repair the tear B12.
▸ **Check if still bleeding**	**HEAVY BLEEDING**	■ Continue IV fluids with 20 units of oxytocin at 30 drops/ minute. Insert second IV line. ■ Apply bimanual uterine or aortic compression B10. ■ Give appropriate IM/IV antibiotics B15. ■ **Refer woman urgently to hospital, if cervical tears detected apply sponge holding forceps and refer** B17.
	CONTROLLED BLEEDING	■ Continue oxytocin infusion with 20 IU/litre of IV fluids at 20 drops/min for at least one hour after bleeding stops B10. ■ Observe closely (every 30 minutes) for 4 hours. Keep nearby for 24 hours. If severe pallor, refer to health centre. ■ Examine the woman using *Assess the mother after delivery* D12.

▼ **NEXT: Convulsions or unconscious**

EMERGENCY SIGNS	MEASURE	TREATMENT	
CONVULSIONS OR UNCONSCIOUS			
■ Convulsing (now or recently), or ■ Unconscious If unconscious, ask relative "has there been a recent convulsion?"	■ Measure blood pressure ■ Measure temperature ■ Assess pregnancy status	■ Protect woman from fall and injury. Get help. ■ Manage airway B9. ■ After convulsion ends, help woman onto her left side. ■ Insert an IV line and give fluids slowly (30 drops/min) B9. ■ Give magnesium sulphate B13. ■ If early pregnancy, give diazepam IV or rectally B14. ■ If diastolic BPmore than110mm of Hg, give antihypertensive B14. ■ If temperature more than38 °C, or history of fever, also give treatment for dangerous fever (below). ■ **Refer woman urgently to hospital** * B17.	*This may be eclampsia.*
		Measure BP and temperature ■ If diastolic BP more than110mm of Hg, give antihypertensive B14. ■ If temperature more than38 °C, or history of fever, also give treatment for dangerous fever (below). ■ **Refer woman urgently to hospital*** B17.	
SEVERE ABDOMINAL PAIN			
■ Severe abdominal pain (not normal labour)	■ Measure blood pressure ■ Measure temperature	■ Insert an IV line and give fluids B9. ■ If temperature more than more than38 °C, give first dose of appropriate IM/IV antibiotics B15. ■ **Refer woman urgently to hospital*** B17. ■ If systolic BP less than90 mm Hg see B9.	***This may be ruptured uterus,obstructed labour, abruptio placenta, puerperal or postabortion sepsis, ectopic pregnancy or any surgical cause like acute appendicitis.***
DANGEROUS FEVER			
Fever (temperature more than 38°C) and any of: ■ Very fast breathing ■ Stiff neck ■ Lethargy ■ Very weak/not able to stand	■ Measure temperature ■ Record pulse	■ Insert an IV line B9. ■ Give fluids slowly B9. ■ Give first dose of appropriate IM/IV antibiotics B15. ■ Give artemether IM (if not available give quinine IM) and glucose as per national guidelines B16. ■ **Refer woman urgently to hospital*** B17.	*This may be malaria, meningitis, pneumonia, septicemia.*

* But if birth is imminent (bulging, thin perineum during contractions, visible fetal head), transfer woman to labour room and proceed as on D1-D28.

NEXT: Priority Signs

PRIORITY SIGNS	MEASURE	TREATMENT
LABOUR		
■ Labour pains or ■ Ruptured membranes		■ Manage as for Childbirth D1-D28.
OTHER DANGER SIGNS OR SYMPTOMS		
If any of: ■ Severe pallor ■ **Epigastric or abdominal pain** ■ **Severe headache** ■ **Blurred vision** ■ **Fever (temperature more than 38°C)** ■ **Breathing difficulty (resp more than 30 breath / minute)**	■ **Measure blood pressure** ■ **Measure temperature** ■ Measure respiratory rate ■ Measure pulse	■ If pregnant (and not in labour), provide antenatal care C1-C19. ■ If recently given birth, provide postpartum care D21 **and** E1-E9. ■ If recent abortion, provide post-abortion care B20-B21 . ■ If early pregnancy, or not aware of pregnancy, check for ectopic pregnancy B19.
IF NO EMERGENCY OR PRIORITY SIGNS, NON URGENT		
■ No emergency signs or ■ No priority signs		■ If pregnant (and not in labour), provide antenatal care C1-C19. ■ If recently given birth, provide postpartum care E1-E9 .

EMERGENCY TREATMENTS FOR THE WOMAN

B9 AIRWAY, BREATHING AND CIRCULATION
Manage the airway and breathing
Insert IV line and give fluids

B10 BLEEDING (1)
Massage uterus and expel clots
Apply bimanual uterine compression
Apply aortic compression
Give oxytocin
Give ergometrine

B11 BLEEDING (2)
Remove placenta and fragments manually
After manual removal of the placenta

B12 BLEEDING (3)
Repair the tear
Empty bladder

B13 ECLAMPSIA AND PRE-ECLAMPSIA (1)
Important considerations in caring for a woman with eclampsia and pre-eclampsia
Give magnesium sulphate

B14 ECLAMPSIA AND PRE-ECLAMPSIA (2)
Give diazepam
Give appropriate antihypertensive

B15 INFECTION
Give appropriate IV/IM antibiotics

B16 MALARIA
Give artemether or quinine IM
Give glucose IV

B17 REFER THE WOMAN URGENTLY TO THE HOSPITAL
Refer the woman urgently to the hospital
Essential emergency drugs and supplies for transport and home delivery

- This section has details on emergency treatments identified during Rapid assessment and management (RAM) B3-B6 to be given before referral.
- Give the treatment and refer the woman urgently to hospital B17.
- If drug treatment, give the first dose of the drugs before referral. .
  DO NOT delay referral by giving non-urgent treatments.

ARIWAY, BREATHING AND CIRCULATION

Manage the airway and breathing

If the woman has great difficulty breathing and:

- If you suspect obstruction:
  - → Try to clear the airway and dislodge obstruction
  - → Help the woman to find the best position for breathing
  - → **Urgently refer the woman to hospital B17.**
- If the woman is unconscious:
  - → Keep her on her back, arms at the side
  - → Tilt her head backward (unless trauma is suspected)
  - → Lift her chin to open airway
  - → Inspect her mouth for foreign body; remove if found
  - → Clear secretions from throat.

If the woman is not breathing:

→ Ventilate with bag and mask until she starts breathing spontaneously

If woman still has great difficulty breathing, keep her propped up, and

Refer the woman urgently to hospital B17.

Insert IV line and give fluids

- Wash hands with soap and water and put on gloves.
- Clean woman's skin with spirit at site for IV line. Apply tourniquet.
- Insert an intravenous line (IV line) using a 16-18 gauge needle.
- Attach Ringer's lactate or normal saline. Ensure infusion is running well.

Give fluids at rapid rate if shock, systolic BPless than 90 mmHg, pulse more than110/minute, or heavy vaginal bleeding:

- Infuse 1 litre in 15-20 minutes (as rapid as possible).
- Infuse 1 litre in 30 miuntes at 30 ml/minute. Repeat if necessary.
- Monitor every 15 minutes for:
  - → blood pressure (BP) and pulse
  - → shortness of breath or puffiness.
- Reduce the infusion rate 3 ml/minute (1 litre in6-8 hours) when pulse slows to less than 100/ minute, systolic BP increases to 100 mmHg or higher.
- Reduce the infusion rate to 0.5 ml/minute if breathing difficulty or puffiness develops.
- Monitor urine output.
- Record time and amount of fluids given.

Give fluids at moderate rate if severe abdominal pain, obstructed labour, ectopic pregnancy, dangerous fever or dehydration:

- Infuse 1 litre in 2-3 hours.

Give fluids at slow rate if severe anaemia/severe pre-eclampsia or eclampsia:

- Infuse 1 litre in 6-8 hours.

If intravenous access not possible

- Give oral rehydration solution (ORS) by mouth if able to drink, or by nasogastric (NG) tube.
- Quantity of ORS: 300 to 500 ml in 1 hour.

DO NOT give ORS to a woman who is unconscious or has convulsions.

ORS Formulation

- Take four glasses of clean (Boiled) drinking water in a jug
- Then add a packet of ORS in it
- Stir till mixed well
- Cover the jug with a piece of cloth
- Give several times to the patient
- Use within 4 hours
- If more than four have passed, prepare new ORS

BLEEDING

Massage uterus and expel clots

If heavy postpartum bleeding persists after placenta is delivered, or uterus is not well contracted (is soft):

- Place cupped palm on uterine fundus and feel for state of contraction.
- Massage fundus in a circular motion with cupped palm until uterus is well contracted.
- When well contracted, place fingers behind fundus and push down in one swift action to expel clots.
- Collect blood in ac container placed close to the vulva. Measure or estimate blood loss, and record.

Apply bimanual uterine compression

If heavy postpartum bleeding persists despite uterine massage, oxytocin/ergometrine treatment and removal of placenta:

- Wear sterile or clean gloves.
- Introduce the right hand into vagina, clenched fist, with the back of the hand directed posteriorly and the knuckles in the anterior fornix.
- Place the other hand on the abdomen behind the uterus and squeeze the uterus firmly between the two hands.
- Continue compression until bleeding stops (no bleeding if the compression is released).
- If bleeding persists, apply aortic compression and transport woman to hospital.
- Perform condom temponade and apply anti shock garments if available.

Apply aortic compression

If heavy postpartum bleeding persists despite uterine massage, oxytocin/ergometrine treatment and removal of placenta:

- Feel for femoral pulse.
- Apply pressure above the umbilicus to stop bleeding. Apply sufficient pressure until femoral pulse is not felt.
- After finding correct site, show assistant or relative how to apply pressure, if necessary.
- Continue pressure until bleeding stops. If bleeding persists, keep applying pressure while transporting woman to hospital.

Give oxytocin

If heavy postpartum bleeding

Initial dose	Continuing dose	Maximum dose
IM/IV: 10 IU	IM/IV: repeat 10 IU after 20 minutes if heavy bleeding persists	Not more than 3 litres if IV fluids containing oxytocin
IV infusion: 20 IU in 1 litre at 60 drops/min	IV infusion: 10 IU in 1 litre at 30 drops/min	

Give ergometrine

If heavy bleeding in early pregnancy or postpartum bleeding (after oxytocin) but **DO NOT** give if eclampsia, pre-eclampsia, or hypertension

Initial dose	Continuing dose	Maximum dose
IM/IV: 0.2 mg slowly	IM/IV: repeat 0.2 mg IM after 15 minutes if heavy bleeding persists	**Not more than 5 doses (total 1.0 mg)**

Give misoprostol*

If oxytocin and/ or ergometrine not available then give misoprostol

Dose	Packing available	Dose
3 tables S/L or oral	200 ug 400 ug	600 ug

*** Misoprostol may cause nausea, fever and chills**

Remove placenta and fragments manually

- If placenta not delivered 1 hour after delivery of the baby, OR
- If heavy vaginal bleeding continues despite massage and oxytocin and placenta cannot be delivered by controlled cord traction, or if placenta is incomplete and bleeding continues.

Preparation

- Explain to the woman the need for manual removal of the placenta and obtain her consent.
- Insert an IV line. If bleeding, give fluids rapidly. If not bleeding, give fluids slowly B9.
- Assist woman to get onto her back.
- Give diazepam (10-mg IM/IV).
- Clean vulva and perineal area.
- Ensure the bladder is empty. Catheterize if necessary B12.
- Wash hands and forearms well and put on long sterile gloves (and an apron or gown if available).

Technique

- With the left hand, hold the umbilical cord with th clamp. Then pull be cord gently until it is horizontal.
- Insert right hand into the vagina and up into the uterus.
- Leave the cord and hold the fundus with the left hand in order to support the fundus of the uterus and to provide counter-traction during removal.
- Move the fingers of the right hand sideways until edge of the placenta is located.
- Detach the placenta from the implantation site by keeping the fingers tightly together and using the edge of the hand to gradually make a space between the placenta and the uterine wall.
- Proceed gradually all around the placental bed until the whole placenta is detached from the uterine wall.
- Withdraw the right hand from the uterus gradually, bringing the placenta with it.
- Explore the inside of the uterine cavity to ensure all placental tissue has been removed.
- With the left hand, provide counter traction to the fundus through the abdomen by pushing it in the opposite direction of the hand that is being withdrawn. This prevents inversion of the uterus.
- Examine the uterine surface of the placenta to ensure that lobes and membranes are complete. If any placental lobe or tissue fragments are missing, explore again the uterine cavity to remove them.

If hours or days have passed since delivery, or if the placenta is retained due to constriction ring or closed cervix, it may not be possible to put the hand into the uterus. DO NOT persist. Refer urgently to hospital B17.

If the placenta does not separate from the uterine surface by gentle sideways movement of the fingertips at the line of cleavage, suspect placenta accreta. DO NOT persist in efforts to remove placenta. Refer urgently to hospital B17.

After manual removal of the placenta

- Repeat oxytocin 10-IU IM/IV.
- Massage the fundus of the uterus to encourage a tonic uterine contraction.
- Give ampicillin 2 g IV/IM B15.
- If fever more than38.5 °C, foul-smelling lochia or history of rupture of membranes for 12 or more hours, also give gentamicin 80 mg IM B15.
- If bleeding stops:
  - → give fluids slowly for at least 1 hour after removal of placenta.
- If heavy bleeding continues:
  - → give ergometrine 0.2 mg IM and/or misoprostol and anti-shock garments (if available) during transport
  - → give 20 IU oxytocin in each litre of IV fluids and infuse rapidly
  - → If oxytocin not available, give misoprostol 3 tab per oral or per rectal
  - → **Refer urgently to hospital** B17.
- During transportation, feel continuously whether uterus is well contracted (hard and round). If not, massage and repeat oxytocin 10 IU IM/IV.
- Provide bimanual or aortic compression if severe bleeding before and during transportation B10.

REPAIR THE TEAR AND EMPTY BLADDER

Repair the tear

- Examine the tear and determine the degree:
  - → The tear is small and involved only vaginal mucosa and connective tissues and underlying muscles (first or second degree tear). If the tear is not bleeding, leave the wound open.
  - → The tear is long and deep through the perineum and involves the anal sphincter and rectal mucosa (third and fourth degree tear). Cover it with a clean pad and **refer the woman urgently to hospital** B17.
- If first or second degree tear and heavy bleeding persists after applying pressure over the wound:
  - → Suture the tear or refer for suturing if no one is available with suturing skills.
  - → Suture the tear using universal precautions, aseptic technique and sterile equipment.
  - → Use a needle holder and a 21 gauge, 4 cm, curved needle.
  - → Use absorbable polyglycon suture material.
  - → Make sure that the apex of the tear is reached before you begin suturing.
  - → Ensure that edges of the tear match up well.

DO NOT suture if more than 12 hours since delivery. **Refer woman to hospital** B17.

Episiotomy procedure

- Perform and suture the episiotomy using universal precautions A 4, aseptic technique & sterile equipment.
- Apply antiseptic solution to the perineal area.
- Give local anesthesia. Infiltrate beneath the skin of perineum & into perineal muscles using about 10 ml of 0.5% lignocaine solution (always pull back on plunger to be sure that no vessel has been penetrated)
- Aspirate (pull back on the plunger) to be sure that no vessel has been penetrated.
- If blood is returned in the syringe with aspiration, remove the needle, recheck the position carefully and try again.
- Never inject if blood is aspirated.
- Infiltrate beneath the vaginal mucosa, beneath the skin of then pinch the area with forceps. If the woman feels the pinch, wait 2 more minutes and then retest.
- Place two fingers between baby's head & perineum.
- Use the scissor to cut the perineum about 3-4 cm in mediolateral direction.
- Control the baby's head & shoulders as they deliver to prevent an extension of episiotomy
- Carefully examine for extension, tears & repair.
-

Episiotomy Repair

- Start episiotomy repair about 1cm above apex(top) of episiotomy.
- Use a needle holder & 21 Gauge, 4 cm curved needle & absorbable polyglycon suture material 2-0.
- Close vaginal mucosa using continuous suture to the level of the vaginal opening. Bring the needle under the vaginal opening & out through the incision and tie.
- Close the perineal muscles using interrupted 2-0 sutures.
- Close the skin using interrupted sutures.

DO NOT Do episiotomy routinely

DO NOT give IV injection of lignocaine as woman can suffer seizures and death.

Empty bladder

If bladder is distended and the woman is unable to pass urine:

- Encourage the woman to urinate.
- If she is unable to urinate, catheterize the bladder:
  - → Wash hands
  - → Clean urethral area with antiseptic
  - → Put on clean gloves
  - → Split labia. Clean area again
  - → Insert catheter up to 4 cm
  - → Measure urine and record amount
  - → Remove catheter.

ECLAMPSIA AND PRE-ECLAMPSIA (1)

Give magnesium sulphate

If severe pre-eclampsia and eclampsia

IV/IM combined dose (loading dose)

- Insert IV line and give fluids slowly (normal saline or Ringer's lactate) — 1 litre in 6-8 hours (3-ml/minute) B9.
- **Give 4-g of magnesium sulphate (20 ml of 20% solution) IV slowly over 20 minutes (woman may feel warm during injection).**
  AND:
- Give 10 g of magnesium sulphate IM: give 5 g (10 ml of 50% solution) IM deep in upper outer quadrant of each buttock with 1 ml of 2% lignocaine in the same syringe.

If unable to give IV, give IM only (loading dose)

- Give 10 g of magnesium sulphate IM: give 5 g (10 ml of 50% solution) IM deep in upper outer quadrant of each buttock with 1 ml of 2% lignocaine in the same syringe.

If convulsions recur

- After 15 minutes, give an additional 2 g of magnesium sulphate (10 ml of 20% solution) IV over 20 minutes. If convulsions still continue, give diazepam B14.

If referral delayed for long, or the woman is in late labour, continue treatment:

- Give 5 g of 50% magnesium sulphate solution IM with 1 ml of 2% lignocaine every 4 hours in alternate buttocks until 24 hours after birth or after last convulsion (whichever is later).
- Monitor urine output: collect urine and measure the quantity.
- Before giving the next dose of magnesium sulphate, ensure:
  - → knee jerk is present
  - → urine output more than100 ml/4 hrs
  - → respiratory rate more than16/min.
- **DO NOT** give the next dose if any of these signs:
  - → knee jerk absent
  - → urine output less than100 ml/4 hrs
  - → respiratory rate less than16/min.
- Record findings and drugs given.

Important considerations in caring for a woman with eclampsia or pre-eclampsia

- Do not leave the woman on her own.
  - → Help her into the left side position and protect her from fall and injury
  - → Place padded tongue blades between her teeth to prevent a tongue bite, and secure it to prevent aspiration (**DO NOT** attempt this during a convulsion).
- **Give IV 20% magnesium sulphate slowly over 20 minutes. Rapid injection can cause respiratory** failure or death.
  - → If respiratory depression (breathing less than 16/minute) occurs after magnesium sulphate, do not give any more magnesium sulphate. Give the antidote: calcium gluconate 1 g IV (10 ml of 10% solution) over 10 minutes.
- **DO NOT** give intravenous fluids rapidly.
- **DO NOT** give intravenously 50% magnesium sulphate without dilluting it to 20%.
- **Refer urgently to hospital** unless delivery is imminent.
  - → If delivery imminent, manage as in Childbirth D1-D29 and accompany the woman during transport.
  - → Keep her in the left side position.
  - → If a convulsion occurs during the journey, give magnesium sulphate and protect her from fall and injury.

Formulation of magnesium sulphate

		50% solution vial containing 5g in 10 ml (1g/2ml)	**20% solution** to make 10 ml of 20% solution, add 4 ml of 50% solution to 6 ml sterilewater
IM	5 g	10 ml and 1 ml 2% lignocaine	Not applicable
IV	4 g	8 ml	20 ml
	2 g	4 ml	10 ml

After receiving magnesium sulphate a woman feel flushing, thirst, headache, nausea or may vomit.

ECLAMPSIA AND PRE-ECLAMPSIA (2)

Give diazepam

If convulsions occur in early pregnancy or
If magnesium sulphate toxicity occurs or magnesium sulphate is not available.

Loading dose IV

- Give diazepam 10 mg IV slowly over 2 minutes.
- If convulsions recur, repeat 10 mg.

Maintenance dose

- Give diazepam 40 mg in 500 ml IV fluids (normal saline or Ringer's lactate) titrated over 6-8 hours to keep the woman sedated but rousable.
- Stop the maintenance dose if breathing less than16 breaths/minute.
- Assist ventilation if necessary with mask and bag.
- Do not give more than 100 mg in 24 hours.
- If IV access is not possible (e.g. during convulsion), give diazepam rectally.

Loading dose rectally

- Give 20 mg (4 ml) in a 10 ml syringe (or urinary catheter):
  - → Remove the needle, lubricate the barrel and insert the syringe into the rectum to half its length.
  - → Discharge the contents and leave the syringe in place, holding the buttocks together for 10 minutes to prevent expulsion of the drug.
- If convulsions recur, repeat 10 mg.

Maintenance dose

- **Give additional 10 mg (2 ml) every hour during transport.**

Diazepam: vial containing 10 mg in 2 ml

	IV	Rectally
Initial dose	10 mg = 2 ml	20 mg = 4 ml
Second dose	10 mg = 2 ml	10 mg = 2 ml

Give appropriate antihypertensive drug

If diastolic blood pressure is more than 110-mmHg:

- Give hydralazine 5 mg IV slowly (3-4 minutes). If IV not possible give IM.
- If diastolic blood pressure remains more than 90 mmHg, repeat the dose at 30 minute intervals until diastolic BP is around 90 mmHg.
- Do not give more than 20 mg in total.

INFECTION

Give appropriate IV/IM antibiotics

- Give the first dose of antibiotic(s) before referral. If referral is delayed or not possible, continue antibiotics IM/IV for 48 hours after woman is fever free. Then give amoxicillin orally 500 mg 3 times daily until 7 days of treatment completed.
- If signs persist or mother becomes weak or has abdominal pain postpartum, **refer urgently to hospital** B17.

CONDITION	ANTIBIOTICS
■ Severe abdominal pain ■ Dangerous fever/very severe febrile disease ■ Complicated abortion ■ Uterine and fetal infection	**3 antibiotics** ■ Ampicillin ■ Gentamicin ■ Metronidazole
■ Postpartum bleeding → lasting more than 24 hours → occurring more than 24 hours after delivery ■ Upper urinary tract infection ■ Pneumonia	**2 antibiotics** ■ Ampicillin ■ Gentamicin
■ Manual removal of placenta/fragments ■ Risk of uterine and fetal infection ■ In labour more than 24 hours	**1 antibiotic** ■ Ampicillin

Antibiotic	Preparation	Dosage/route	Frequency
Ampicillin	Vial containing 500 mg as powder: to be mixed with 2.5 ml sterile water	First 2 g IV/IM then 1 g	every 6 hours
Gentamicin	Vial containing 40 mg/ml in 2 ml	80 mg IM	every 8 hours
Metronidazole DO NOT GIVE IM	Vial containing 500 mg in 100 ml	500 mg or 100 ml IV infusion	every 8 hours
Erythromycin (if allergy to ampicillin)	Vial containing 500 mg as powder	500 mg IV/IM	every 6 hours

MALARIA

Give arthemeter or quinine IM

If dangerous fever or very severe febrile disease

	Arthemeter	Quinine*
	1ml vial containing 80 mg/ml	2 ml vial containing 300 mg/ml
Loading dose for	3.2 mg/kg	20 mg/kg
assumed weight 50-60 kg	2 ml	4 ml
Continue treatment	1.6 mg/kg	10 mg/kg
if unable to refer	1 ml once daily for 3 days**	2 ml/8 hours for a total of 7 days**

- Give the loading dose of the most effective drug, according to the national policy.
- If quinine:
  - → divide the required dose equally into 2 injections and give 1 in each anterior thigh
  - → always give glucose with quinine.
- Refer urgently to hospital B17.
- If delivery imminent or unable to refer immediately, continue treatment as above and refer after delivery.

* These dosages are for quinine dihydrochloride. If quinine base, give 8.2 mg/kg every 8 hours.

** Discontinue parenteral treatment as soon as woman is conscious and able to swallow. Begin oral treatment according to national guidelines.

*** National Guidelines given in "Malaria Case Management Chart" are attached at Annex I

Give glucose IV

If dangerous fever or very severe febrile disease treated with quinine

50% glucose solution*	25% glucose solution	10% glucose solution (5 ml/kg)
25-50 ml	50-100 ml	125-250 ml

- Make sure IV drip is running well. Give glucose by slow IV push.
- If no IV glucose is available, give sugar water by mouth or nasogastric tube.
- To make sugar water, dissolve 4 level teaspoons of sugar (20 g) in a 200 ml cup of clean water.

* 50% glucose solution is the same as 50% dextrose solution or D50. This solution is irritating to veins. Dilute it with an equal quantity of sterile water or saline to produce 25% glucose solution.

Refer the woman urgently to hospital

- After emergency management, discuss decision with woman and relatives.
- Quickly organize transport and possible financial aid.
- Inform the referral centre if possible by radio or phone.
- Accompany the woman if at all possible, or send:
  - → a helth worker trained in delivery care
  - → a relative who can donate blood
  - → baby with the mother, if possible
  - → essential emergency drugs and supplies B17.
  - → referral note N2.
- During journey:
  - → watch IV infusion
  - → If journey is long. give appropriate treatment on the way
  - → keep record of all IV fluids, medications given, time of administration and the woman's condition.

Essential emergency drugs and supplies for transport and home delivery

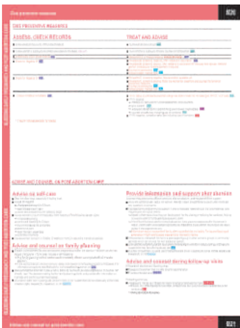
Emergency drugs	Strength and Form	Quantity for carry
Oxytocin	10 IU vial	6
Ergometrine	0.2 mg vial	2
Magnesium sulphate	5 g vials (20 g)	4
Diazepam (parentral)	10 mg vial	3
Calcium gluconate	1 g vial	1
Ampicillin	500 mg vial	4
Gentamicin	80 mg vial	3
Metronidazole	500 mg vial	2
Ringer's lactate	1 litre bottle	4 (if distant referral)
Misoprostol	200ug	10 in number
Normal saline	1 litre bottle	2 in quantity

Emergency supplies	
IV catheter and tubing	2 sets
Gloves	2 pairs, at least, one pair sterile
Sterile syringes and needles	5 sets
Urinary catheter	1
Antiseptic solution	1 small bottle
Container for sharps	1
Bag for trash	1
Torch and extra battery	1

If delivery is anticipated on the way	
Soap, towels	2 sets
Disposable delivery kit (blade, 3 ties)	2 sets
Clean clothes (3) for receiving, drying and wrapping the baby	1 set
Clean clothes for the baby	2 set
Plastic bag for placenta	1 set
Resuscitation bag and mask for the baby	2 set

BLEEDING IN EARLY PREGNANCY AND POST-ABORTION CARE

B19 EXAMINATION OF THE WOMAN WITH BLEEDING IN EARLY PREGNANCY AND POST-ABORTION CARE



B20 GIVE PREVENTIVE MEASURES

B21 ADVISE AND COUNSEL ON POST-ABORTION CARE

Advise on self-care
Advise and counsel on family planning
Provide information and support after abortion
Advise and counsel during follow-up visits

- Always begin with Rapid assessment and management (RAM) B3-B7 .
- Next use the Bleeding in early pregnancy/post abortion care B19 to assess the woman with light vaginal bleeding or a history of missed periods.
- Use chart on Preventive measure B20 to provide preventive measures to all women.
- Use Advise and Counsel on post-abortion care B21 to advise on self care, danger signs, follow-up Visit, family planning.
- Record all treatment given, positive findings, and the schedule next visit in the home-based and clinic recording forms.
- If the woman is HIV positive. adolescent or has special needs. use G2 H1-H4 .
- If the woman is Hepatitis B positive, refer to designated relevant site G3 .
- If the woman is Hepatitis C positive, refer to designated relevant site G4 .

EXAMINATION OF THE WOMAN WITH BLEEDING IN EARLY PREGNANCY, AND POST-ABORTION CARE

Use this chart if a woman has vaginal bleeding in early pregnancy or a history of missed periods

ASK, CHECK RECORD

- When did bleeding start?
- How much blood have you lost?
- Are you still bleeding?
- Is the bleeding increasing or decreasing?
- Could you be pregnant?
- When was your last period?
- Have you had a recent abortion?
- Did you or anyone else do anything to induce an abortion?
- Have you fainted recently?
- Do you have abdominal pain?
- Do you have any other concerns to discuss?

LOOK, LISTEN, FEEL

- Look at amount of bleeding.
- Note if there is foul-smelling vaginal discharge.
- Feel for lower abdominal pain.
- Feel for fever. If hot, measure temperature.
- Look for pallor.

SIGNS	CLASSIFY	TREAT AND ADVISE
■ Vaginal bleeding and any of: → Foul-smelling vaginal discharge → Abortion with uterine manipulation → Abdominal pain/tenderness → Temperature >38 °C.	**COMPLICATED ABORTION**	■ Insert an IV line and give fluids B9 ■ Give paracetamol for pain F4 ■ Give appropriate IM/IV antibiotics B15 ■ Refer urgently to hospital B17
■ Light vaginal bleeding	**THREATENED ABORTION**	■ Observe bleeding for 4-6 hours: → If no decrease, **refer to hospital.** → If decrease, let the woman go home. → Advise the woman to return immediately if bleeding increases. ■ Follow up in 2 days B21.
■ History of heavy bleeding but: → now decreasing, or → no bleeding at present.	**COMPLETE ABORTION**	■ Check preventive measures B20. ■ Advise on self-care B21. ■ Advise and counsel on family planning B21. ■ Advise to return if bleeding dose not stop within
■ Two or more of the following signs: → abdominal pain → fainting → pale → very weak	**ECTOPIC PREGNANCY**	■ Insert an IV line and give fluids B9. ■ **Refer urgently to hospital** B17.

NEXT: Give preventive measures

GIVE PREVENTIVE MEASURES

ASSESS, CHECK RECORDS	TREAT AND ADVISE
■ Check tetanus toxoid (TT) immunization status.	■ Give tetanus toxoid if due F2.
■ Check woman's supply of the prescribed dose of iron/falate, calcium.	■ Give 3 month's supply of iron and counsel on compliance F3.
■ Check blood group and Rh status C5.	■ If blood group is Rhesus negative C5. **Refer to Hospital** B17.
■ Check for Hepatitis B* C6.	■ If Hepatitis B screening negative, offer Hepatitis B vaccination C6. ■ If Hepatitis B screening positive, offer Hepatitis B vaccination for the baby and spouse, refer the woman and baby for further treatment if required. ■ Counsel on precaution G3. ■ Advise to seek medical help G3.
■ Check for Hepatitis C* C6.	■ If Hepatitis C screening negative, No vaccination available yet. ■ If Hepatitis C screening positive, Refer the woman for treatment and counsel the family on preventive measures. ■ Counsel on precaution G4. ■ Advise to seek medical help G4.
■ Check HIV status if indicated C6.	■ If HIV status is unknown but woman is high risk for HIV, refer fro HIV testing to PPTCT, VCT sites M10. ■ If HIV-positive,refer to PPTCT Centers for HIV services M10. ■ If HIV-negative, counsel on safer sex including use of condoms G2.

* If facility not available refer to hospital

ADVISE AND COUNSEL ON POST-ABORTION CARE

Advise on self-care

- Rest for a few days, especially if feeling tired.
- Advise on hygiene
  - → change pads every 4 to 6 hours
  - → wash the perineum daily
  - → avoid sexual relations until bleeding stops
- Advise woman to return immediately if she has any of the following danger signs:
  - → Increased bleeding
  - → continued bleeding for 2 days
  - → foul-smelling vaginal discharge
  - → abdominal pain
  - → fever, feeling ill, weakness
  - → dizziness or fainting,
- Advise woman to return if delay (6 weeks or more) in resuming menstrual periods.

Advise and counsel on family planning

- Explain to the women that she can become pregnant soon after the abortion - as soon as she has sexual intercourse - if she does not use a contraceptive:
  - → Any family planning method can be used immediately after an uncomplicated first trimester abortion.
  - → If the woman has an infection or injury: delay IUD insertion or female sterilization until healed. For information on options, see Methods for non-breastfeeding women on D27.
- Make arrangements for her to see a family planning counsellor as soon as possible, or counsel her directly. (The decision-making tool for family planning clients and providers for information on methods and on the counselling process).
- Counsel on safer sex including the use condom if she or her husband are at risk of sexually transmitted infection (STI), Hepatitis B, Hepatitis C or HIV G2-G4.

Provide information and support after abortion

A woman may experience different emotions after an abortion and may benefit from support:

- Allow the woman to talk about her worries, feelings, health and personal situation, Ask if she has any questions or concerns.
- Facilitate family and community support, if she is interested (depending on the circumstances, she may not wish to involve others).
  - → Speak to them about how they can best support her, by sharing or reducing her workload, helping out with children or simply being avaialble to listen.
  - → Inform them that post-abortion complications can have grave consequences for the woman's health, inform them of the danger signs and the importance of the woman returning to the health worker if she experiences any.
  - → Inform them about importance of family planning and advise on Healthy Timing and Spacing of pregnancy (HTSP) and to avoid pregnancy for the next 6 months.
- If the woman is interested, link her to a peer support group or other women's groups or community services which can provide her with additional support.
- If the woman discloses voilence or you see unexplained bruises and other injuries which make you suspect she may be suffering abuse H4.
- Counsel on safer sex including use of condoms if she or her husband are at risk for STI, Hepatitis B Hepatitis C or HIV G2-G4.

Advise and counsel during follow-up visits

If threatened abortion and bleeding stops:

- Reassure the woman that it is safe to continue pregnancy.
- Provide antenatal care C1-C18.

If bleeding continues:

- Assess and manage as in Bleeding in early pregnancy/post-abortion care D18-D22.
  - → If fever, foul-smelling, vaginal discharge or abdominal pain give first dose of appropriate IV/IM antibiotics B15.
  - → **Refer woman to hospital.** B17

ANTENATAL CARE

- Always begin with **Rapid assessment and management (RAM)** B3- B7 If the woman has no emergency or priority signs and has come for antenatal care, use this section for further care.

- Next use the **Pregnancy status and birth plan chart** C2 to ask the woman about her present pregnancy status, history of previous pregnancies, and check her for general danger signs, decide on an appropriate place of birth for the woman using this chart and prepare the birth and emergency plan. The birth plan should be reviewed during every follow-up visit.

- Check all women for pre-eclampsia, anaemia, diabetes, Rh-Incompatability, Hepatitis B, Hepatitis C and HIV if indicated according to the charts C3-C6.

- In cases where an abnormal sign is identified (volunteered or observed), use the charts **Respond to observed signs or volunteered problems** C7-C11 to classify the condition and identify appropriate treatment(s).

- Give **preventive measures** C12.

- Develop a **birth and emergency plan** C14-C15.

- Advise and counsel on nutrition C13 family planning C16 labour signs, danger signs C15 routine and follow-up visits C17 using Information and Counselling sheets M1-M9.

- Record all positive findings, birth plan, treatments given and the next scheduled visit in the home-based maternal card/clinic recording form.

ANTENATAL CARE

C2 ASSESS THE PREGNANT WOMAN: PREGNANCY STATUS, BIRTH AND EMERGENCY PLAN

C3 CHECK FOR PRE-ECLAMPSIA

C8 RESPOND TO OBSERVED SIGNS OR VOLUNTEERED PROBLEMS (2)
If fever or buming on urination

C9 RESPOND TO OBSERVED SIGNS OR VOLUNTEERED PROBLEMS (3)
If vaginal discharge

C14 DEVELOP A BIRTH AND EMERGENCY PLAN
Facility delivery
Home delivery with a skilled attendant

C15 Advise on labour signs
Advise on danger signs
Discuss how to prepare for an emergency in pregnancy

C4 CHECK FOR ANAEMIA

C5 CHECK FOR DIABETES, BLOOD GROUP & RH STATUS

C10 RESPOND TO OBSERVED SIGNS OR VOLUNTEERED PROBLEMS (4)
If signs suggesting HIV intection
If smoking alcohol or drug abuse, or history of violence

C11 RESPOND TO OBSERVED SIGNS OR VOLUNTEERED PROBLEMS (5)
If cough or breathing difficulty
If taking anti-tuberculosis drugs

C16 ADVISE AND COUNSEL ON FAMILY PLANNING
Counsel on the importance of family planning
Special considerations for family planning counselling during pregnancy

C17 ADVISE ON ROUTINE AND FOLLOW-UP VISITS

C6 CHECK FOR HEPATITIS B, HEPATITIS C, HIV STATUS & SYPHILIS

C7 RESPOND TO OBSERVED SIGNS OR VOLUNTEERED PROBLEMS (1)
If no fetal movement
If ruptured membrane and no labour

C12 GIVE PREVENTIVE MEASURES

C13 ADVISE AND COUNSEL ON NUTRITION AND SELF-CARE
Counsel on nutrition
Advise on self-care during pregnancy

C18 HOME DELIVERY WITHOUT A SKILLED ATTENDANT
Instruct mother and family on clean and safer delivery at home
Advise to avoid hamful practices
Advise on danger signs

ASSESS THE PREGNANT WOMAN: PREGNANCY STATUS, BIRTH AND EMERGENCY PLAN

Use this chart to assess the pregnant woman at each of the four antenatal care visits. During first antenatal visit, prepare a birth and emergency plan using this chart and review them during following visits. Modify the birth plan if any complications arise.

ASK, CHECK RECORD	LOOK, LISTEN, FEEL
ALL VISITS ■ Check duration of pregnancy*. ■ Where do you plan to deliver? ■ Any vaginal bleeding since last visit? ■ Is the baby moving? (after 4 months) ■ Check record for previous compilations and treatments received during this pregnancy. ■ Do you have any concerns? ■ Do you takes any medicine for any other problem?	■ Feel for trimester of pregnancy. ■ Blood pressure ■ weight ■ Pallor ■ Oedena
FIRST VISIT ■ How many months pregnant are you? ■ When was your last period? ■ When do you expect to deliver? ■ How old are you? ■ Have you had baby before? If yes: ■ Check record for prior pregnancies or if there is no record ask about: → Number of prior pregnancies / deliveries → Prior caesarean section, forceps or vacuum → Prior third degree tear → Heavy bleeding during or after delivery → Convulsions → Stillbirth or death in first day → Enquire for Hepatitis B, Hepatitis C & HIV status → Prior history of hypertension / Fits / diabetes	■ Look for caesarean scar. ■ Symphysio fundal height
THIRD TRIMESTER Has she been counselled on family planning? If yes, does she want tubal ligation or IUD C16	■ Feel for obvious multiple pregnancy. ■ Feel for transverse lie. ■ Listen to fetal heart.

INDICATIONS	PLACE OF DELIVERY ADVISE	
■ Prior delivery by caesarean. ■ Age less than 18 years. ■ Transverse lie or other obvious malpresentation within one month of expected: ■ Obvious multiple pregnancy: ■ Tubal ligation or IUD device immediately after delivery. ■ Documented third degree tear/ vesico-vaginal fistula repair ■ History of or current vaginal bleeding or other complication during this pregnancy. ■ History of taking medicine ■ Pregnancy more than 40 weeks	**REFERRAL LEVEL**	Explain why delivery needs to be at referral level C14 Develop the birth and emergency plan C14
■ First birth. ■ Last baby born dead or died in first day. ■ Prior history of retain placenta ■ More than six previous births. ■ Prior delivery with heavy bleeding. ■ Prior delivery with convulsions/raised blood pressure. ■ Prior delivery by forceps or vacuum. ■ HIV-positive woman.	**PRIMARY HEALTH CARE LEVEL**	Explain why delivery needs to be at primary health care level C14 Develop the birth and emergency plan, obstetric care for HIV positive pregnant women including ARV should be provided at tertiary/ DHQ level hospital trained in PPTCT C14
None of the above.	**ACCORDING TO WOMAN'S PREFERENCE**	Explain why delivery needs to be with a skilled birth attendant, preferably at a facility. Develop the birth and emergency plan C14 Give information and counselling M2

* Estimated Date of Delivery (EDD) = Last Menstrual Period (LMP) + 9 months + 7 days

NEXT: Check for pre-eclampsia

CHECK FOR PRE-ECLAMPSIA

Screen all pregnant women at every visit.

ASK, CHECK RECORD	LOOK, LISTEN, FEEL
■ Blood pressure at the last visit? ■ Headaches ■ Blurring of vision ■ Epigastric pain	■ Measure blood pressure in sitting position. ■ If diastolic blood pressure is more than 90 mmHg. Repeat after 1 hour rest. ■ If diastolic blood pressure is still more than or equal to 110mmHg. Ask the woman if she has: →severe headache →blurred vision →epigastric pain and →check protein in urine.

SIGNS	CLASSIFY	TREAT AND ADVISE
■ Diastolic blood pressure morethan or equal to110 mmHg and 3+ proteinuria. Or ■ Diastolic blood pressure more than or equal to 110mmHg on two readings and 2+ proteinuria, and any of: →severe headache →blurred vision →epigastric pain.	**SEVERE PRE-ECLAMPSIA**	■ Give magnesium sulphate B13 ■ Give appropriate anti-hypertensives B14 ■ Revise the birth plan C2 ■ Refer urgently to hospital B17
■ Diastolic blood pressure 90-110-mmHg on two readings and 2+ proteinuria.	**PRE-ECLAMPSIA**	■ Revise the birth plan C2 ■ Refer to hospital. B17
■ Diastolic blood pressure more than 90 mmHg on 2 readings.	**HYPERTENSION**	■ Advise to reduce workload and to rest. ■ Advise on danger signs C15 ■ Reassess at the next antenatal visit or in 1 week if more than 8 months pregnant. ■ If hypertension persists after 1 week or at next visit, refer to hospital or discuss case with the doctor or midwife, if available.
■ **None of the above.**	**NO HYPERTENSION**	**No treatment required.**

NEXT: Check for anaemia

CHECK FOR ANAEMIA

Screen all pregnant women at every visit.

ASK, CHECK RECORD	LOOK, LISTEN, FEEL
■ Do you tire easily? ■ Are you breathless (short of breath) during routine household work?	**On first visit:** ■ Measure hemoglobin **On subsequent visits:** ■ Look for conjunctival pallor. ■ **Look for palmar pallor. If pallor:** → Is it severe pallor? → Some pallor? → Count number of breaths in 1 minute.

SIGNS	CLASSIFY	TREAT AND ADVISE
■ Haemoglobin les than 7-g/dl. AND/OR ■ Severe palmar and conjunctival pallor or ■ Any pallor with any of → more than 30 breaths per minute → tires easily → breathlessness at rest	**SEVERE ANAEMIA**	■ Revise birth plan so as to deliver in a facility with blood transfusion services C2 ■ Give double dose of iron (1 tablet twice daily) for 3 months F3 ■ Counsel on compliance with treatment F3 ■ Follow up in 2 weeks to check clinical progress, test results, and compliance with treatment. ■ **Refer urgently to hospital** B17
■ Hemoglobin 7-11-g/dl. **OR** ■ Palmar or conjunctival pallor.	**MODERATE ANAEMIA**	■ Give double dose of iron (1 tablet twice daily) for 3 months F3 ■ Counsel on compliance with treatment F3 ■ Give appropriate oral antimalarial if not given in the past month F4 ■ Reassess at next antenatal visit (4-6 weeks). If **anaemia persists, refer to hospital.** B17
■ Haemoglobin more than 11-g/dl. ■ No pallor.	**NO CLINICAL ANAEMIA**	■ Give iron 1 tablet once daily for 3 months F3 ■ Counsel on compliance with treatment F4

CHECK FOR DIABETES, BLOOD GROUP & RH STATUS

Use this chart to screen all pregnant women at antenatal visits

ASK, CHECK RECORD	LOOK, LISTEN, FEEL	TEST RESULT	CLASSIFY	TREAT AND ADVISE
AT FIRST VISIT ■ Have you ever been tested for diabetes mellitus? → Does anyone in your family diabetes? → Have you ever been diagnosed as having diabetes in pregnancy? → Have you ever had an unexplained still birth? → Have you ever delivered a baby weighing more than 4kg? → Have you ever had excessive liquor in any pregnancy? → Have you ever had baby with congenital abnormality?	If not, perform strip test on glucometer If facility not available, refer to hospital for testing	■ RBS more than 200mg/dl	**DIABETES**	→ Refer to hospital B17
		■ RBS 1 50-200mg/dl	**POSSIBLE DIABETES**	→ Refer to Hospital B17
		■ RBSless than 150mg/dl	**NO DIABETES**	→ Reassure
■ Do you know your blood group? → If the answer is No → If YES: check results	check blood group/Rh status	■ If mother Rh-negative ■ Check husband blood group ■ If husband Rh-postive	**RH-INCOMPATIBILITY**	→ Refer to hospital → Give information & explain reason for referral
		■ If mother Rh-postive	**NO RH-INCOMPATIBILITY**	→ Reassure
AT 6 TO 7 MONTHS → Repeat test for diabetes		■ If mother Rh-negetive ■ If husband Rh-negetive	**NO RH-INCOMPATIBILITY**	→ Reassure

NEXT: Check For Hepatitis B, Hepatitis C & HIV Status

CHECK FOR HEPATITIS B, HEPATITIS C & HIV STATUS

ASK, CHECK RECORD	LOOK, LISTEN, FEEL
■ Have you ever been tested for hepatitis B	→ Perform hepatitis B rapid test on kits or refer if facility not available
■ Have you ever been tested for hepatitis C	→ Perform hepatitis C rapid test on kits or refer if facility not available
→ If YES: Check record	→ If answer to any of these questions is yes then perform Rapid HIV test or refer to PPTCT
■ Ask the women the following questions? Whether the women her self or her husband has: → current or past history of her husband working abroad → History of blood transfusion In last 5 years → History of injecting drug use in last 5 years → History of surgery / dental surgery → History of tattoos	

TEST RESULT	CLASSIFY	TREAT AND ADVISE
■ Hepatitis B positive	**POSSIBLE HEPATITIS B**	→ Counsel on implication of positive test G3 → Refer to A4 universal precaution → If mother has hepatitis B refer baby to hospital for Immunization G3.
■ Hepatitis C positive	**POSSIBLE HEPATITIS C**	→ Counsel on implication of positive test G4 → Refer to A4 universal precaution.
■ Hepatitis B Negative		→ If mother not vaccinated against hepatitis B, offer vaccination
■ Hepatitis C Negative		→ Reassurance G4.
■ HIV positive OR on ARV	**POSSIBLE HIV**	→ Refer to relevant PPTCT sites M10. → Refer to G2 for adherence
■ HIV Negative	**NO HIV**	→ Reassurance G2.

NEXT: **Respond to observed signs or volunteered problems**
If no problem, go to page C12

RESPOND TO OBSERVED SIGNS OR VOLUNTEERED PROBLEMS

ASK, CHECK RECORD	LOOK, LISTEN, FEEL	SIGNS	CLASSIFY	TREAT AND ADVISE
IF NO FETAL MOVEMENT				
■ When did the baby last move? ■ If no movement felt, ask woman to move around for some time, reassess fetal movement.	■ Feel for fetal movements. ■ Listen for fetal heart after 6 months of pregnancy D2 ■ If no heart beat, repeat after 1 hour.	■ No fetal movement. ■ No fetal heart beat.	**PROBABLY DEAD BABY**	■ Inform the woman and husband about the possibility of dead baby. ■ Refer to hospital B17 .
		■ No fetal movement but fetal heart. beat present.	**WELL BABY**	■ Inform the woman that baby is fine and likely to be well but to return if problem persists.
IF RUPTURED MEMBRANES AND NO LABOUR				
■ When did the membranes rupture? ■ When is your baby due?	■ Look at pad or underwear for evidence of: → amniotic fluid foul-smelling vaginal discharge → look for cord prolapse ■ If no evidence, ask her to wear a pad. Check again in 1 hour. ■ Measure temperature. ■ Feel for abdominal tenderness ■ Listen fetal heart sound	■ Fever 38°C. ■ Foul-smelling vaginal discharge.	**UTERINE AND FETAL INFECTION**	■ Give appropriate IM/IV antibiotics B15. ■ Refer urgently to hospital B17.
		■ Rupture of membranes at less than8 months of pregnancy.	**RISK OF UTERINE AND FETAL INFECTION**	■ Give appropriate IM/IV antibiotic B15. ■ Refer urgently to hospital B17. ■ DO NOT DO PELVIC EXAMINATION ■ Look for cord prolapse, fetal heart sounds, abdominal tenderness
		■ Rupture of membranes at more than8 months of pregnancy.		■ Manage as Woman in childbirth D1-D29.

NEXT: If fever or burning on urination

ASK, CHECK RECORD	LOOK, LISTEN, FEEL	SIGNS	CLASSIFY	TREAT AND ADVISE
IF FEVER OR BURNING ON URINATION				
■ Have you had fever? ■ Do you have burning on urination?	■ If history of fever or feels hot → Measure axillary temperature. → Look or feel for stiff neck. → Look for lethargy. ■ Percuss flanks for tenderness.	■ Fever more than 38 C and any of: → very fast breathing or → stiff neck → lethargy → very weak/ not able to stand.	**VERY SEVERE FEBRLE DISEASE**	■ Insert IV line and give fluids slowly B9. ■ Give appropriate IM/IV antibiotics B15. ■ Give artemether/quinine IM B16. ■ Give glucose B16. ■ Refer urgently to hospital B17.
		■ Fever more than 38 C and any of: → Flank pain → Burning on urination.	**UPPER URINARY TRACT INFECTION**	■ Give appropriate IM/IV antibiotics B15. ■ Refer urgently to hospital B17.
		■ Fever more than 38 C or history of fever (in last 48 hours).	**MALARIA**	■ Advise Rapid Diagnostic Test ■ Give appropriate oral antimalarial F4. ■ If no improvement in 2 days or condition is worse, refer to hospital.
		■ Burning on urination.	**LOWER URINARY TRACT INFECTION**	■ Give appropriate oral antibiotics F5. ■ Encourage her to drink more fluids. ■ If no improvement in 2 days or condition is worse, refer to hospital.

ASK, CHECK RECORD	LOOK, LISTEN, FEEL	SIGNS	CLASSIFY	TREAT AND ADVISE

IF VAGINAL DISCHARGE

ASK, CHECK RECORD

- Have you noticed changes in your Vaginal discharge?
- Do you have itching at the vulva?
- Has your husband had a urinary problem?

If husband is present in the clinic, ask the woman if she feels comfortable if you ask him similar questions.
If yes, ask him if he has:

- urethral discharge or pus.
- burning on passing urine.

If husband could not be approached, explain importance of husband assessment and treatment to avoid reinfection.
Schedule follow-up appointment for woman and husband (if possible).

LOOK, LISTEN, FEEL

- Separate the labia and look for abnormal vaginal discharge:
  - → amount
  - → colour
  - → odour/smell.
- If no discharge is seen, examine with a gloved finger and look at the discharge on the glove.

SIGNS	CLASSIFY	TREAT AND ADVISE
■ Abnormal vaginal discharge. ■ Husband has urethral discharge or burning on passing urine.	**POSSIBLE GONORRHEA OR CHLAMYDIA INFECTION**	■ Give appropriate antibiotics to woman F5. ■ Treat husband with appropriate oral antibiotics F5. ■ Counsel on safer sex including use of condoms G2.
■ Curd like vaginal discharge. ■ Intense vulval itching.	**POSSIBLE CANDIDA INFECTION**	■ Give clotrimazole F5. ■ Counsel on safer sex including use of condoms G2.
■ Abnormal vaginal discharge	**POSSIBLE BACTERIAL OR TRICHOMONAS INFECTION**	■ Give metronidazole to woman F5. ■ Counsel on safer sex including use of condoms G2.

NEXT: If history suggesting HIV infection

IF HISTORY SUGGESTING OF HIV INFECTION

Use this chart to exclude HIV infection in high risk pregnant women

ASK, CHECK RECORD	LOOK, LISTEN, FEEL	SIGNS	CLASSIFY	TREAT AND ADVISE
■ Have you ever been check for HIV If not checked, then ask: → Has your husband ever worked abroad? → If you or your husband ever injected drugs? → History of blood transfusion in self or spouse → If answer is "yes" to any of the 3 questions, woman should be referred to identified HIV/PPTCT centers for VCTC and PPTCT services. → History of surgery / dental surgery → History of tattoos	■ If HIV positive.	■ Possible HIV infection, refer to relevant PPTCT site M10.		
	■ If HIV negative.	■ Reassurance & counsel on precaution G2.		
	■ If husband positive.	■ Refer to relevant PPTCT site M10 .		
	■ Possible HIV (Rapid HIV test positive).	■ If facility available test or **refer to hospital**.		

IF SMOKING, ALCOHOL OR DRUG ABUSE, OR HISTORY OF VIOLENCE

- Counsel on stopping smoking
- For alcohol/drug abuse, refer to specialized care Providers,
- For counselling on violence, see H4

NEXT: **If cough or breathing difficulty**

ASK, CHECK RECORD	LOOK, LISTEN, FEEL	SIGNS	CLASSIFY	TREAT AND ADVISE
IF COUGH OR BREATHING DIFFICULTY				
■ How long have you been coughing? ■ How long have you had difficulty in breathing? ■ Do you have chest pain? ■ Do you have any blood in sputum? ■ Do you smoke?	■ Look for breathlessness. ■ Listen for wheezing. ■ Measure temperature.	**At least 2 of the following signs:** ■ Fever more than38°C. ■ Breathlessness. ■ Chest pain.	**POSSIBLE PNEUMONIA**	■ Give first dose of appropriate IM/IV antibiotics B15 . ■ **Refer urgently to hospital** B17.
		At least 1 of the following signs: ■ Cough or breathing difficulty for more than 3 weeks ■ Blood in sputum ■ Wheezing	**POSSIBLE CHRONIC LUNG DISEASE**	■ Refer to hospital for assessment. ■ If severe wheezing, refer urgently to hospital B17 .
		■ Fever less than 38°C, and ■ Cough less than 3 weeks.	**UPPER RESPIRATORY TRACT INFECTION**	■ Advise safe, soothing remedy. ■ If smoking, counsel to stop smoking.
IF TAKING ANTI-TUBERCULOSIS DRUGS				
■ Are you taking anti-tubeculosis drugs, If yes, since when? ■ Does the treatment include injection (streptomycin)?		■ Taking anti-tuberculosis drugs. ■ Receiving injectable anti-tuberculosis drugs.	**TUBERCULOSIS**	■ If anti-tubercular treatment includes streptomycin (injection). refer the woman to district hospital for revision of treatment as streptomycin is ototoxic to the fetus. ■ If treatment, does not include streptomycin, assure the woman that the drugs are not harmful to her baby, and advise her to continue treatment for a successful outcome of pregnancy. ■ If her sputum is TB positive within 2 months of delivery. plan to give (INH prophylaxis to the newbron K13. ■ Reinforce information on TB and HIV co-infection and promote VCTC G2-G3. ■ If smoking, counsel to stop smoking. ■ Advise to screen immediate family members and close contacts for tuberculosis.

▼ **NEXT: Give preventive measures**

GIVE PREVENTIVE MEASURES

Advise and counsel all pregnant women at every antenatal care visit.

ASSESS. CHECK RECORD	TREAT AND ADVISE
■ Check tetanus toxoid (TT) immunization status.	■ Give tetanus toxoid if due F2. ■ If TT1. plan to give TT2 at next visit.
■ Check woman's supply the prescribed dose of iron.	■ Give 3 month's supply of iron and counsel on compliance and safety F3.
■ Check woman's supply the prescribed dose of folate.	■ Give 3 month's supply of folate and counsel on compliance and safety F3.
■ Check woman's supply the prescribed dose of calcium.	■ Give 3 month's supply of calcium and counsel on compliance and safety F3.
■ Check when last dose of mebendazole given.	■ Give mebendazole once in second or third trimester F3.
■ Ask if she (and children) are sleeping under insecticide treated bednets.	■ Give intermittent preventive treatment in second and third trimesters F4. ■ Encourage sleeping under insecticide treated bednets.
	First visit ■ Develop a birth and emergency plan C14. Counsel on nutrition C13. ■ Counsel on importance of exclusive breastfeeding K2. ■ Counsel on stopping smoking and alchol and drug abuse. ■ Counsel on safer sex including use of condoms. **All visits** ■ Review and update the birth and emergency plan according to new findings C14-C15. ■ Advise on when to seek care: C17. →routine visits →follow-up vists →danger signs. **Third trimester** ■ Counsel on family planning C16.
■ **Record all visits and treatments given.**	

NEXT: **Advise and council on nutrition and self care**

ADVISE AND COUNSEL ON NUTRITION AND SELF-CARE

Use the information and counselling sheet to support your interaction with the woman, her husband and family.

Counsel on nutrition

- Advise the woman to eat a greater amount and variety of healthy foods, such as meat, fish, oils, nuts, seeds, cereats, beans vegetables, cheese, milk to help her feel well and strong (give examples of types of food and how much to eat).
- Spend more time on nutrition counseling with very thin and adolescent
- Determine if there are important taboos about foods which are nutritionally important for good health, advise the woman against these taboos.
- Talk to family members such as the husband and mother-in-law, to encourage them to help ensure the woman eats enough and avoids hard physical work.

Advise on self-care during pregnancy

Advise the woman to:

- Take iron tablets, calcium and vitamin D F3.
- Rest and avoid lifting heavy objects.
- Sleep under an insecticide impregnated bednet.
- Counsel on safer sex including use of condoms, if at risk for STI or Hepatitis B or Hepatitis C or HIV G2-G4.
- Avoid alcohol and smoking during pregnancy.
- NOT to take medication, especially injectable unless prescribed at the health centre/hospital.

DEVELOP A BIRTH AND EMERGENCY PLAN

Use the information and counselling sheet to support your interaction with the woman, her husband and family.

Facility delivery

Explain why birth in a facility is recommended

- Any complication can develop during delivery - they are not always predictable.
- A facility has staff, equipment, supplies and drugs available to provide best care if needed, and a referral system.
- If HIV-positive she will need appropriate ARV treatment for herself and her baby during childbirth.
- All HIV positive women should deliver at tertiary or DHQ level hospital where OB staff is trained in PPTCT.

Advise how to prepare

Review the arrangements for delivery:

- How will she get there? Will she have to pay for transport?
- How much will it cost to deliver at the facility? How will she pay?
- Can she start saving straight away?
- Who will go with her for support during labour and delivery?
- Who will help while she is away to care for her home and other children?

Advise when to go

- If the woman lives near the facility, she should go at the first signs of labour C15.
- If living far from the facility, she should go 2-3 weeks before baby due date and stay either at the matemity waiting home or with family or friends near the facility.
- Advise to ask for help from the community, if needed I2.

Advise what to bring

- Home-based maternal record.
- Clean cloths for washing, drying and wrapping the baby.
- Additional clean cloths to use as sanitary pads after birth.
- Clothes for mother and baby.
- Food and water for woman and support person.

Home delivery with a skilled attendant

Advise how to prepare

Review the following with her:

- Who will be the companion during labour and delivery?
- Who will be close by for at least 24 hours after delivery?
- Who will help to care for her home and other children?
- Advise to call the skilled attendant at the first signs of labour C15.
- Advise to have her home-based maternal record ready.
- Advise to ask for help from the community, If needed I2.

Explain supplies needed for home delivery

- Warm spot for the birth with a clean surface or a clean cloth.
- Clean cloths of different sizes: for the bed, for drying and wrapping the baby, for cleaning the baby's eyes, for the birth attendant to wash and dry her hands, for use as sanitary pads.
- Blankets.
- Buckets of clean water and some way to heat this water.
- Soap.
- Bowls: 2 for washing and 1 for the placenta.
- Plastic for wrapping the placenta.

Develop a birth and emergency plan (2)

Advise on labour signs

Advise to go to the facility or contact the skilled birth attendant if any of the following signs:

- a bloody sticky discharge.
- painful contractions every 20 minutes or less.
- waters have broken.

Advise on danger signs

Advise to go to the hospital/health centre immediately, day or night, WITHOUT waiting if any of the following signs:

- vaginal bleeding.
- convulsions.
- severe headaches with blurred vision.
- fever and too weak to get out of bed.
- severe abdominal pain.
- fast or difficult breathing.

She should go to the health centre as soon as possible if any of the following signs:

- fever.
- abdominal pain.
- feels ill.
- swelling of fingers, face, legs.

Discuss how to prepare for an emergency in pregnancy

- Discuss emergency issues with the woman and her husband/family:
  - → where will she go?
  - → how will they get there?
  - → how much it will cost for services and transport?
  - → can she start saving straight away?
  - → who will go with her for support during labour and delivery?
  - → who will care for her home and other children?
- Advise the woman to ask for help from the community, if needed I1-I3.
- Advise her to bring her home-based maternal record to the health centre, even for an emergency visit.

ADVISE AND COUNSEL ON FAMILY PLANNING

Counsel on the importance of family planning

- If appropriate ask the woman if she would like her husband or another family member to be included in the counselling session.
- Explain that after birth if she has sex and is not exclusively breastfeeding. she can become pregnant as soon as four weeks after delivery. Therefore it is important to start thinkng early on about what family planning method they will use.
  - → Ask about plans for having more children. If she (and her husband) want more children advise that waiting at least 2 years before trying to become pregnant again is good for the mother and for the baby's health.
  - → Information on when to start a method after delivery will vary depending whether a woman is breastfeeding or not.
  - → Make arrangements for the woman to see a family planning counsellor, or counsel her directly (see the tools for family planning providers and clients for information on methods and on the counseling process).
- Counsel on safer sex including use of condoms for dual protection from sexually transmitted infections (STI), Hepatitis B, Hepatitis C, or HIV and pregnancy. Promote especially if at risk for STI or HIV G2-G3.
- For HIV-Positive women, refer to PPTCT M10.

Method options for the non-breastfeeding woman

Can be used immediately postpartum	**Condoms** Progestogen-only oral contraceptives Progestogen-only injectables Implant Spermicide Female sterilization (within 7days or delay 6 weeks) Copper IUCD (immediately following expulsion of placenta or within 48 hours)
Delay 3 weeks	Combined oral contraceptives Combined injectables Diaphragm Fertility awareness methods

Special considerations for family planning counseling during pregnancy

Counselling should be given during the third trimester of pregnancy.

- If the woman chooses female sterilization:
  - → can be performed immediately postpartum if no sign of infection (ideally within 7 days or delay for 6 weeks).
  - → plan for delivery in hospital or health centre where they are trained to carry out the procedure,
  - → ensure counselling and informed consent prior to labour and delivery.
- If the woman chooses an intrauterine device (IUCD):
  - → can be inserted immediately postpartum if no sign of infection (up to 48 hours or delay 4 weeks)
  - → plan for delivery in hospital or health centre where they are trained to insert the IUCD.

Method options for the breastfeeding woman

Can be used immediately postpartum	Lactational amenonhea method (LAM) Condoms Spermicide Female sterilization (within 7 days or delay 6 weeks) Copper IUD (within 48 hours or delay 4 weeks)
Delay 6 weeks	Progestogen-only oral contraceptives Progestogen-only injectables Implants Diaphragm
Delay 6 months	Combined oral contraceptives Combined injectables Fertility awareness methods

ADVISE ON ROUTINE AND FOLLOW-UP VISITS

Encourage the woman to bring her husband or family member to at least 1 visit.

Routine antenatal care visits

1st visit	**Before 4 months**	**Before 16 weeks**
2nd visit	6 months	24-28 weeks
3rd visit	8 months	30-32 weeks
4th visit	9 months	36-38 weeks

- All pregnant women should have 4 routine antenatal visits.
- First antenatal contact should be as early in pregnancy as possible.
- During the last visit inform the woman to return if she does not deliver after expected date of delivery.
- More frequent visits or different schedules may be required according to national policies.
- If women is HIV-positive urgently refer to PPTCT site for ARV prophylaxis M10.

HOME DELIVERY WITHOUT A SKILLED ATTENDANT

Reinforce the importance of delivery with a skilled birth attendant preferably at health facility

Instruct mother and family on clean and safer delivery at home

If the woman has chosen to deliver at home without a skilled attendant, review these simple instructions with the woman and family members.

- Give them a disposable delivery kit and explain how to use it.

Tell her/them:

- To ensure a clean delivery surface for the birth.
- To ensure that the attendant should wash her hands with clean water and soap before/after touching mother/baby. She should also keep her nails clean.
- After birth dry and place the baby on the mother's abdomen with skin-to-skin contact and wipe the baby's eyes using a clean cloth for each eye.
- To cover the mother and the baby.
- To use the ties and razor blade from the disposable delivery kit to tie and cut the cord. The cord is cut when it stops pulsating.
- To wipe the baby clean but not bathe the baby until after 6 hours.
- To wait for the placenta to deliver on its own.
- To start breastfeeding when the baby shows signs of readiness within the first hour after birth.
- Not to leave the mother alone for the first 24 hours.
- To keep the mother and the baby warm, dress or wrap the baby, including the baby's head.
- To dispose off the placenta in a correct safe and culturally appropriate manner (burn or burry).

- Advise her/them on danger signs for the mother and the baby and where to go.

Advise to avoid harmful practices

For example:

NOT to use local medications to hasten labour.
NOT to wait for waters to stop before going to health facility.
NOT to insert any substances into the vagina during labour or after delivery.
NOT to push on the abdomen during labour or delivery.
NOT to pull on the cord to deliver the placenta.
NOT to put ash, cow dung or other substances on umbilical cord/stump.

Encourage helpful traditional practices:

____

____

Advise on danger signs

If the mother or baby has any of these signs. She/they must go to the health centre Immediately, day or night WITHOUT waiting

Mother

- Water break and not in labour after 6 hours.
- Labour pains/contractions continue for more than 12 hours.
- Heavy bleeding after delivery (pad/cloth soaked in less than 5 minutes).
- Bleeding increases.
- Placenta not expelled 1 hour after birth of the baby.

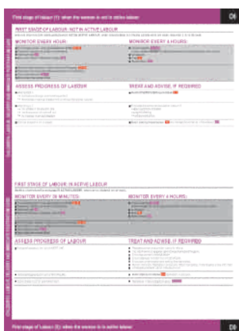
Baby

- Very small.
- Difficulty in breathing.
- Fits.
- Fever.
- Feels cold.
- Bleeding.
- Not able to feed.

CHILDBIRTH: LABOUR, DELIVERY AND IMMEDIATE POSTPARTUM CARE

D2 EXAMINE THE WOMAN IN LABOUR OR WITH RUPTURED MEMBRANES

D3 DECIDE STAGE OF LABOUR



D8 FIRST STAGE OF LABOUR (1): WHEN THE WOMAN IS NOT IN ACTIVE LABOUR

D9 FIRST STAGE FO LABOUR (2): IN ACTIVE LABOUR

D14 RESPOND TO PROBLEMS DURING LABOUR AND DELIVERY (1)
If fetal heart rate less than120 or more than160 bpm

D15 RESPOND TO PROBLEMS DURING LABOUR AND DELIVERY (2)
If prolapsed cord

D4 RESPOND TO OBSTETRICAL PROBLEMS ON ADMISSION (1)

D5 RESPOND TO OBSTETRICAL PROBLEMS ON ADMISSION (2)

D10 SECOND STAGE OF LABOUR: DELIVER THE BABY AND GIVE IMMEDIATE NEWBORN CARE (1)

D11 SECOND STAGE OF LABOUR: DELIVER THE BABY AND GIVE IMMEDIATE NEWBORN CARE (2)

D16 RESPOND TO PROBLEMS DURING LABOUR AND DELIVERY (3)
If breech presentation

D17 RESPOND TO PROBLEMS DURING LABOUR AND DELIVERY (4)
If stuck shoulders

D6 GIVE SUPPORTIVE CARE THROUGHOUT LABOUR

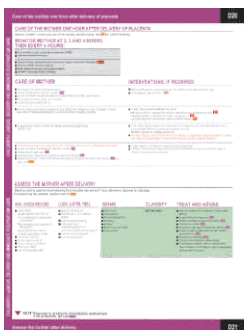
D7 BIRTH COMPANION

D12 THIRD STAGE OF LABOUR: DELIVER THE PLACENTA (1)

D13 THIRD STAGE OF LABOUR: DELIVER THE PLACENTA (2)

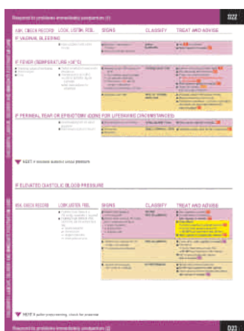
D18 RESPOND TO PROBLEMS DURING LABOUR AND DELIVERY (5)
If multiple births

D19 CARE OF THE MOTHER AND NEWBORN WITHIN FIRST HOUR OF DELIVERY OF PLACENTA



D20 CARE OF THE MOTHER ONE HOUR AFTER DELIVERY OF PLACENTA

D21 ASSESS THE MOTHER AFTER DELVIERY

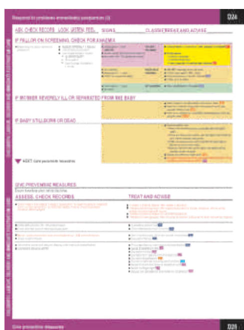


D22 RESPOND TO PROBLEMS IMMEDIATELY POSTPARTUM (1)

If vaginal bleeding
If fever
If perineal tear or epislotomy

D23 RESPOND TO PROBLEMS IMMEDIATELY POSTPARTUM (2)

If elevated diastolic blood pressure



D24 RESPOND TO PROBLEMS IMMEDIATELY POSTPARTUM (3)

If palor on screening check for anaemia
If mother severely ill or separated from baby
If baby stillborn or dead

D25 GIVE PREVENTIVE MEASURES

D26 ADVISE ON POSTPARTUM CARE

Advise on postpartum care and hygiene
Counsel on nutrition

D27 COUNSEL ON BIRTH SPACING AND FAMILY PLANNING

Counsel on importance of family planning
Lactation and amenorrhea method (LAM)

D28 ADVISE ON WHEN TO RETRUN

Routine postpartum visits
Advise on danger signs
Discuss how to prepare for an emergency postpartum

D29 HOME DELIVERY BY SKILLED ATTENDANT

Preparation for home delivery
Delivery care
Immediate postpartum care of the mother
Postpartum care of the newborn

- Always begin with **Rapid assessment and management (RAM)** B3-B7.
- Next, use the chart on **Examine the woman in labour or with ruptured membranes** D2-D3 to assess the clinical situation and obstetrical history, and decide the stage of labour.
- If an abnormal sign is identified, use the charts on **Respond to obstetrical problems** on admission D4-D5.
- Care for the woman according to the stage of labour D8-D13 and respond to problems during labour and delivery as on D14-D18.
- Use **Give supportive care throughout labour** D6-D7 to provide support and care throughout labour and delivery.
- Record findings continually on labour record and partograph N4-N6.
- Keep mother and baby in labour room for one hour after delivery and use charts **Care of the mother and newborn within first hour of delivery placenta on** D19.
- Next use **Care of the mother after the first hour following delivery of placenta** D20 to provide care until discharge. Use chart on D25 to provide **Preventive measures and Advise on postpartum care** D26-D28 **to advise on care, danger signs, when** to seek routine or emergency care, and family planning.
- Examine the mother for discharge using chart on D21.
- **Do not** discharge mother from the facility before 12 hours.
- If attending a delivery at the woman's home, see D29.

EXAMINE THE WOMAN IN LABOUR OR WITH RUPTURED MEMBRANES

First do Rapid assessment and management

Then use this chart to assess the woman's and fetal status and decide stage of labour.

ASK, CHECK RECORD

History of this labour:

- When did contractions begin?
- How frequent are contractions? How strong?
- Have your wates broken? If yes, when? Were they clear or green?
- Have you had any bleeding? If yes, when? How much?
- Is the baby moving?
- DO you have any concern?

Check record, or if no record:

- Ask when the delivery is expected.
- Determine if preterm (less than 8 months pregnant)-
- Review the birth plan. Blood group and Rh factor

If prior pregnancies:

- Number of prior pregnancies/ deliveries.
- Any prior caesarean section, forceps, or vacuum, or other complication such as postpartum haemorrhage?
- Any prior third degree tear?

Current pregnancy:

- **Hepatitis B & Hepatitis C status** C5 .
- Hb results C4.
- Tetanus immunization status F2.
- HIV status if indicated C6.
- Infant feeding plan K2 .
- Receiving any medicine.

LOOK, LISTEN, FEEL

- Observe the woman's response to contractions:
  - → Is she coping well or is she distressed?
  - → Is she pushing or grunting?
- Check abdomen for:
  - → caesarean section scar.
  - → horizontal ridge across lower abdomen (if present, empty bladder B12 and observe again).
- Feel abdomen for:
  - → contractions frequency, duration and any continuous contractions?
  - → fetal lie-longitudinal or transverse?
  - → fetal presentation-head, breech, other?
  - → more than one fetus?
  - → fetal movement.
- Listen to the fetal heart beat:
  - → Count number of beats in 1 minute.
  - → If less than 110 beats per minute, or more than 150, turn woman on her left side and count again.
- Measure blood pressure.
- Measure temperature.
- Look for pallor.
- Look for sunken eyes, dry mouth.
- Pinch the skin of the forearm: does It fo back quickly?

NEXT: Perform vaginal examination and decide stage of labour

DECIDE STAGE OF LABOUR

ASK, CHECK RECORD

- Explain to the woman that you will perform a vaginal examination and ask for her consent.

LOOK, LISTEN, FEEL

- Look at vulva for:
  - → bulging perineum
  - → any visible fetal parts
  - → vaginal bleeding
  - → leaking amniotic fluid: if yes, is it meconium stained, foul-smelling?
  - → warts, keloid tissue or scars that may interfere with delivery:

Perform vaginal examination

- **DO NOT shave the perineal area.**
- Prepare:
  - → clean gloves
  - → swabs, pads,
- Wash hands with soap before and after each examination.
- Wash vulva and perineal areas.
- Put on gloves.
- Position the woman with legs flexed and apart.

DO NOT perform vaginal examination if bleeding. now or at any time after 7 months of pregnancy.

- Perform gentle vaginal examination (do not start during a contraction):
  - → Determine cervical dilatation in centimetres.
  - → Feel for presenting part: is it hard, round or smooth (the head) If not, identify the presenting part.
  - → Feel for membranes - are they intact?
  - → Feel for cord - is it felt? Is it pulsating? If so, act immediately as on D15

SIGNS	CLASSIFY	MANAGE
Bulging thin perineum, vagina gaping and head visible, full cervical dilatation.	**IMMINENT DELIVERY**	See second stage of labour D10-D11 Record on partograph N5
Cervical dilatation: multigravida more than 5 cm, primigravida more than 6 cm	**LATE ACTIVE LABOUR**	See first stage of labour - active labour D9 Start plotting partograph N5 Record in labour record N5
Cervical dilatation more than 4-5 cm.	**EARLY ACTIVE LABOUR**	
Cervical dilatation: 0-3 cm: contractions weak and Less than 2cm in 10 minutes.	**NOT YET IN ACTIVE LABOUR**	See first stage of labour - not active labour D8 Record in labour record N4

NEXT: **Respond to obstetrical problems on admission.**

RESPOND TO OBSTETRICAL PROBLEMS ON ADMISSION

Use this chart if abnormal findings on assessing pregnancy and fetal status

SIGNS	CLASSIFY	TREAT AND ADVISE
■ Transverse lie. ■ Continuous contractions. ■ Constant pain between contractions. ■ Sudden and severe abdominal pain. ■ Horizontal ridge across lower abdomen. ■ Labour more than12 hours.	**OBSTRUCTED LABOUR**	■ If distressed, insert an IV line and give fluids B9 ■ If in labour more than 12 hours, give appropriate IM/IV antibiotics B15 ■ **Refer urgently to hospital B17**

FOR ALL SITUATIONS IN RED BELOW, REFER URGENTLY TO HOSPITAL IF IN EARLY LABOUR, MANAGE ONLY IF IN LATE LABOUR

SIGNS	CLASSIFY	TREAT AND ADVISE
■ Rupture of membranes and any of: Fever more than38 C Foul-smelling vaginal discharge.	**UTERINE AND FETAL INFECTION**	■ Give appropriate IM/IV antibiotics B15 ■ If late labour, deliver and refer to hospital after delivery B17 ■ Plan to treat newborn J5
■ Rupture of membranes at less than 8-months of pregnancy.	**RISK OF UTERINE AND FETAL INFECTION**	■ Give appropriate IM/IV antibiotics B15 ■ If late labour, deliver D10-D28 ■ Discontinue antibiotic for mother after delivery if no signs of infection. ■ Plan to treat newborn J5
■ Diastolic blood pressure more than 90 mmHg.	**PRE-ECLAMPSIA**	■ Assess further and manage as on D23
■ Severe palmar and conjunctival pallor and/or haemoglobin less than7g/dl.	**SEVERE AMAEMIA**	■ Manage as on D24
■ Breech or other mal presentation D16 ■ Multiple pregnancy D18 ■ Fetel distress D14 ■ Prolapsed cord D15	**OBSTETRICAL COMPLICATION**	■ Follow specific instructions (see page numbers in left column)

SIGNS	CLASSIFY	TREAT AND ADVISE
■ Warts, keloid tissue that may interfene with delivery. ■ Prior third degree tear / vasico vaginal fistula repair. ■ Bleeding any time in thid trimester. ■ Prior delivery by: caesanean section forceps or vacuum delivery. ■ Age less than 18 years.	**RISK OF OBSTETRICAL COMPLICATION**	■ If in early labor refer D10-D11 ■ If imminent delivery give a generous episiotomy and carefully control delivery of the head. ■ If late labour, deliver D10-D28 ■ Have help available during delivery.
■ Labour before 8 completed months of pregnancy (more than one month before estimated date of delivery).	**PRETERM LABOUR**	■ Reassess fetal presentation (breech more common). ■ If woman is lying encourage her to lie on her left side. ■ Call for help during delivery. ■ Conduct delivery very carefully as small baby may pop out suddenly. in particular, control delivery of the head. ■ Prepare equipment for resuscitation of newborn K11
■ Fetal heart rate less than100- more than150 beats per minute.	**POSSIBLE FETAL DISTRESS**	■ Manage as on D14
■ Rupture of membranes at term and before labour.	**RUPTURE OF MEMBRANES**	■ Give appropriate IM/IV antibiotics if rupture of membrane more than 12 hours B15 ■ Plan to treat the newborn J5
■ If two or more of the following signs: thirsty sunken eyes dry mouth skin pinch goes back slowly.	**DEHYDRATION**	■ Give oral fluids. ■ If not able to drink, give 1 litre IV fluids over 3 hours B9
■ HIV test positive. ■ Taking ARV treatment or prophylaxis.	**HIV-POSITIVE**	■ Refer to the designated PPTCT sites M10
■ No fetal movement and ■ No fetal heart beat on repeated examination	**POSSIBLE FETAL DEATH**	■ Confirm fetal death with ultrasound examination if available. ■ If ultrasound not available, inform the parents about the possibility of baby not being alive and refer ■ Inform the parents that baby is not alive. ■ Provide emotional support

NEXT: Give supportive care throughout labour

GIVE SUPPORTIVE CARE THROUGHOUT LABOUR

Use this chart to provide a supportive, encouraging atmosphere for birth, respectful of the woman's wishes.

Communication

- Explain all procedures, seek permission, and discuss findings with the woman.
- Keep her informed about the progress if in labour.
- Praise her, encourage and reassure her that things are going well.
- Ensure and respect privacy during examinations and discussions.

Cleanliness

- Encourage the woman to bathe or shower or wash herself and genitals at the onset of labour.
- Clean the vulva and perineal areas before each examination.
- Wash your hands with soap before and after each examination. Use clean gloves for vaginal examination.
- Ensure cleanliness of labour and birthing area(s).
- Clean up spills immediately.
- **DO NOT** give enema.

Mobility

- Encourage the woman to walk around freely during the first stage of labour.
- Support the woman's choice of position (left lateral, squating, kneeling, standing supported by the companion) for each stage of labour and delivery.

Urination

- Encourage the woman to empty her bladder frequently, Remind her every 2 hours.

Eating, drinking

- Encourage the woman to eat and drink as she wishes throughout labour.
- Nutritious liquid drinks are important even in late labour.
- If the woman has visible severe wasting or tires during labour make sure she eats and drinks.

Breathing technique

- Teach her to notice her normal breathing.
- Encourage her to breathe out more slowly, making a sighing noise, and to relax with each breath.
- If she feels dizzy, unwell, is feeling pins-and-needles (tingiling) in her face, hands and feet, encourage her to breathe more slowly.
- To prevent pushing at the end of first stage of labour teach her to pant, to breathe with an open mouth, to take in 2 short breaths followed by long breath out.
- During delivery of the head, ask her not to push but to breathe steadily or to pant.

Pain and discomfort relief

- Suggest change of position.
- Encourage mobility, as comfortable for her.
- Encourage companion to:
  - → massage the woman's back if she finds this helpful.
  - → hold the woman's hand and sponge her face between contractions.
- Encourage her to use the breathing technique.
- Encourage warm bath or shower, if available.

- **If woman is distressed or anxious, investigate the cause** D2-D4.
- **If pain is constant (persisting between contractions) and very severe or sudden in onset** D4.

Birth companion

- Encourage support from the chosen birth companion throughout labour.
- Describe to the birth companion what she should do:
  - →Always be with the woman.
  - →Encourage her.
  - →Help her to breathe and relax.
  - →Rub her back, wipe her brow with a wet cloth, do other supportive actions.
  - →Give support using local practices which do not disturb labour or delivery.
  - →Encourage woman to move around freely as she wishes and to adopt the position of her choice.
  - →Encourage her to drink fluids and eat light food.
  - →Assist her to the toilet when needed & remind her every 2 hours.

- Ask the birth companion to call for help if:
  - →The woman is bearing down with contractions.
  - →There is vaginal bleeding.
  - →She is suddenly in much more pain.
  - →She loses consciousness or has fits.
  - →There is any other concern-

- Tell the birth companion what she or he SHOULD NOT DO and explain why:

DO NOT encourage woman to push.
DO NOT give advice other than that given by the health worker.
DO NOT keep woman in bed if she wants to move around.

FIRST STAGE OF LABOUR: NOT IN ACTIVE LABOUR

Use this chart for care of the woman when NOT IN ACTIVE LABOUR, when cervix dilated 0-4 cm and contractions are weak, less than 2 in 10 minutes.

MONITOR EVERY HOUR:	MONITOR EVERY 4 HOURS:
■ For emergency signs, using rapid assessment (RAM) B3-B7 ■ Frequency, intensity and duration of contractions. ■ Fetal heart rate D14 ■ Mood and behaviour (distressed, anxious) D6	■ Cervical dilatation D3 D15 Unless indicated, **DO NOT** do vaginal examination more frequently than every 4 hours. ■ Temperature. ■ Pulse B3 ■ Blood pressure D23
■ Record findings regularly in Labour record and Partograph N4-N5 ■ Record time of rupture of membranes and colour of amniotic fluid. ■ Give Supportive care D6-D7 ■ **Never leave the woman alone.**	

ASSESS PROGRESS OF LABOUR	TREAT AND ADVISE, IF REQUIRED
■ After 8 hours if: → Contractions stronger and more frequent but → No progress in cervical dilatation with or without membranes ruptured.	■ **Refer the woman urgently to hospital** B17
■ After 8 hours if: → no increase in contractions, and → membranes are not ruptured, and → no progress in cervical dilatation.	■ Discharge the woman and advise her to return if: → pain/discomfort increases → vaginal bleeding → membranes rupture.
■ Cervical dilatation 4 cm or greater.	■ **Begin plotting the partograph** N5 and manage the woman as in Active labour D9

FIRST STAGE OF LABOUR: IN ACTIVE LABOUR

Use this chart when the woman is IN ACTIVE LABOUR, when cervix dilated 4 cm or more.

MONITOR EVERY 30 MINUTES:

- For emergency signs, using rapid assessment (RAM) B3-B7
- Frequency. Intensity and duration of contractions.
- Fetal heart rate D14.
- Mood and behaviour (distressed, anxious) D6

MONITOR EVERY 4 HOURS:

- Cervical dilatation D3 D15.
  Unless indicated, do not do vaginal examination more frequently than every 4 hours.
- Temperature.
- Pulse B3.
- Blood pressure D23.

- Record findings regularly in Labour record and Partograph N4-N5
- Record time of rupture of membranes and colour of amniotic fluid.
- Give supportive care D6-D7
- **Never leave the woman alone.**

ASSESS PROGRESS OF LABOUR	TREAT AND ADVISE, IF REQUIRED
Partograph passes to the right of ALERT LINE.	Reassess woman and consider criteria for referral. Call senior person if available. Alert emergency transport services. Encourage woman to empty bladder. Ensure adequate hydration but omit solid foods. Encourage upright position and walking if woman wishes. Monitor intensively. Reassess in 2 hours and refer if no progress. If referral takes a long time. refer immediately (DO NOT wait to cross action line).
Partograph passes to the right of ACTION LINE.	**Refer urgently to hospital** B17 unless birth is imminent.
Cervix dilated 10 cm or bulging perineum.	Manage as in Second stage of labour D10-D11

SECOND STAGE OF LABOUR: DELIVER THE BABY AND GIVE IMMEDIATE NEWBORN CARE

Use this chart when cervix dilated 10 cm or bulging thin perineum and head visible.

MONITOR EVERY 5 MINUTES:

- For emergency signs, using rapid assessment (RAM) B3-B7.
- Frequency, intensity and duration of contractions.
- Fetal heart rate D14.
- Perineum thinning and bulging.
- Visible descent of fetal head or during contraction.
- Mood and behaviour (distressed, anxious) D6.
- Record findings regularly in Labour record and Partograph N4-N6.
- Give Supportive care D6-D7.
- Never leave the woman alone.

DELIVER THE BABY	TREAT AND ADVISE IF REQUIRED
■ Ensure all delivery equipment and supplies, including newborn resuscitation equipment, are available, and place of delivery is clean and warm (25°C) L3.	
■ Ensure bladder is empty. ■ Assist the woman into a comfortable position of her choice, as upright as possible. ■ Stay with her and offer her emotional and physical support D6-D7.	■ If unable to pass urine and bladder is full, empty bladder B12. ■ **DO NOT** let her lie flat (horizontally) on her back. ■ If the woman is distressed, encourage pain discomfort relief D6.
■ Allow her to push as she wishes with contractions.	**DO NOT urge her to push.** ■ If, after 30 minutes of spontaneous expulsive efforts, the perineum does not begin to thin and stretch with contractions, do a vaginal examination to confirm full dilatation of cervix. ■ If cervix is not fully dilated, await second stage, Place woman on her left side and discourage pushing, Encourage breathing technique D6.
■ Wait until head visible and perineum distending. ■ Wash hands with clean water and soap. Put on gloves just before delivery. ■ See universal precautions during labour and delivery A4.	■ If expulsive phase of second stage lasts for 1 hour in a primigravida or 30 minutes or more in a multigravida without visible descent of the head, call for staff trained to use vacuum extractor or refer urgently to hospital B17. ■ If obvious obstruction to progress (warts/scarring/keloid tissue/previous third degree tear), do a generous episiotomy. **DO NOT** perform episiotomy routinely. ■ If breech or other malpresentation, manage as on D16.

DELIVER THE BABY	TREAT AND ADVISE, IF REQUIRED
■ Ensure controlled delivery of the head: → Keep one hand gently on the head as it advances with contractions. → Support perineum with other hand and cover anus with pad held in position by side of hand during delivery. → Leave the perineum visible (between thumb and first finger). → Ask the mother to breathe steadily and not to push during delivery of the head. → Encourage rapid breathing with mouth open.	■ If potentially damaging expulsive efforts, exert more pressure on perineum to prevent third degree tear. ■ Discard soiled pad to prevent infection.
■ Feel gently around baby's neck for the cord. ■ Check if the face is clear of mucus and membranes.	■ If cord present and loose, deliver the baby through the loop of cord or slip the cord over the baby's head; ■ Gently wipe face clean with gauze or cloth, if necessary.
■ Await spontaneous rotation of shoulders and delivery (within 1-2 minutes). ■ Apply gentle downward pressure to deliver top shoulder. ■ Then lift baby up, towards the mother's abdomen to deliver lower shoulder. ■ Place baby on abdomen or in mother's arms. ■ Note time of delivery.	■ If delay in delivery of shoulders: → DO NOT panic but call for help and ask companion to assist. → Manage as in stuck shoulders D17. ■ If placing newborn on abdomen is not acceptable, or the mother cannot hold the baby, place the baby in a clean, warm, safe place close to the mother.
■ Thoroughly dry the baby immediately. Wipe eyes. Discard wet cloth. ■ Assess baby's breathing while drying. ■ If the baby is not crying, observe breathing: → breathing well (chest rising)? → not breathing or gasping?	DO NOT leave the baby wet - she/he will become cold. ■ If the baby is not breathing or gasping (unless baby is dead, macerated, severely malformed): → Cut cord quickly: transfer to a firm, warm surface; start Newborn resuscitation K11. ■ CALL FOR HELP - one person should care for the mother.
■ Exclude second baby. ■ Palpate mother's abdomen. ■ Give 10 IU oxytocin IM to the mother, if not available give misoprostol 3 tab (200ug each) orally or sublingually. ■ Watch for vaginal bleeding.	■ If second baby, **DO NOT** give oxytocin now. **GET HELP**. ■ Deliver the second baby. Manage as in Multiple pregnancy D18. ■ If heavy bleeding, repeat oxytocin 10 IU/IM.
■ Change gloves. If not possible, wash gloved hands. ■ Clamp and cut the cord. → put ties tightly around the cord at 2 cm and 5 cm form baby's abdomen. → cut between ties with sterile instrument. → observe for oozing blood.	■ If blood oozing, place a second tie between the skin and the first tie. **DO NOT** apply any substance to the stump. **DO NOT** bandage or bind the stump.
■ Leave baby on the mother's chest in skin-to-skin contact. Place identification label. ■ Cover the baby, cover the head with a cap.	■ If room cool (less than 25°C), use additional blanket to cover the mother and baby.
■ Encourage initiation of breastfeeding K2.	■ If HIV-positive mother has chosen replacement feeding, feed accordingly K3.

THIRD STAGE OF LABOUR: DELIVER THE PLACENTA

Use this chart for care of the woman between birth of the baby and delivery of placenta.

MONITOR MOTHER EVERY 5 MINUTES:

- For emergency signs, using rapid assessment (RAM) B3-B7.
- Feel if uterus is well contracted.
- Mood and behaviour (distressed, anxious) D6.
- Time since third stage began (time since birth).

- Record findings, treatments and procedures in Labour record and Partograph (pp.N4-N6).
- Give Supportive care D6-D7
- **Never leave the woman alone.**

MONITOR BABY EVERY 15 MINUTES:

- Breathing: listen for grunting, look for chest in-drawing and fast breathing J2.
- Warmth: check to see if feet are cold to touch J2.

DELIVER THE PLACENTA

- Ensure 10-IU oxytocin IM is given, If not available give 3 tablets of misoprostol (200ug each) orally or sublingually
- Await strong uterine contraction(2-3 minutes) and deliver placenta by controlled cord traction:
  - → Place side of one hand (usually left) above symphysis pubis with plam facing towards the mother's umbilicus. This applies counter traction to the uterus during **controlled cord** traction. At the same time, apply steady, sustained controlled cord traction.
  - → If placenta does not descend during 30-40 seconds of controlled cord traction, release both cord traction and counter traction on the abdomen and wait until the uterus is well contracted again. Then repeat controlled cord traction with counter traction.
  - → As the placenta is coming out, catch in both hands to prevent tearing of the membranes.
  - → If the membranes do not slip out spontaneously, gently twist them into a rope and move them up and down to assist separation without tearing them.

TREAT AND ADVISE IF REQUIRED

- If, after 30 miuntes of giving oxytocin or misoprostol, the placenta in not delivered and the woman is NOT bleeding:
  - → Empty bladder B12.
  - → Encourage breastfeeding
  - → Repeat controlled cord traction.
- If woman is bleeding, manage as on B5.
- If placenta is not delivered in another 30 minutes (1 hour after delivery):
  - → Remove placenta manually B11.
  - → Give appropriate IM/IV antibiotic B15.
- If in 1 hour unable to remove placenta:
  - → Refer the woman to hospital B17.
  - → Insert and IV line and give fluids with 20 IU of oxytocin at 30 drops per minute during transfer B9.

DO NOT exert excessive traction on the cord.

DO NOT Squeeze or push the uterus to deliver the placenta.

- Check that placenta and membranes are complete.

- If placenta is incomplete:
  - → Remove placental fragments manually B11.
  - → Give appropriate IM/IV antibiotic B15.

DELIVER THE PLACENTA	TREAT AND ADVISE, IF REQUIRED
■ Check that uterus is well contracted and there is no heavy bleeding. ■ Repeat check every 5 minutes. ■ If the woman has opted for Post Partum Intrauterine contraceptive Device insertion (PPIUCD) after counselling in the antenatal period or early labour then Insert IUCD within 10 minutes of delivery of placenta if this skill is available.	■ If heavy bleeding: → Massage uterus to expel clots if any, until it is hard B10. → Give oxytocin 10 IU IM, if not available give 0.2 mg of inj. Ergometrine IM → if oxytocin or ergometrine not available, give 3 tablets of Misoprostol orally or 5 tablets rectally, B10. → Call for help. → Start an IV line B9, add 20 IU of oxytocin to iv fluids and give at 60 drops per minute B9. Empty the bladder Use anti shock garment if available (Details of procedure can be given if included) B12. ■ If bleeding persists and uterus is soft: → Continue massaging uterus until it is hard. → Apply bimanual or aortic compression B10. → Continue IV fluids with 20 IU of oxytocin at 30 drops per minute. → **Refer woman urgently to hospital** B17.
■ Examine perineum, lower vagina and vulva for tears.	■ If third degree tear (involving rectum or anus), **refer urgently to hospital** B17. ■ Check after 5 minutes. If bleeding persists, repair the tear and çatheterize B12. ■ For other tears: apply pressure over the tear with a sterile pad or gauze and put legs together.
■ Collect, estimate and record blood loss throughout third stage and immediately afterwards.	■ If blood loss ≈ 250 ml, but bleeding has stopped: → Plan to keep the woman in the facility for 24 hours. → Monitor intensively every 15 min for 2 hrs: → BP, pulse → vaginal bleeding → uterus, to make sure it is well contracted. → Assist the woman when she first walks after resting and recovering. → If not possible to observe at the facility, **refer to hospital** B17.
■ Clean the woman and the area beneath her, Put sanitary pad or folded clean cloth under her buttocks to collect blood. help her to change clothes if necessary.	
■ Keep the mother and baby in delivery room for a minimum of one hour after delivery of placenta.	
■ Dispose of placenta in the correct, safe and culturally appropriate manner.	■ If disposing placenta: → Use gloves when handling placenta. → Put placenta into a bag and place it into a leak-proof container. → Always carry placenta in a leak-proof container. → Incinerate the placenta or bury it at least 10 m away from a water source, in a 2 m deep pit.

Third stage of labour: deliver the placenta

RESPOND TO PROBLEMS DURING LABOUR AND DELIVERY

ASK, CHECK RECORD	LOOK, LISTEN, FEEL	SIGNS	CLASSIFY	TREAT AND ADVISE
IF FETAL HEART RATE (FHR) less than110 or more than150 BEATS PER MINUTE				
	■ Position the woman on her left side, ■ If membranes have ruptured, look at vulva for prolapsed cord. ■ See if liquor was meconium stained. ■ **Repeat FHR count after** 15 minutes.	■ Cord seen at vulva.	**PROLAPSED CORD**	■ Manage urgently as on D15.
		■ FHR remains more than150 or less than110 beats/min after 30 minutes obsevation.	**BABY NOT WELL**	■ If early labour: → Refer the woman urgently to hopital B17. → Keep her lying on her left side. ■ If late labour: → Call for help during delivery → Monitor after every contraction. If FHR does not return to normal in 15 minutes explain to the woman (and her companion) that the baby may not be well. → Prepare for newborn resuscitation K11.
		■ FHR returns to normal.	**BABY WELL**	■ Monitor FHR every 15 minutes.

NEXT: **If prolapsed cord**

IF PROLAPSED CORD

The cord is visible outside the vagina or can be felt in the vagina below the presenting part.

ASK, CHECK RECORD	LOOK, LISTEN, FEEL	SIGNS	CLASSIFY	TREAT
	■ Look at or feel the cord gently for pulsations. ■ Feel for transverse lie. ■ Do vaginal examination to determine status of labour.	■ Transverse lie	**OBSTRUCTED LABOUR**	■ Refer urgently to hospital B17.
		■ Cord is pulsating	**FETUS ALIVE**	If early labour: ■ Push the head or presenting part out of the pelvis and hold it above the brim/pelvis with your hand on the abdomen until caesarean section is performed. ■ Instruct assistant (family, staff) to position the woman's buttocks higher than the shoulder. ■ or pass a Foley's catheter and fill the urinary bladder with 300-500ml sterile saline. Clamp the catheter. This lifts the baby's head out of the pelvis. ■ **Refer urgently to hospital** B17. ■ If transfer not possible, allow labour to continue. **If late labour:** ■ Call for additional help if possible (for mother and baby). ■ Prepare for Newborn resuscitation K11. ■ Ask the woman to assume an upright or squatting. position to help progress. ■ Expedite delivery by encouraging woman to push with contraction.
		■ Cord is not pulsating	**FETUS PROBABLY DEAD**	■ Explain to the parents that baby may not be well.

NEXT: If breech presentation

IF BREECH PRESENTATION

LOOK, LISTEN, FEEL

- On external examination fetal head felt in fundus.
- Soft body part (leg or buttocks) felt on vaginal examination.
- Legs or buttocks presenting at perineum.
- Meconium

SIGN	TREAT
If early labour	**Refer urgently to hospital B17.**
If late labour	Call for additional help. Confirm full dilatation of the carvix by vaginal examination D3. Ensure bladder is empty. If unable to empty bladder see Empty bladder B12. Prepare for newborn resuscitation K11. Deliver the baby: → Assist the woman into a position that will allow the baby to hang down during delivery, for example, propped up with buttocks at edge of bed or onto her hands and knees (all fours position). → When baby's buttocks are distending the perineum make an episiotomy. → Allow buttocks, trunk and shoulders to deliver spontaneously during contractions. → After delivery of the shoulders allow the baby to hang until next contraction.
If the head does not deliver after several contractions	Place the baby astride your left forearm with limbs hanging on each side. Place the middle and index fingers of the left hand over the malar cheek bones on either side to apply gentle downwards pressure to aid flexion of head. Keeping the left hand as described, place the index and ring fingers of the right hand over the baby's shoulders and the middle finger on the baby's head to gently aid flexion until the hairline is visible. When the hairline is visible, raise the baby in upward and forward direction towards the mother's abdomen until the nose and mouth are free. The assistant gives supra pubic pressure during the period to maintain flexion.
If trapped arms or shoulders	Feel the baby's chest for arms, if not felt: Hold the baby gently with hands around each thigh and thumbs on sacrum. Gently guiding the baby down, turn the baby, keeping the back uppermost until the shoulder which was posterior (below) is now anterior (at the top) and the arm is released. Then turn the baby back, again keeping the back uppermost to deliver the other arm. Then proceed with delivery of head as described above.
If trapped head (and baby is dead)	Tie a 1 kg weight to the baby's feet and await full dilatation. Then proceed with delivery of head as described above. **NEVER** pull on the breech **DO NOT** allow the woman to push until the cervix is fully dilated. Pushing too soon may cause the head to be trapped.

NEXT: If stuck shoulders

IF STUCK SHOULDERS (SHOULDER DYSTOCIA)

SIGN	TREAT
■ Fetal head is delivered, but shoulders are stuck and cannot be delivered.	■ Call for additional help. ■ Prepare for newborn resuscitation refer to K11. ■ Explain the problem to the woman and her companion. ■ Ask the woman to lie on her back while gripping her legs tightly flexed against her chest, with knees wide apart. ask the companion or other helper to keep the legs in that position. ■ Perform an adequate episiotomy. ■ Ask an assistant to apply continuous pressure downwards, with the palm of the hand on the abdomen directly above the pubic area, while you maintain continuous downward traction on the fetal head.
■ If the shoulders are still not delivered and surgical help is not available immediately.	■ Remain calm explain to the woman that you need her cooperation to try another position. ■ Assist her to adopt a kneeling on "all fours" position and ask her companion to hold her steady - this simple change of position is sometimes sufficient to dislodge the impacted shoulder and achieve delivery. ■ Introduce the right hand into the vagina along the posterior curve of the sacrum. ■ Attempt to deliver the posterior shoulder or arm using pressure from the finger of the right hand to hook the posterior shoulder and arm downwards and forwards through the vagina. ■ Complete the rest of delivery as normal. ■ If not successful, **refer urgently to hospital** B17. **DO NOT panic** **DO NOT pull excessively on the head.** **DO NOT give fundal pressure.**

NEXT: If multiple births

IF MULTIPLE BIRTHS

SIGN	TREAT
■ Prepare for delivery	■ Prepare delivery room and equipment for birth of 2 or more babies. Include: → more warm cloths → two sets of cord ties and razor blades → resuscitation equipment for 2 babies. ■ Arrange for a helper to assist you with the births and care of the babies.
■ Second stage of labour	■ Deliver the first baby following the usual procedure, Resuscitate if necessary label her/him Twin 1. ■ Ask helper to attend to the first baby. ■ Palpate uterus immediately to detemine the lie of the second baby. If transverse or oblique lie, gently turn the baby by abdominal manipulation to head or breech presentation, ■ Check the presentation by vaginal examination. Check the fetal heart rate. ■ Stay with the woman and continue monitoring her and the fetal heart rate intensively. ■ Remove wet clothes from underneath her, if feeling chilled, cover her. ■ When the membranes rupture, perform vaginal examination D3 to check for prolapsed cord, If present, see Prolapsed cord D15. ■ When strong contractions restart, ask the mother to bear down when she feels ready. ■ Deliver the second baby, Resuscitate if necessary, Label her/him Twin 2, ■ After cutting the cord, ask the helper to attend to the second baby. ■ Palpate the uterus for a third baby. If a third baby is felt, proceed as described above. If no third is felt, go to third stage of labour. **DO NOT** attempt to deliver the placenta until all the babies are born. **DO NOT** give the mother oxytocin until after the birth of all babies.
■ Third stage of labour	■ Give oxytocin 10 IU IM or if oxytocin not available give 3 tab of Misoprostol orally or sublingually, after excluding another baby. ■ When the uterus is well contracted, deliver the placenta and membranes by controlled cord traction, applying traction to all cords together D12-D13. ■ Before and after delivery of the placenta and membranes, observe closely for vaginal bleeding because this woman is at greater risk of postpartum haemorrhage. if bleeding, see B5. ■ Examine the placenta and membranes for completeness, There may be one large placenta with 2 umbilical cords, or a separate placenta with an umbilical cord for each baby.
■ Immediate postpartum care	■ Monitor intensively as risk of bleeding is increased. ■ Provide immediate postpartum care D19-D20. ■ In addition: → Keep mother in health centre for longer observation → Plan to measure haemoglobin postpartum if possible → Give special support for care and feeding of babies J11 and K4 .

NEXT: Care of the mother and newborn within first hour of delivery of placenta

CARE OF THE MOTHER AND NEWBORN WITHIN FIRST HOUR OF DELIVERY OF PLACENTA

Use this chart for mother and newborn during the first hour after complete delivery of placenta.

MONITOR MOTHER EVERY 15 MINUTES:

- For emergency signs, using rapid assessment (RAM) B3-B7.
- Feel if uterus is hard and round.

MONITOR BABY EVERY 15 MINUTES:

- Breathing: listen for grunting, look for chest in-drawing and fast breathing J2.
- Warmth: check to see if feet are cold to touch J2.

- Record findings, treatments and procedures in Labour record, **Partograph** and postpartom record N4-N6.
- Keep mother and baby in delivery room - **do not separate them.**
- **Never leave the woman and newborn alone.**

CARE OF MOTHER AND NEWBORN

WOMAN

- Assess the amount of vaginal bleeding.
- Encourage the woman to eat and drink.
- Ask the companion to stay with the mother.
- Encourage the woman to pass urine.

INTERVENTIONS, IF REQUIRED

- If pad soaked in less than 5 minutes, or constant trickle of blood, manage as on D22.
- If uterus soft, manage as on B10.
- If bleeding from a perineal tear, repair if required B12 **or refer to hospital** B17.

NEWBORN

- Wipe the eyes.
- Apply an antimicrobial within 1 hour of birth.
  either 1% silver nitrate drops or 2.5% povidone iodine drops or 1% tetracycline ointment.
- **DO NOT** wash away the eye antimicrobial.
- If blood or meconium, wipe off with wet cloth and dry.
- **DO NOT** remove vemix or bathe the baby.
- Continue keeping the baby warm and in skin-to-skin contact with the mother-
- Encourage the mother to initiate breastfeeding when baby shows signs of readiness. Offer her help.
- **DO NOT** give artificial teats or pre-lacteal feeds to the newborn: no water, sugar water, or local feeds.

Interventions:

- If breathing with difficulty -- grunting, chest in-drawing or fast breathing examine the baby as on J2-J8.
- If feet are cold to touch or mother and baby are separated:
  - → Ensure the room is warm. Cover mother and baby with a blanket
    - → Reassess in 1 hour. If still cold, measure temperature, If less than 36.5 °C, manage as on K9.
- If unable to initiate brestfeeding (mother has complications):
  - → Plan for alternative feeding method K5-K6.
  - → If mother HIV positive: refer for postnatal care for mother and newborn including ARV prophylaxis for the baby to designated PPTCT centers M10.
  - → Support the mother's choice of newborn feeding K3.
- If baby is stillborn or dead, give supportive care to mother and her family D24.

- Examine the mother and newborn one hour after delivery of placenta.
  Use Assess the mother after delivery D21 and Examine the newborn J2-J8.

- **Refer to hospital now if woman had serous complications at admission or during delivery but was** in late labour.

CARE OF THE MOTHER ONE HOUR AFTER DELIVERY OF PLACENTA

Use this chart for continuous care of the mother until discharge. See J10 for care of the baby.

MONITOR MOTHER AT 2, 3 AND 4 HOURS, THEN EVERY 4 HOURS:

- For emergency signs, using rapid assessment (RAM).
- Feel uterus if hard and round.

- Record findings, treatments and procedures in Labour record and Partograph N4-N6.
- Keep the mother and baby together.
- **Never leave the woman and newborn alone.**
- **DO NOT discharge before 12 hours.**

CARE OF MOTHER	INTERVENTIONS, IF REQUIRED
■ Accompany the mother and baby to ward. ■ Advise on Postpartum care and hygiene D26. ■ Ensure the mother has sanitary napkins or clean material to collect vaginal blood. ■ Encourage the mother to eat, drink and rest. ■ Ensure the room is warm (25°C).	■ Make sure the woman has someone with her and they know when to call for help. ■ If HIV-positive: refer to PPTCT M10.
■ Ask the mother's companion to watch her and call for help if bleeding or pain increases, if mother feels dizzy or has severe headaches, visual disturbance or epigastric distress.	■ If heavy vaginal bleeding, palpate the uterus. → If uterus not firm, massage the fundus to make it contract and expel any clots B5. → If pad is soaked in less than 5 minutes, manage as on B5. → If bleeding is from perineal tear, repair or refer to hospital B12-B17.
■ Encourage the mother to empty her bladder and ensure that she has passed urine.	■ If the mother cannot pass urine or the bladder is full (swelling over lower abdomen) and she is uncomfortable, help her by gently pouring water on vulva. **DO NOT catheterize unless you have to.** ■ Consider PPIUCD insertion within 48 hours of delivery or tubal ligation before discharge. If interval IUD insertion or tubal ligation is desired plan follow up visit at 4-6 weeks postpartum.
■ Check record and give any treatment or offer prophylaxis which is due e.g. Hepatitis B vaccination. ■ Advise the mother on postpartum care and nutrition D28. ■ Advise when to seek care D28. ■ Counsel on birth spacing and other family planning methods D27. ■ Repeat examination of the mother before discharge using Assess the mother after delivery D21 For baby, see J2-J8.	■ If tubal ligation or IUD desired, make plans before discharge. ■ If mother is on antibiotics because of rupture of membranes more than18 hours but shows no signs of infection now, discontinue antibiotics.

ASSESS THE MOTHER AFTER DELIVERY

Use this chart to examine the mother the first time after delviery (at 1 hour delivery or late) and for dischage.
For examining the newborn use the chart on J2-J8.

ASK, CHECK RECORD	LOOK, LISTEN, FEEL	SIGNS	CLASSIFY	TREAT AND ADVISE
■ Check record: → bleeding more than 250 ml? → completeness of placenta and membranes? → complications during delivery or postpartum? → special treatment needs? → needs tubal ligation or IUD? ■ How are you feeling? ■ Do you have any pains? ■ Do you have any concerns? ■ How is your baby? ■ How do your breasts feel?	■ Measure temperature. ■ Feel the uterus. Is it hard and round? ■ Look for vaginal bleeding ■ Look at perineum. → Is there a tear or cut? → Is it red, swollen or draining pus? ■ Look for conjunctival pallor. ■ Look for palmar pallor.	■ Uterus hard. ■ Little bleeding. ■ No perineal problem. ■ No pallor. ■ No fever. ■ Blood pressure normal. ■ Pulse normal.	**MOTHER WELL**	■ Keep the mother at the facility for 12 hours after delivery. ■ Ensure preventive measures D25. ■ Advise on postpartum care and hygiene D26. ■ Counsel on nutrition D26. ■ Counsel on birth spacing and family planning D27. ■ Advise on when to seek care and next routine postpartum visit D28. ■ Reassess for discharge D21. ■ Continue any treatments initiated earlier. ■ If tubal ligation desired, refer to hospital within 7 days of delivery. If IUD desired, refer to appropriate services within 48 hours.

NEXT: Respond to problems immediately postpartum
If no problems, go to page D25

ASK, CHECK RECORD	LOOK, LISTEN, FEEL	SIGNS	CLASSIFY	TREAT AND ADVISE
IF VAGINAL BLEEDING				
	■ A pad is soaked in less than 5 minutes.	■ More than 1 pad soaked in 5 minutes ■ Uterus not hard and not round	**HEAVY BLEEDING**	■ See B5 for treatment. ■ **Refer urgently to hospital B17.**
IF FEVER (TEMPERATURE more than38° C)				
■ Time since rupture of membranes ■ Abdominal pain ■ Chills	■ Repeat temperature measurement after 2 hours ■ If temperature is still more than38°C → Look for abnormal vaginal discharge. → feel lower abdomen for tenderness	■ Temperature still more than38°C and any of: Chills → Foul-smelling vaginal discharge → Low abdomen tenderness → Rupture of membranes more than12 hours	**UTERINE INFECTION**	■ Insert an IV line and give fluids rapidly B9. ■ Give appropriate IM/IV antibiotics B15. ■ If placenta delivered: → Give oxytocin 10 IU IM if bleeding more → than average B10. ■ **Refer woman urgently to hospital B17.** ■ Assess the newborn J2-J3. Treat if any sign of infection,
		■ Temperature still more than38°C	**RISK OF UTERINE INFECTION**	■ **Encourage woman to drink plenty of fluids,** ■ **Measure temperature every 4 hours,** ■ **If temperature persists for more than 12 hours, is very high or rises rapidly, give appropriate antibiotic and refer to hospital B15.**
IF PERINEAL TEAR OR EPISIOTOMY (DONE FOR LIFESAVING CIRCUMSTANCES)				
	■ Is there bleeding from the tear or episiotomy ■ Does it extend to anus or rectum?	■ Tear extending to anus or rectum.	**THIRD DEGREE TEAR**	■ **Refer woman urgently to hospital B17.**
		■ Perineal tear ■ Episiotomy	**SMALL PERINEAL TEAR**	■ **If bleeding persists, repair the tear or episiotomy B12.**

NEXT: If elevated diastolic blood pressure

IF ELEVATED DIASTOLIC BLOOD PRESSURE

ASK, CHECK RECORD	LOOK, LISTEN, FEEL	SIGNS	CLASSIFY	TREAT AND ADVISE
	■ If diastolic blood pressure is more than 90 mmHg. repeat after 1 hour rest. ■ If diastolic blood pressure is still more than 90 mmHg, ask the woman if she **has:** → severe headache → blurred vision → epigastric pain and → check protein in urine.	■ Diastolic blood pressure more than110 mmHg OR ■ Diastolic blood pressure more than 90 mmHg and 2+ proteinuria and any of: → severe headache → blurred vision → epigastric pain.	**SEVERE PRE-ECLAMPSIA**	■ Give magnesium sulphate B13. ■ If in early labour or postpartum, **refer urgently to hospital** B17.
		■ Diastolic blood pressure 90-110 mmHg on two readings. ■ 2+ proteinuria (on admission).	**PRE-ECLAMPSIA**	■ If early labour, **refer urgently to hospital** B17. ■ If late labour: →monitor blood pressure every hour →**DO NOT** give ergometrine after delivery. ■ If BP remains elevated after delivery. **refer to hospital** B17.
		■ Diastolic blood pressure more than 90 mmHg on 2 readings.	**HYPERTENSION**	■ Monitor blood pressure every hour. ■ **DO NOT give ergometrine after delivery.** ■ If blood pressure remains elevated after delivery. **refer woman to hospital** B17.

NEXT: If pallor on screening, check for anaemia

ASK, CHECK RECORD	LOOK, LISTEN, FEEL	SIGNS	CLASSIFY	TREAT AND ADVISE

IF PALLOR ON SCREENING, CHECK FOR ANAEMIA

ASK, CHECK RECORD	LOOK, LISTEN, FEEL	SIGNS	CLASSIFY	TREAT AND ADVISE
■ Bleeding during labour, delivery or postpartum.	■ Measure hemoglobin, if possible. ■ Look for conjunctival pallor. ■ Look for palmar pallor, if pallor: → Is it severe pallor? → Some pallor? → Count number of breaths in 1 minute	■ Haemoglobin less than 7 g/dl. **AND/OR** ■ Severe palmer and conjunctival pallor or ■ Any pallor with more than 30 breaths per minute.	**SEVERE ANAEMIA**	
		■ Any bleeding ■ Haemoglobin 7-11-g/dl. ■ Palmar or conjunctival pallor.	**MODERATE ANAEMIA**	■ **DO NOT discharge before 24 hours.** ■ Check haemoglobin after 3 days, ■ Give double dose of iron for 3 months F3. ■ Follow up in 4 weeks.
		■ Haemoglobin more than 11-g/dl ■ No Pallor.	**NO ANAEMIA**	■ **Give iron/folate for 3 months** F3.

IF MOTHER SEVERELY ILL OR SEPARATED FROM THE BABY

- Teach mother to express breast milk every 3 hours K8.
- Help her to express breast milk if necessary Ensure baby receives mother's milk K8.
- Help her to establish or re-establish breastfeeding as soon as possible. See K2-K3.

IF BABY STILLBORN OR DEAD

- Give supportive care:
  - → Inform the parents as soon as possible after the baby's death.
  - → Show the baby to the mother, give the baby to the mother to hold, where culturally appropriate.
  - → Offer the parents and family to be with the dead baby in privacy as long as they need.
  - → Discuss with them the events before the death and the possible causes of death.
- Advise the mother on breast care K8.
- Counsel on appropriate family planning method (Healthy Timing and Spacing of Pregnancy HTSP) D27.

NEXT: Give preventive measures

GIVE PREVENTIVE MEASURES

Ensure that all are given before discharge.

ASSESS, CHECK RECORDS	TREAT AND ADVISE
■ Check hepatitis B & hepatitis C status in records and if no screening done for hepatitis B and C during this pregnancy, do the screening tests. If facility of test not available, counsel & refer to hospital.	■ If Hepatitis B screening negative: Offer Hepatitis B vaccination. ■ If Hepatitis B screening positive: Offer Hepatitis B vaccination for the baby and spouse, refer the woman. and baby for further treatment if required. ■ If Hepatitis C screening negative: NO vaccination available yet. ■ If Hepatitis C screening positive: Refer the woman for treatment and counsel the family on preventive measures.
■ Check tetanus toxoid (TT) immunization status. ■ Check when last dose of mebendazole was given.	■ Give tetanus toxoid if due F2. ■ Give mebendazole once in 6 months F3.
■ Woman's supply of prescribed dose of iron/folate/calcium, Vit D and multivitamins. ■ Check if vitamin A given.	■ Give 3 month's supply of iron and counsel on compliance F3. ■ Give vitamin A if due F2.
■ Ask whether woman and baby are sleeping under insecticide treated bednet. ■ Counsel and advise all women.	■ Encourage sleeping under insecticide treated bednet F4. ■ Advise on postpartum care D26. ■ Counsel on nutrition D26. ■ Counsel on birth spacing and family planning D27. ■ Counsel on breastfeeding K2. ■ Counsel on safer sex including use of condoms G2. ■ Advise on routine and follow-up postpartum visits D28. ■ Advise on danger signs D28. ■ Discuss how to prepare for an emergency in postpartum D28.

ADVISE ON POSTPARTUM CARE

Advise on postpartum care and hygiene

Advise and explain to the woman:

- To always have someone near her for the first 24 hours to respond to any change in her condition.
- Not to insert anything into the vagina.
- To have enough rest and sleep.
- The importance of washing to prevent infection of the mother and her baby:
  - → wash hands before handling baby
  - → wash perineum daily and after faecal excretion
  - → change perineal pads every 4 to 6 hours. or more frequently if heavy lochia
  - → wash used pads or dispose of them safely
  - → wash the body daily.
- To avoid sexual intercourse until the perineal wound heals.

Counsel on nutrition

- Advise the woman to eat a greater amount and variety of healthy foods, such as meat, fish, oils, nuts, seeds, cereals, beans, vegetables, cheese, milk to help her feel well and strong (give examples of types of food and how much to eat.
- Reassure the mother that she can eat any normal foods -- these will not harm the breastfeeding baby.
- Spend more time on nutrition counselling with very thin women and adolescents.
- Determine if there are important taboos about foods which are nutritionally healthy. Advise the woman against these taboos.
- Talk to family members such as husband and mother-in-law, to encourage them to help ensure the woman eats enough and avoids hard physical work.

COUNSEL ON BIRTH SPACING AND FAMILY PLANNING

Counsel on the importance of family planning

- If appropriate, ask the woman if she would like her husband or another family member to be included in the counselling session.
- Explain that after birth, if she has sex and is not exclusively breast feeding, she can become pregnant as soon as 4 weeks after delivery. Therefore it is important to start thinking early about what family planning method they will use,
  - → Ask about plans for having more children. If she (and her husband) want more children, advise that waiting at least 2 years before trying to become pregnant again is good for the mother and for the baby's health.
  - → Information on when to start a method after delivery will vary depending on whether a woman is breastfeeding or not.
  - → Make arrangements for the woman to see a family planning counsellor, or counsel her directly (see the Decision-making tool for family planning providers and clients for information on methods and on the counselling process).
- Council on safer sex including use of condoms for dual protection from sexually transmitted infection (STI) or HIV and pregnancy. Promote their use, expecially if at risk for sexually transmitted infection (STI) or HIV G2.
- For HIV positive women, refer to PPTCT M10 for family planning considerations.
- Her husband can decide to have a vasectomy (male sterilization) at any time.

Method options for the non-breastfeeding woman

Can be used immediately postpartum	Condoms Progestogen-only oral contraceptives Progestogen-only injectables Implant Spermicide Female sterilization (within 7 days or delay 6 weeks) Copper IUCD: immediately within 10 min of expulsion of placenta or within 48 hrs or delay for 4 weeks postpartum.
Delay 3 weeks	Combined oral contraceptives Combined injectables Fertility awareness methods

Lactational amenorrhoea method (LAM)

- A breastfeeding woman is protected from pregnancy only if:
  - → she is no more than 6 months postpartum, and
  - → she is breastfeeding exclusively (8 or more times a day, including at least once at night: no daytime feedings more than 4 hours apart and no night feedings more than 6 hours apart; no complementary foods or fluids), and
  - → her menstrual cycle has not returned.
- A breastfeeding woman can also choose any other family planning method, either to use alone or together with LAM.

Method options for the breastfeeding woman

Can be used immediately postpartum	Lactational amenorrhea method (LAM) Condoms Spermicide Female sterilisation (within 7 days or delay 6 weeks) Copper IUCD: immediately within 10 min of expulsion of placenta or within 48 hrs or delay for 4 weeks postpartum.
Delay 6 weeks	Progestogen-only oral contraceptives Progestogen-only injectables Implants Diaphragm
Delay 6 months	Combined oral contraceptives Combined injectables Fertility awareness methods

ADVISE ON WHEN TO RETURN

Use this chart for advising on postpartum care on D21 or E2 For newborn babies see the schedule on K14

Encourage woman to bring her husband or family member to at least one visit.

Routine postpartum care visits

FIRST VISIT D19	within the first week, preferable within 2-3 days
SECOND VISIT E 2	4-6 weeks

Follow-up visits for problems

If the problem was:	Return in:
Fever	2 days
Lower urinary tract infection	2 days
Perineal infection or pain	2 days
Hypertension	1 week
Urinary incontinence	1 week
Severe anaemia	2 weeks
Postpartum blues	2 weeks
HIV-positive	Refer to PPTCT
Moderate anaemia	4 weeks
If treated in hospital for any complication	According to hospital instructions or according to national guidelines, but no later than in 2 weeks.
If mother Hepatitis B positive	Refer to hospital for baby's vaccination / Immunization
If mother Hepatitis B negative	Refer her & her baby to hospital for vaccination
If mother tuberculosis positive	Refer to relevant centre

Advise on danger signs

Advise to go to a hospital or health centre immediately, day or night, WITHOUT WAITING, if any of the following signs:

- vaginal bleeding:
  - → more than 2 or 3 pads soaked in 20-30 minutes after delivery **OR**
  - → bleeding increases rather than decreases after delivery.
- convulsions.
- fast or difficult breathing.
- fever and too weak to get out of bed.
- severe abdominal pain.

Go to health centre **as soon as possible** if any of the following signs:

- fever
- abdominal pain
- feels ill
- breasts swollen, red or tender breasts, or sore nipple
- urine dribbling or pain on micturition
- pain in the perineum or draining pus
- foul-smelling lochia

Discuss how to prepare for an emergency in postpartum

- Advise to always have someone near for at least 24 hours after delivery to respond to any change in condition.
- Discuss with woman and her husband and family about emergency issues:
  - → where to go if danger signs
  - → how to reach the hospital
  - → costs involved
  - → family and community support.
- Advise the woman to ask for help from the community, if needed I1-I3
- Advise the woman to bring her home-based maternal record to the health centre, even for an emergency visit.

HOME DELIVERY BY SKILLED ATTENDANT

Use these instructions if you are attending delivery at home.

Preparation for home delivery

- Check emergency arrangements.
- Keep emergency transport arrangements up-to-date.
- Carry with you all essential drugs B17 records, and the delivery kit.
- Ensure that the family prepares, as on C17.

Delivery care

- Follow the labour and delivery procedures D2-D28 K11.
- Observe universal precautions A4.
- Give Supportive care. Involve the companion in care and support D8-D7 .
- Maintain the partograph and labour record N4-N5.
- Provide newborn care J2-J8.
- Refer to facility as soon as possible if any abnormal finding in mother or baby B17 K14.

Immediate postpartum care of mother

- Stay with the woman for first two hours after delivery of placenta C2 C13-C14.
- Examine the mother before leaving her D21.
- Advise on postpartum care, nutrition and family planning D26-D27.
- Ensure that someone will stay with the mother for the first 24 hours.
- Maintain partogram record N6

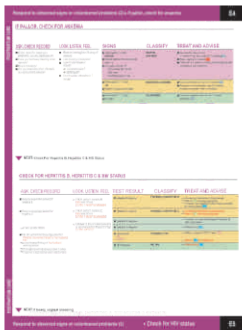
Postpartum care of newborn

- Stay until baby has had the first breastfeed and help the mother good positioning and attachment K3.
- Advise on breastfeeding and breast care K2-K3.
- Examine the baby before leaving J10.
- Immunize the baby if possible K13.
- Advise on newborn care K10.
- Advise the family about danger signs and when and where to seek care K14.
- If possible, return within a day to check the mother and baby.
- Advise a postpartum visit for the mother and baby within the first week K14.
- Maintain the newborn record N6.

POSTPARTUM CARE

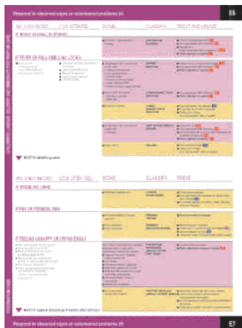
E2 POSTPARTUM EXAMINATION OF THE MOTHER (UP TO 6 WEEKS)

E3 RESPOND TO OBSERVED SIGNS OR VOLUNTEERED PROBLEMS (1)
If elevated diastolic pressure



E4 RESPOND TO OBSERVED SIGNS OR VOLUNTEERED PROBLEMS (2)
If pallor, check for anaemia

E5 RESPOND TO OBSERVED SIGNS OR VOLUNTEERED PROBLEMS (3)
Check for Hepatitis B, Hepatitis C, HIV status

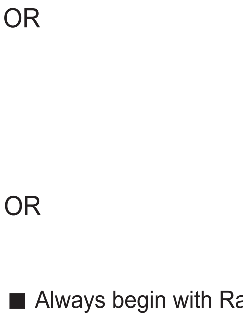


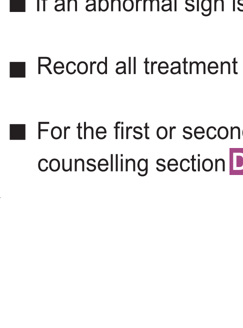
E6 RESPOND TO OBSERVED SIGNS OR VOLUNTEERED PROBLEMS (4)
If heavy vaginal bleeding
If fever or foul-smelling lochia

E7 RESPOND TO OBSERVED SIGNS OR VOLUNTEERED PROBLEMS (5)
If dribbling urine
If puss or perineal pain
If feeling unhappy or crying easily

E8 RESPOND TO OBSERVED SIGNS OR VOLUNTEERED PROBLEMS (6)
If vaginal discharge 4 weeks after delivery
if breast problem

E9 RESPOND TO OBSERVED SIGNS OR VOLUNTEERED PROBLEMS (7)
If cough or breathing difficulty
if taking anti-tuberculosis drugs





- Always begin with Rapid assessment and management (RAM) **B2-B7**.
- Next use the Postpartum examination of the mother **E2** .
- If an abnormal sign is identified (volunteered or observed), use the charts Respond to observed signs or volunteered problems **E3-E10**.
- Record all treatment give, positive findings, and the scheduled next visit in the home-based and clinic recording form.
- For the first or second postpartum visit during the first week after delivery, use the Postpartum examination chart **D21** and Advise and counselling section **D26** to examine and advise the mother.

POSTPARTUM EXAMINATION OF THE MOTHER (UP TO 6 WEEKS)

Use this chart for examining the mother after discharge from a facility or after home delivery
If she delivered less than a week ago without a skilled attendant, use the chart Assess the mother after delivery D21.

ASK, CHECK RECORD

- When and where did you deliver?
- How are you feeling?
- Have you had any pain or fever or bleeding since delivery?
- Do you have any problem with passing urine?
- Have you decided on any contraception?
- How do your breasts feel?
- Do you have any other concerns?
- Check records:
  - → Any complications during delivery?
  - → Receiving any treatments?
  - → HIV status.
- Any chronic disease
- Any swelling in leg

LOOK, LISTEN, FEEL

- Measure blood pressure and temperature.
- Feel uterus. Is it hard and round?
- Look at vulva and perineum for:
  - → tear
  - → swelling
  - → pus.
- Look at pad for bleeding and lochia.
  - → Does it smell?
  - → Is it profuse?
- Look for pallor.
- Look for swelling in leg

SIGNS	CLASSIFY	TREAT AND ADVISE
■ Mother feeling well. ■ Did not bleed more than250 ml. ■ Uterus well contracted and hard. ■ No perineal swelling. ■ Blood pressure, pulse and temperature normal. ■ No pallor. ■ No breast problem. ■ Is breastfeeding well. ■ No fever or pain or concern. ■ No problem with urination. ■ No swelling in leg	**NORMAL POSTPARTUM**	■ Make sure woman and family know what to watch for and when to seek care D28. ■ Advise on Postpartum care and hygiene. and counsel on nutrition D28. ■ Counsel on the importance of birth spacing and family planning D27. Refer for family planning counselling. ■ Dispense 3 months iron supply and counsel on compliance F3 . ■ Give any treatment or prophylaxis due: → tetanus immunization if she has not had full course F2 . ■ Promote use of impregnated bednet for the mother and baby. ■ Record on the mother’s home-based maternal record. ■ Advise to return to health centre within 4-6 weeks.

NEXT: Respond to observed signs or volunteered problems

If breast problem see J9
To examine the baby see J2-J8

RESPOND TO OBSERVED SIGNS OR VOLUNTEERED PROBLEMS

IF ELEVATED DIASTOLIC BLOOD PRESSURE

ASK, CHECK RECORD	LOOK, LISTEN, FEEL	SIGNS	CLASSIFY	TREAT AND ADVISE
■ History of pre-eclampsia or eclampsia in pregnancy, delivery or after delivery? ■ Ask for: ● Headache ● Blurring of vision ● Epigastric pain	■ If diastolic blood pressure is more than 90 mmHg. repeat after 1 hour rest.	■ Diastolic blood pressure more than110 mmHg and / or danger signs	**SEVERE HYPERTENSION**	■ **Give appropriate anthypertensive B14.** ■ **Refer urgently to hospital B17.**
		■ Diastolic blood pressure more than 90 mmHg on 2 readings.	**MODERATE HYPERTENSION**	■ Reassess in 1 week. If hypertension persists, refer to hospital.
		■ Diastolic blood pressure less than 90 mmHg after 2 readings.	**BLOOD PRESSURE NORMAL**	■ No additional treatment.

▼ **NEXT: If pallor, check for anaemia**

IF PALLOR, CHECK FOR ANAEMIA

ASK, CHECK RECORD	LOOK, LISTEN, FEEL
■ Check record for bleeding in pregnancy, delivery or postpartum. ■ Have you had heavy bleeding since delivery? ■ Do you tire easily? ■ Are you breathless (short of breath) during routine housework?	■ Measure haemoglobin if history of bleeding. ■ Look for conjunctival pallor. ■ Look for palmar pallor. If pallor: → is it severe pallor? → some pallor? ■ Count number of breaths in 1 minute.

SIGNS	CLASSIFY	TREAT AND ADVISE
■ Haemoglobin less than 7 g/dl **AND/OR** ■ Severe palmar and conjunctival pallor or ■ Any pallor and any of: more than30 breaths per minute tires easily breathlessness at rest	**SEVERE ANAEMIA**	■ Give double dose of iron (1 tablet 60 mg twice daily for 3 months) F3. ■ Refer urgently to hospital B17. ■ Follow up in 2 weeks to check clinical progress and compliance with treatment.
■ Haemoglobin 7-11-g/dl OR ■ Palmar or conjunctival pallor.	**MODERATE ANAEMIA**	■ Give double dose of iron for 3 months F3. ■ Reasses at next postnatal visit (in 4 weeks). If anaemia persists, refer to hospital.
■ Haemoglobin more than 11-g/dl. ■ No pallor.	**NO ANAEMIA**	■ Continue treatment with iron for 3 months altogether F3.

NEXT: Check For Hepatitis B, Hepatitis C & HIV Status

CHECK FOR HEPATITIS B, HEPATITIS C & HIV STATUS

ASK, CHECK RECORD	LOOK, LISTEN, FEEL
■ Have you ever been tested for hepatitis B	→ Perform hepatitis B rapid test on kits or refer if facility not available
■ Have you ever been tested for hepatitis C	→ Perform hepatitis C rapid test on kits or refer if facility not available
→ If YES: Check record	→ If answer to any of these questions is yes then perform Rapid HIV test or refer to PPTCT
■ Ask the women the following questions? Whether the women herself or her husband has: → current or past history of her husband working abroad → History of blood transfusion in last 5 years → History of injecting drug use in last 5 years → History of Dental surgery → History of tatoos	

TEST RESULT	CLASSIFY	TREAT AND ADVISE
■ Hepatitis B positive	**POSSIBLE HEPATITIS B**	→ Counsel on implication of positive test G3 → Refer to A4 universal precaution → If mother has hepatitis B refer baby to hospital for Immunization G3.
■ Hepatitis C positive	**POSSIBLE HEPATITIS C**	→ Counsel on implication of positive test G4 → Refer to A4 universal precaution.
■ Hepatitis B Negative		→ If mother not vaccinated against hepatitis B, offer vaccination
■ Hepatitis C Negative		→ Reassurance G4.
■ HIV positive OR on ARV	**POSSIBLE HIV**	→ Refer to relevant PPTCT sites M10. → Refer to G2 for Adherence
■ HIV Negative	**NO HIV**	→ Reassurance G2

NEXT: If heavy vaginal bleeding

IF HEAVY VAGINAL BLEEDING

ASK, CHECK RECORD	LOOK, LISTEN, FEEL	SIGNS	CLASSIFY	TREAT AND ADVISE
		■ More than 1 pad soaked in 5 minutes.	**POSTPARTUM BLEEDING**	■ Give syntocinon/misoprostol/0.2 mg ergometrine IM B10. ■ Give appropriate IM/IV antibiotics B15. ■ Manage as in Rapid assessment and management B3-B7. ■ **Refer urgently to hospital** B17.

IF FEVER OR FOUL-SMELLING LOCHIA

ASK, CHECK RECORD	LOOK, LISTEN, FEEL	SIGNS	CLASSIFY	TREAT AND ADVISE
■ Have you had: → heavy bleeding? → foul-smelling lochia? → burning on urination?	■ Feel lower abdomen and flanks for tenderness. ■ Look for abnormal lochia. ■ Measure temperature. ■ Look or feel for stiff neck. ■ Look for lethargy.	■ Temperature more than 38°C and any of: → very weak → abdominal tenderness → foul-smelling lochia → profuse lochia → uterus not well contracted → lower abdominal pain → history of heavy vaginal bleeding.	**UTERINE INFECTION**	■ Insert an IV line and give fluids rapidly B9. ■ Give appropriate IM/IV antibiotics B15. ■ **Refer urgently to hospital** B17.
		■ Fever more than 38°C and any of: → burning on urination → flank pain.	**UPPER URINARY TRACT INFECTION**	■ Give appropriate IM/IV antibiotics B15. ■ **Refer urgently to hospital** B17.
		■ Burning on urination.	**LOWER URINARY TRACT INFECTION**	■ Give appropriate oral antibiotic F5. ■ Encourage her to drink more fluids. ■ Follow up in 2 days. If no improvement, refer to hospital.
		■ Temperature more than 38°C and any of: → stiff neck → lethargy.	**VERY SEVERE FEBRILE DISEASE**	■ Insert an IV line B9. ■ Give appropriate IM/IV antibiotics B15. ■ Give artemether IM (or quinine IM if artemether not available) and glucose B16. ■ **Refer urgently to hospital** B17.
		■ Fever more than 38°C.	**MALARIA**	■ Give oral antimalarial F4. ■ Follow up in 2 days. If no improvement, refer to hospital.

NEXT: If dribbling urine

ASK, CHECK RECORD	LOOK, LISTEN, FEEL	SIGNS	CLASSIFY	TREAT
IF DRIBBLING URINE				
		■ Dribbling or leaking urine.	**URINARY INCONTINENCE**	■ Check perineal trauma. ■ Give appropriate oral antibiotics for lower urinary tract infection F5. ■ If conditions persists more than 1 week, refer the woman to hospital-
IF PUS OR PERINEAL PAIN				
		■ Excessive swelling of vulva or perineum.	**PERINEAL TRAUMA**	■ **Refer the woman to hospital.**
		■ Pus in perineum. ■ Pain in perineum.	**PERINEAL INFECTION OR PAIN**	■ Remove sutures, if present. ■ Clean wound. Counsel on care and hygiene D26. ■ Give paracetamol for pain F4. ■ Follow up in 2 days. If no improvement, refer to hospital.
IF FEELING UNHAPPY OR CRYING EASILY				
■ How have you been feeling recently? ■ Have you been in low spirits? ■ Have you been able to enjoy the things you usually enjoy? ■ Have you had your usual level of energy, or have you been feeling tired? ■ How has your sleep been? ■ Have you been able to concentrate (for example on newspaper articles or your favorite radio programers)?		Two or more of the following symptoms during the same 2 week period representing a change from normal: ■ Inappropriate guilt or negative feeling towards self. ■ Cries easily. ■ Decreased interest or pleasure. ■ Feels tired, agitated all the time. ■ Disturbed sleep (sleeping too much **or too little, waking early).** ■ Diminished ability to think or concentrate. ■ Marked loss of appetite.	**POSTPARTUM DEPRESSION (USUALLY AFTER FIRST WEEK)**	■ Provide emotional support. ■ **Refer urgently the woman to hospital** B17.
		■ Any of the above, for less than 2 weeks.	**POSTPARTUM BLUES (USUALLY IN FIRST WEEK)**	■ Assure the woman that this is very common. ■ Listen to her concerns. Give emotional encouragement and support. ■ Counsel husband and family to provide assistance to the woman. ■ Follow up in 2 weeks, and refer if no improvement.

NEXT: If vaginal discharge 4 weeks after delivery

ASK, CHECK RECORD	LOOK, LISTEN, FEEL	SIGNS	CLASSIFY	TREAT AND ADVISE

IF VAGINAL DISCHARGE 4 WEEKS AFTER DELIVERY

ASK, CHECK RECORD	LOOK, LISTEN, FEEL	SIGNS	CLASSIFY	TREAT AND ADVISE
■ Do you have itching at the vulva? ■ Has your husband had a urinary problem? If husband is present int he clinic, ask the woman if she feels comfortable if you ask him similar questions. If yes, ask him if he has: ■ urethral discharge or pus ■ burning on passing urine. If husband could not be approached, explain importance of partner assessment and treatment to avoid reinfection.	■ Separate the labia and look for abnormal vaginal discharge: → amount → colour → odour/smell. ■ If no discharge is seen, examine with a gloved finger and look at the discharge on the glove.	■ Abnormal vaginal discharge, and husband has urethral discharge or burning on passing urine.	**POSSIBLE GONORRHOEA OR CHLAMYDIA INFECTION**	■ Give appropriate oral antibiotics to woman F5. ■ Treat husband with appropriate oral antibiotics F5. ■ Counsel on safer sex including use of condoms G2.
		■ Curd-like vaginal discharge and/or ■ Intense vulval itching.	**POSSIBLE CANDIDA INFECTION**	■ Give clotrimazole F5. ■ Counsel on safer sex including use of condoms G2. ■ If no improvement, refer the woman to hospital.
		■ Abnormal vaginal discharge.	**POSSIBLE BACTERIAL OR TRICHOMONAS INFECTION**	■ Give metronidazole to woman F5. ■ Counsel on safer sex including use of condoms G2.

IF BREAST PROBLEM

See J9.

NEXT: If cough or breathing difficulty

IF COUGH OR BREATHING DIFFICULTY

ASK, CHECK RECORD	LOOK, LISTEN, FEEL	SIGNS	CLASSIFY	TREAT AND ADVISE
■ How long have you been coughing? ■ How long have you had difficulty in breathing? ■ Do you have chest pain? ■ Do you have any blood in sputum? ■ Do you smoke?	■ Look for breathlessness. ■ Listen for wheezing. ■ Measure temperature.	At least 2 of the following: ■ Temperature more than 38°C. ■ Breathlessness. ■ Chest pain.	**POSSIBLE PNEUMONIA**	■ Give first dose of appropriate IM/IV antibiotics B15. ■ **Refer urgently to hospital** B17.
		At least 1 of the following: ■ Cough or breathing difficulty for more than 3 weeks. ■ Blood in sputum. ■ Wheezing.	**POSSIBLE CHRONIC LUNG DISEASE**	■ Refer to hospital for assessment. ■ If severe wheezing, refer urgently to hospital B17.
		■ Temperature less than 38°C. ■ Cough for less than 3 weeks.	**UPPER RESPIRATORY TRACT INFECTION**	■ Advise safe, soothing remedy. ■ If smoking, counsel to stop smoking.

IF TAKING ANTI-TUBERCULOSIS DRUGS

ASK, CHECK RECORD	LOOK, LISTEN, FEEL	SIGNS	CLASSIFY	TREAT AND ADVISE
■ Are you taking anti-tuterculosis drugs? if yes, since when?		■ **Taking anti-tuberculosis drugs.**	**TUBERCULOSIS**	■ Assure the woman that the drugs are not harmful to her baby, and of the need to continue treatment. ■ If her sputum is TB-positive within 2 months of delivery, plan to give INH prophylaxis to the newborn K13. ■ Reinforce information on HIV and TB co-infection and promote VCCT G2. ■ If smoking, counsel to stop smoking. ■ Advise to screen immediate family members and close contacts for tuberculosis.

PREVENTIVE MEASURES AND ADDITIONAL TREATMENTS FOR THE WOMAN

F2 PREVENTIVE MEASURES (1)
Give tetanus toxoid
Give vitamin A postpartum

F3 PREVENTIVE MEASURES (2)
Give iron and folic acid
Motivate on compliance with iron treatment
Give mebendazole

F4 ADDITIONAL TREATMENTS FOR THE WOMAN (1)
Give preventive intermittent treatment for falciparum malaria
Advise to use insecticide-trealed bednet
Give paracetamol

F5 ADDITIONAL TREATMENTS FOR THE WOMAN (2)
Give appropriate oral antibiotics

F6 ADDITIONAL TREATMENTS FOR THE WOMAN (3)
Give benzathine penicillin IM
observe for signs of aliergy

- This section has details on preventive measures and treatments prescribed in pregnancy and postpartum.
- General principles are found in the section on good practice A2.
- For emergency treatment for the woman see B8-B17.
- For treatment for the newborn see K9-K13.

PREVENTIVE MEASURES

Give tetanus toxoid

- Immunize all women
- Check the woman's tetanus toxoid (TT) immunization status:
  → When was TT last give?
  → Which dose of TT was this?
- If immunization status unknown, give TT1.

Plan to give TT2 in 4 weeks.

If due:

- Explain to the woman that the vaccine is safe to be given in pregnancy, it will not harm the baby.
- The injection site may become a little swollen, red and painful, but this will go away in a few days.
- **If she has heard that the injection has contraceptive effects, assure her it does not, that it only** protects her from disease.
- Give 0.5 ml TT IM, upper arm.
- Advise woman when next dose is due.
- Record on mother's card.

Tetanus toxoid schedule

At first contact with woman of childbearing age or at first antenatal care visit, as early as possible.	TT1
At least 4 weeks after TT1 (at next antenatal care visit).	TT2
At least 6 months after TT2.	TT3
At least 1 year after TT3.	TT4
At least 1 year after TT4.	TT5

Give vitamin A postpartum

- Give 200000 IU vitamin A capsules after delivery or within 6 weeks of delivery:
- Explain to the woman that the capsule with vitamin A will help her to recover better, and that the baby will receive the vitamin through her breast milk.
  → ask her to swallow the capsule in your presence.
  → explain to her that if she feels nauseated or has a headache. It should pass in a couple of days.

- **DO NOT** give capsules with high dose of vitamin A during pregnancy.

Vitamin A

1 capsule	200000 IU	1 capsule after delivery or within 6 weeks of delivery

Give iron and folic acid

- To all pregnant, postpartum and post-abortion women:
  - → Routinely once daily in pregnancy and until 3 months after delivery or abortion.
  - → Twice daily as treatment for anaemia (double dose).
- Check woman's supply of iron and folic acid at each visit and dispense 3 months supply.
- Advise to store iron safely:
  - → Where children cannot get it.
  - → In a dry place.

Iron and folate

1 tablet - 60 mg. Folic acid - 400-ug

	All women	**Women with anaemia**
	1 tablet	2 tablets
In pregnancy	Throughout the pregnancy	3 months
Postpartum and post-abortion	3 months	3 months

Give mebendazole

- Give 500 mg to every woman once in 6 months.
- **DO NOT** give it in the first trimester.

Mebendazole

500 mg tablet	100 mg tablet
1 tablet	5 tablets

Give Calcium & Vitamin D

- Give Calcium & Vitamin D during second & third trimester
- **DO NOT** give it in the first trimester.

Calcium	1000 mg - 1300 mg
Vitamin D	200 IU - 800 IU

Motivate on compliance with iron treatment

Explore local perceptions about iron treatment (examples of incorrect perceptions: making more blood will make bleeding worse, iron will cause too large a baby).

- Explain to mother and her family:
  - → Iron is essential for her health during pregnancy and after delivery.
  - → The danger of anaemia and need for supplementation.
- Discuss any incorrect perceptions.
- Explore the mother's concerns about the medication:
  - → Has she used the tablets before?
  - → Were there problems?
  - → Any other concerns?
- Advise on how to take the tablets.
  - → With meals or, if once daily, at night.
  - → Iron tablets may help the patient feel less tired. Do not stop treatment if this occurs.
  - → Do not worry about black stools. This is normal.
- Give advice on how to manage side-effects:
  - → If constipated, drink more water.
  - → Take tablets after food or at night to avoid nausea.
  - → Explain that these side effects are not serious.
  - → Advise her to return if she has problems taking the iron tablets.
- If necessary. discuss with family member, TBA, other community based health workers or other women, how to help in promoting the use of iron and folate tablets.
- Counsel on eating iron-rich foods -- see C18 D28.

ANTIMALARIAL TREATMENT AND PARACETAMOL

Advise to use insecticide-treated bednet

Ask whether woman and newborn will be sleeping under a bednet.
If yes,
→ Has it been dipped in insecticide?
→ When?
→ Advise to dip every 6 months.
If not, advise to use insecticide-treated bednet, and provide information to help her do this.

Give appropriate oral antimalarial treatment

A highly effective antimalarial (even if second - line) is preferred during pregnancy

	Chloroquine						Sulfadoxine + Pyrimethamine
	Give daily for 3 days						Give single dose in clinic
	Tablet (150 mg base)			Tablet (100 mg base)			Tablet 500 mg sulfadoxine + 25 mg pyrimethamine
Pregnant woman (For weight around 50 kg)	Day 1	Day 2	Day 3	Day 1	Day 2	Day 3	
	4	4	2	6	6	3	3

Dose of artem or any other malaria medicine to be added

Give paracetamol

If severe pain

Paracetamol	Dose	Frequency
1 tablet - 500 mg	1-2 tablets	every 4-6 hours

GIVE APPROPRIATE ORAL ANTIBIOTICS

INDICATION	ANTIBIOTIC	DOSE	FREQUENCY	DURATION	COMMENT
Mastitis	**CLOXACILLIN** 1 capsule (500 mg)	500 mg	every 6 hours	10 days	
Lower urinary tract infection	**AMOXYCILLIN** 1 tablet (500 mg) OR	500 mg	every 8 hours	3 days	
	TRIMETHOPRIM+ SULPHAMETHOXAZOLE 1 tablet (80 mg + 400 mg)	80 mg trimethoprim + 400 mg sulphamethoxazole	two tablets every 12 hours	3 days	Avoid in late pregnancy and two weeks after delviery when breastfeeding.
Gonorrhoea Woman	**CEFTRIAXONE** (Vial-250 mg)	250 mg IM injection	once only	once only	
Husband only	**CIPROFLOXACIN** (1 tablet-250 mg)	500 mg (2 tablets)	once only	once only	Not safe for pregnant or lactating woman.
Chlamydia Woman	**ERYTHROMYCIN** (1 tablet-250 mg)	500 mg (2 tablets)	every 6 hours	7 days	
Husband only	**TETRACYCLINE** (1 tablet-250 mg) OR	500 mg (2 tablets)	every 6 hours	7 days	Not safe for pregnant or lactating woman.
	DOXYCYCLINE (1 tablet-100 mg)	100 mg	every 12 hours	7 days	
Trichomonas or bacterial vaginal infection	**METRONIDAZOLE** (1 tablet-500 mg)	2 g or 500 mg	once only every 12 hours	once only 7 days	Do not use in the first trimester of pregnancy.
Vaginal candida infection	**CLOTRIMAZOLE** 1 pessary 200 mg or 500 mg	100 mg 500 mg	every night once only	6 days once only	Teach the woman how to insert a pessary into vagina and to wash hands before and after each application.

GIVE BENZATHINE PENICILLIN IM

Treat the husband. Rule out history of allergy to antibiotics.

INDICATION	ANTIBIOTIC	DOSE	FREQUENCY	DURATION	COMMENT
Syphilis RPR test positive	**BENZATHINE PENICILLIN IM** (2.4 million units in 5 ml)	2.4 million units IM injection	once only	once only	Give as two IM injections at separate sites. Plan to treat newborn K12. Counsel on correct and consistent use of condoms G2.
If woman has allergy to penicillin	**ERYTHROMYCIN** (1 tablet - 250 mg)	500 mg (2 tablets)	every 6 hours	15 days	
If husband has allergy to penicillin	**TETRACYCLINE** (1 tablet - 250 mg) OR	500 mg (2 tablets)	every 6 hours	15 days	Not safe for pregnant or lactating woman.
	DOXYCYCLINE (1 tablet - 100 mg)	100 mg	every 12 hours	15 days	

OBSERVE FOR SIGNS OF ALLERY

After giving penicillin injection, keep the woman for a few minutes and observe for signs of allergy.

ASK, CHECK RECORD	LOOK, LISTEN, FEEL	SIGNS	CLASSIFY	TREAT
■ How are you feeling? ■ Do you feel tightness in the chest and throat? ■ Do you feel dizzy and confused?	■ Look at the face, neck and tongue for swelling. ■ Look at the skin for rash or hives. ■ Look at the injection site for swelling and redness. ■ Look for difficult breathing. ■ Listen for wheezing.	Any of these signs: ■ Tightness in the chest and throat. ■ Feeling dizzy and confused. ■ Swelling of the face, neck and tongue. ■ Injection site swollen and red. ■ Rash or hives. ■ Difficult breathing or wheezing.	**ALLERGY TO PENICILLIN**	■ Open the airway B9. ■ Insert IV line and give fluids B9. ■ Give 0.5 ml adrenaline 1:1000 in 10 ml saline solution IV slowly. Repeat in 5-15 minutes, if required. ■ DO NOT leave the woman on her own. ■ Refer urgently to hospital B17.

INFORM AND COUNSEL ON HIV, HEPATITIS B, HEPATITIS C, DIABETES MELLITUS, MALARIA & TUBERCULOSIS

G2 KEY INFORMATION ON HIV

G3 PROVIDE KEY INFORMATION HEPATITIS B

G4 KEY INFORMATION HEPATITIS C

G5 PROVIDE KEY INFORMATION ON DIABETES MELLITUS

G6 KEY INFORMATION ON MALAIRA

G7 PROVIDE KEY INFORMATION ON TUBERCULOSIS

PROVIDE KEY INFORMATION ON HIV

Hepatitis B Virus Prevalence in Pakistan

What is HIV (human immunodeficiency virus) and how is HIV transmitted?

- HIV is a virus that destroys parts of the body's immune system. A person infected with HIV may not feel sick at firs, but slowly the body's immune system is destroyed. the person becomes ill and unable to fight infection. Once a person is infected with HIV. she or he can give the virus to others.
- HIV can be transmitted through:
  - → Exchange of HIV-infected body fluids such as semen, vaginal fluid or blood during unprotected sexual intercourse.
  - → HIV-infected blood transfusions or contaminated needles.
  - → From an infected mother to her child (MTCT) during:
    - → pregnancy
    - → labour and delivery
    - → postpartum through breastfeeding.
- Almost four out of 20 babies born to HIV positive women may be infected without any intervention.
- HIV cannot be transmitted through hugging or mosquito bites.
- A blood test is done to find out if the person is infected with HIV.
- **All pregnant women identified with a risk factor should be referred for VCCT.**

Advantage of knowing the HIV status in pregnancy

Knowing the HIV status during pregnancy is important so that:

- the woman knows her HIV status.
- can share information with her husband.
- encourage her husband to be tested.

If the woman is HIV-positive she can:

- get appropriate medical can to treat and/or prevent HIV-associated illnesses.
- reduce the risk of transmission of infection to the baby:
  - → by taking antiretroviral drugs in pregnancy, and during labour.
  - → by practicing safer infant feeding options.
  - → by adapting birth and emergency plan and delivery practices.
- protect herself and her husband from infection or reinfection.
- make a choice about future pregnancies.

if the woman is HIV- negative she can:

- learn how to remain negative.

Counsel on safer sex including use of condoms

SAFER SEX IS ANY SEXUAL PRACTICE THAT REDUCES THE RISK OF TRANSMITTING HIV AND SEXUALLY TRANSMITTED INFECTIONS (STIs) FROM ONE PERSON TO ANOTHER

THE BEST PROTECTION IS OBTAINED BY:

- Correct and consistent use of condoms during every sexual act.
- Choosing sexual activities that do not allow semen, fluid form the vagina, or blood to enter the mouth, anus or vagina of the husband.
- Be faithful to one husband.
  - → If the woman is HIV-negative explain to her that she is at risk of HIV infection and that it is important to remain negative during pregnancy and breastfeeding. The risk of infecting the baby is higher if the mother is newly infected.
  - → If the woman is HIV-positive explain to her that condom use during every sexual act during pregnancy and breast feeding will protect her and her baby from sexually transmitted infections, or reinfection with another HIV strain and will prevent the transmission of HIV infection to her husband
  - → Make sure the couple knows how to use condoms and where to get them.

NEXT: **Key information on Hepatitis B**

PROVIDE KEY INFORMATION ON HEPATITIS B

Hepatitis B Virus Prevalence in Pakistan

- 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 around the world, especially in developing countries (90%).

What is Hepatitis B

Hepatitis B is a virus that infects the liver. This highly virulent stage is called acute hepatitis

How is it transmitted?

The mode of transmission of HBV varies in part with the prevalence of infection.

- Perinatal infection is the predominant mode of transmission in high prevalence areas.
- Horizontal transmission, particularly in early childhood, accounts for most cases of chronic HBV infection in intermediate prevalence areas like Pakistan.
- Sexual and percutaneous transmission in unprotected sexual intercourse and intravenous drug use in adults are the major routes of spread in low prevalence areas.

Advantage of knowing Hepatitis B status in pregnancy

- Although the mother will usually become jaundiced during the acute stage, some women have no symptoms of hepatitis.
- Because this virus is highly contagious, and the risk that the newborn infant will develop hepatitis B is 10 to 20% if the mother is positive for the hepatitis B surface antigen, and as high as 90% if she is also positive for the HbeAg.
- Usually, the disease is passed on during delivery with exposure to the blood and fluids during the birth process. Universal precautions are mandatory during delivery.
- Without any intervention, 85-90% of the babies born to hepatitis B positive mothers will become chronically infected with the virus.

NEXT: Key information on Hepatitis C

Screening

- All pregnant women should be tested for hepatitis B, which should be done at the same time as other antenatal tests.
- If a woman tests positive (has HBsAg in her blood), the newborn should receive HBIG along with the hepatitis B vaccine.

Vaccination in pregnancy

- If a pregnant woman tests positive during her prenatal visits for hepatitis B, she should receive hepatitis B immune globulin, in third trimester. .
- When her infant is born, the newborn should receive 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.
- This reduces the risk that the infant will become infected with hepatitis B to a range of 0-33%.
- The infants should be tested for immunity, upon completion of the vaccine series .

Breastfeeding

- Women with hepatitis B can breastfeed, provided that the baby receives hepatitis B immune globulin and the first dose of the vaccine within 12 hours of birth, and receives the other two doses of the vaccine on schedule.

Prevention

How can hepatitis B transmission be prevented?

- Use a condom during sex.
- Don't share needles.
- Wear latex or plastic gloves if you have to touch blood.
- Don't share toothbrushes or razors.

PROVIDE KEY INFORMATION ON HEPATITIS C

Prevalence of Hepatitis C in Pakistan

- Hepatitis C Virus has been recognized as a major public health problem all over the world, including Pakistan. Approximately 10 million people are infected with HCV in Pakistan.

What is hepatitis C

- Hepatitis is a general term that means inflammation of the liver.
- Inflammation of the liver caused by infection with HCV is referred to as hepatitis C.
- If the infection does not resolve, it becomes chronic (ongoing, long term) and can cause chronic liver disease, which can be serious or even fatal.

How it is transmitted?

- Transmitted mainly through blood transfusions and parenteral therapy.

Modes of transmission of HCV in Pakistan

- A survey of blood banks in the large urban centers of the country, shows that only about 25% tested blood and blood product donations for HCV infection
- It can be safely assumed that owing to high cost, testing for HCV in the rural areas of the country is even less frequent, making blood transfusions still the major cause of HCV transmission in the country.
- Hepatitis C is contagious. Transmission occurs mainly by contact with contaminated blood.
- Sharing of contaminated needles among IV drug users is the most common mode of transmission.
- Transfusion of unscreened blood or blood products is a risk factor for hepatitis C.
- Less common causes of HCV transmission include the following:
  - → From mother to infant at the time of childbirth
  - → Through sexual intercourse with an infected person, having multiple sex partners is a risk factor.
  - → Needle sticks with HCV-contaminated blood is mostly seen in health care workers.
  - → Most cases have also been traced to the reuse of syringes that were contaminated with small amounts of blood from an infected patient.
  - → It can be transmitted by sharing items contaminated with blood such as a razor, toothbrush, or
  - → nail clippers.

It cannot be transmitted by living with, being near, or touching someone with the disease.

Is there a vaccine to prevent hepatitis C infection?

- Currently, there is no licensed vaccine for the prevention of HCV infection.

Advantage of knowing HCV status in pregnancy

- Most women become pregnant during the years between 20 and 40, which is also the age group in which the incidence of hepatitis C infection is rising most quickly.
- 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.
- 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.

Should a hepatitis C infected mother be advised against breastfeeding?

- Despite the fact that hepatitis C antibodies have been detected in colostrum and breast milk, no case of transmission through breast milk has been reported.
- Studies show that the chance of passing HCV from mother to baby during breastfeeding is highly unlikely. However, if the nipples are bleeding or cracked, it is recommended that breastfeeding be suspended until they have healed, since transmission can occur through blood.

If someone in the household tests positive for hepatitis C, should others in the household get tested?

- The hepatitis C virus is NOT spread by casual contact, such as hugging, kissing or shaking hands, or by being around someone who is sneezing or coughing. HCV is not transmitted through food or water.
- If household members have shared such items as toothbrushes or razors, which pose a risk of blood contamination, then HCV testing of other members in the household should be considered. It is important to avoid sharing personal hygiene items.

Screening strategies for HCV.

- Based on the prevalence of infection and risk factors, universal screening of all adults in Pakistan for HCV infection may be the best strategy.
- We therefore recommend that, in addition to the already well-defined high risk groups, all individuals who have ever received a blood transfusion or multiple therapeutic injections should be screened for HCV infection.

NEXT: Key information on Diabetes Mellitus

PROVIDE KEY INFORMATION ON DIABETES MELLITUS

Prevalence of Diabetes in Pakistan

- 10% of Pakistani population suffers from diabetes mellitus
- More women than men die from diabetes every year in Pakistan
- An alarming 7.1 million people suffer from diabetes, making it the seventh highest population of diabetic patients in the world.
- With an estimated prevalence of 7.6% at present, it is estimated that by 2030, Pakistan will have the fourth largest diabetic population in the world around 13.8 million people.
- The National Health Survey (2009) reported Pakistan as having one of the lowest control rates of diabetes in the world ; less than 3% of the diabetic had disease condition in control.

What is Diabetes and how does it develop?

Diabetes is a disease in which the blood glucose, or sugar, levels are too high.

- Glucose comes from the foods you eat. Insulin is a hormone that helps the glucose get into our cells to give them energy.
- With type 1 diabetes, body does not make insulin. With type 2 diabetes, the more common type, body does not make or use insulin well. Without enough insulin, the glucose stays in blood.
- Over time, having too much glucose in blood can cause serious problems. It can damage eyes, kidneys, and nerves. Diabetes can also cause heart disease, stroke and even the need to remove a limb.
- Pregnant women can also get diabetes, called gestational diabetes.
- A blood test can show if one has diabetes. Exercise, weight control and sticking to our meal plan can help control your diabetes. One should also monitor glucose level and take medicine if prescribed.

Advantage of knowing the Diabetes status during pregnancy

- Gestational diabetes is diabetes that happens for the first time when a woman is pregnant.
- Gestational diabetes improves after the delivery, but it does increase risk for having diabetes later.
- During pregnancy high glucose level is not good for the baby.
  If diabetes is already present before pregnancy, there is need to monitor and control blood sugar levels.
- Either type of 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.

Uncontrolled diabetic pregnancies could result in

- Birth defects in the developing baby, such as those of the brain, spine, and heart.
- An Extra Large Baby
- Higher risk of C Section
- High Blood Pressure (Preeclampsia)
- Early (Preterm) Birth
- Low Blood Sugar (Hypoglycemia)
- Miscarriage or Stillbirth

Gestational Diabetes Mellitus (GDM)

The diagnosis of GDM is made when any of the following plasma glucose values are exceeded:

- → Fasting more than or equal to 92 mg/dL
- → 1 h levels more than or equal to 180 mg/dL
- → 2 h levels more than or equal to 153 mg/dL

Counseling:

- If a woman with diabetes keeps her blood sugar controlled before and during pregnancy, it can reduce a baby with birth defects.
- Controlling blood sugar also reduces the chance a woman will develop diabetes later, or will prevent it from getting worse during pregnancy.
- The following steps should be followed:
  - → Planned Pregnancy
  - → Regular visits to health facility / provider for check up
  - → Eat Healthy Foods
  - → Exercise Regularly
  - → Take medicines and Insulin as directed
  - → Control and Treat Low Blood Sugar Quickly
  - → Monitor Blood Sugar Weekly

PROVIDE KEY INFORMATION ON MALAIRA

Prevalence of Malaria in Pakistan

Pakistan is among 107 countries with endemic malaria. Currently, Pakistan is listed among moderately endemic countries for malaria.

The Pakistan Health Management Information System (HMIS) 2006 report says malaria is the second most frequently reported disease from public sector health facilities.

What is malaria?

- Malaria is a vector borne infectious disease caused by protozoan parasites.
- Malaria in humans is caused by 1 of 4 protozoan species of the genus Plasmodium: Plasmodium falciparum, P. vivax, P. ovale, or P. Malaria.
- Malaria disease can be categorized as uncomplicated or severe (complicated).
- Infection with malaria parasites may result in a wide variety of symptoms, ranging from absent or very mild symptoms to severe disease and even death.
- In general, malaria is a curable disease if diagnosed and treated promptly and correctly.

Mode of transmission

- All species are transmitted by the bite of an infective female Anopheles mosquito.
- Occasionally, transmission occurs by blood transfusion, organ transplantation, needle sharing, or congenitally from mother to fetus.

Diagnosis

- Demonstration of parasites in the blood (MP), usually by microscopy.
- Additional laboratory findings may include mild anemia, mild decrease in blood platelets (thrombocytopenia), elevation of bilirubin, and elevation of aminotransferases.

Advantage of knowing Malaria status in pregnancy

- 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.
- For these reasons, no single drug chemo-prophylactic regimen is completely effective. Therefore, use of an effective chemoprophylaxis regimen (ACT) is essential.

W H O recommendations in pregnancy:

- Prompt Case Management (Artemisinin Combined Therapy) ACT
- Residual insecticide spraying (Vector control)
- ITNs (Insecticide Treated Nets)

Medication in uncomplicated falciparum malaria in pregnancy:

- 1st Trimester: Quinine + Clindamycin for 7 days
- 2nd and 3rd Trimester: ACT regimen is effective

- Artesunate + Clindamycine for 7 days
- The anti-malarial considered safe in the 1st trimester of pregnancy are quinine, chloroquine, proguanil and sulfadoxine-primethamine.
- For severe malaria in situations of epidemics and complex emergencies, and also for pregnant women, intramuscular Artemether is the first drug of choice.
- Given the disadvantages of quinine, ACTs are considered suitable alternative for second and third trimesters.
- As first line treatment, if artemisinin combination is the only available choice, it should be given in symptomatic malaria in the first trimester.????

Counseling:

- 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.
- 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.

NEXT: Key information on Tuberculosis

PROVIDE KEY INFORMATION ON TUBERCULOSIS

Prevalence of Tuberculosis in Pakistan

According to World Health Organization's estimate, Pakistan ranks 6th among the 22 countries with the highest burden of Tuberculosis in the world and contributes about 44% of the Tuberculosis burden in the Eastern Mediterranean region of WHO. The country has an incidence of 177 / 100,000 population or around 250,000 new cases every year. The prevalence of the disease is much higher and is estimated at 1.5 million people.

What is tuberculosis?

- Tuberculosis is an infectious, systemic, chronic and granulomatous disease caused in the vast majority of cases by a bacterium called Mycobacterium Tuberculosis (tubercle bacilli).

How does Tuberculosis develop?

- Infection occurs almost exclusively by inhalation of tubercle bacilli.
- Tuberculosis spreads from the primary lung lesion to other parts of the body via the blood stream, lymphatic or by direct extension, and in this way may affect any organ in the body.

When should Tuberculosis be suspected?

- The most common symptom of Pulmonary Tuberculosis is a persistent cough for three weeks or more, usually with expectoration.
- The other associated symptoms are fever, weight loss, tiredness, night sweats, chest pain, shortness of breath, and coughing up blood.
- The suspicion of Tuberculosis is much more likely to be correct in patients with these symptoms, and is also known to be or have been in contact with a sputum smear-positive Tuberculosis patient.
- Patients who are HIV positive

Advantage of knowing the TB status during pregnancy

- A pregnant woman should be advised that successful treatment of TB with the recommended standardized regimen is important for successful outcome of pregnancy.
- Most anti-tuberculosis drugs are safe for use in pregnancy.
- Untreated tuberculosis (TB) disease represents a greater hazard to a pregnant woman and her fetus than does its treatment.
- The exception is streptomycin, which is ototoxic to the fetus and should not be used during pregnancy.
- Infants born to women with untreated TB may be of lower birth weight than those born to women without TB and, in rare circumstances the infant may be born with TB.
- Maternal TB is associated with increased MTCT of HIV. Prevention of TB among HIV-infected mothers should be a high priority for communities with significant HIV/TB burden.
- Timely and properly applied chemotherapy is the best to prevent transmission of tubercle bacilli to the new born.

Breastfeeding

- A breastfeeding woman who has TB should receive a full course of TB treatment.
- All anti- tuberculosis drugs are compatible with breastfeeding; a woman taking them can safely continue to breastfeed.
- For the same reason, drugs in breast milk are not an effective treatment for TB disease or LTBI in a nursing infant. Breastfeeding women taking INH should also take pyridoxine (vitamin B6) supplementation.
- Mother and baby should stay together and the a baby should be given prophylactic isoniazid for at least 6 months beyond the time the mother is considered to be non-infectious.
- BCG vaccination of the newborn should be postponed until the end of isoniazid prophylaxis if not already vaccinated.

Use of oral contraception in woman with Tuberculosis

- Rifampicin interacts with oral contraceptive medications with a risk of decreased protective efficacy against pregnancy.
- A woman receiving oral contraception may choose between two options while receiving treatment with rifampicin; following consultation with a physician, an oral contraceptive pill containing a higher dose of estrogen (50 ug) may be taken, or another form of contraception may be used

The Role of Counseling and Health Education in Tuberculosis

- It is often necessary to carry out such a counseling session for a patient in the presence of his treatment supporter who will monitor his/her intake of drugs on a daily basis.
- The general public needs to be educated on the importance of early presentation at a health facility for those with chest symptoms, especially cough, persisting for 3 weeks or more.
- Make people aware of the, fact that TB is curable with adequate treatment, but if not treated properly it will be converted in to resistant form of disease which is very difficult to treat.
- Patients be provided health education on continuation basis during treatment period so that she should understand the importance of regularly taking all her prescribed drugs, duration of treatment and importance of sputum examination.

THE WOMAN WITH SPECIAL NEEDS

H2 EMOTIONAL SUPPORT FOR THE WOMAN WITH SPECIAL NEEDS
Sources of support
Emotional support

H3 SPECIAL CONSIDERATIONS IN MANAGING THE PREGNANT ADOLESCENT
When interacting with the adolescent
Help the girl consider her options and to make decisions which best suit her needs

H4 SPECIAL CONSIDERATIONS FOR SUPPORTING THE WOMAN LIVING WITH VIOLENCE
Support the woman living with violence
Support the health service response to the needs of women living with violence

- If a woman is an adolescent or living with violence, she needs special consideration. During interaction with such women, use this section to support them.

EMOTIONAL SUPPORT FOR THE WOMAN WITH SPECIAL NEEDS

You may need to refer many women to another level of care or to a support group. However, if such support is not available, or if the woman will not seek help, counsel her as follows. Your support and willingness to listen will help her to heal.

Sources of support

A key role of the health worker includes linking the health services with the community and other support services available. Maintain existing links and, when possible, explore needs and alternatives for support through the following:

- Community groups, women's groups, leaders.
- Peer support groups.
- Other health service providers.
- Community counsellors.
- Traditional providers.

Emotional support

Principles of good care, including suggestions on communication with the woman and her family, are provided on A2. When giving emotional support to the woman with special needs it is particularly important to remember the following:

- Create a comfortable environment:
  - →Be aware of your attitude.
  - →Be open and approachable.
  - →Use a gentle, reassuring tone of voice.
- Guarantee confidentiality and privacy:
  - →Communicate clearly about confidentiality. Tell the woman that you will not tell anyone else about the visit, discussion or plan.
  - →If brought by a husband, parent or other family member, make sure you have time and space to talk privately. ask the woman if she would like to include her family members in the examination and discussion. Make sure you seek her consent first.
  - →Make sure the physical area allows privacy.
- Convey respect:
  - →Do not be judgmental.
  - →Be understanding of her situation.
  - →Overcome your own discomfort with her situation.
- Give simple, direct answers in clear language:
  - →Verify that she understands the most important points.
- Provide information according to her situation which she can use to make decisions.
- Be a good listener:
  - →Be patient. Women with special needs may need time to tell you their problem or make a decision.
  - →Pay attention to her as she speaks.
- Follow-up visits may be necessary.

SPECIAL CONSIDERATIONS IN MANAGING THE PREGNANT ADOLESCENT

Special training is required to work with adolescent girls and this guide does not substitute for special training.
However, when working with an adolescent, whether married or unmarried, it is particularly important to remember the following.

When interacting with the adolescent

- Do not be judgemental. You should be aware of, and overcome, your own discomfort with adolescent sexuality.
- Encourage the girl to ask questions and tell her that all topics can be discussed.
- Use simple and clear language.
- Repeat guarantee of confidentiality A2.
- Understand adolescent difficulties in communicating about topics related to sexuality (fears of parental discovery, adult disapproval, social stigma. etc).

Support her when discussing her situation and ask if she has any particular concerns:

- Does she live with her parents, can she confide in them? Does she live as a couple? Is she in a long-term relationship? has she been subject to violence or coerion?
- Determine who knows about this pregnancy -- she may not have revealed it openly.
- Support her concerns related to puberty, social acceptance, peer pressure, forming relationships, social stigmas and violence.

Help the girl & her family consider her options and to make decisions which best suit her needs.

- Birth planning delivery in a hospital or health centre is highly recommended. She needs to understand why this is important, she needs to decide if she will do it and and how she will arrange it.
- Spacing of the next pregnancy -- for both the woman and baby's health, it is recommended that any next pregnancy be spaced by at least 2 or 3 years. the girl, with her husband if applicable, needs to decide if and when a second pregnancy is desired, based on their plans. healthy adolescents can safely use any contraceptive method. the girl needs support in knowing her options and in deciding which is best for her. Be active in providing family planning counselling and advice.

SPECIAL CONSIDERATIONS FOR SUPPORTING THE WOMAN LIVING WITH VIOLENCE

Violence against women by their husbands affects women's physical and mental health, including their reproductive health. While you may not have been trained to deal with this problem, women may disclose violence to you or you may see unexplained bruises and other injuries which make you suspect she may be suffering abuse. The following are some recommendations on how to respond and support her.

Support the woman living with violence

- Provide a space where the woman can speak to you in where her husband or others cannot hear. Do all you can to guarantee confidentiality, and reassure her of this.
- Gently encourage her to tell you what is happening to her. You may ask indirect questions to help her tell her story.
- Listen to her in a sympathetic manner. Listening can often be of great support. Do not blame her or make a joke of th esituation. she may defend her husband's action. Reassure her that she does not deserve to be abused in any way.
- Help her to assess her present situation. If she thinks she or her children are in danger, explore together the options to ensure her immediate safety (e.g. can she stay with her parents or friends? Does she have, or could she borrow money?)
- Explore her options with her. Help her identify local sources of support, either within her family. friends, and local community or through NGOs, shelters or social services, if available. Remind her that she has legal resource, if relevant.
- Offer her an opportunity to see you again. Violence by husband is complex, and she may be unable to resolve her situation quickly.
- Document any forms of abuse identified or concerns you may have in the file.

Support the health service response to needs of women living with violence

- Help raise awareness among health care staff about violence against women and its prevalence in the community the clinic serves.
- Find out what if training is available to improve the support that health care staff can provide to those women who may need it.
- Display posters, leaflets and other information that condemn violence, and information on groups that can provide support.
- Make contact with organizations working to address violence in your area. Identify those that can provide support for women in abusive relationships, if specific services are not available, contact other groups such as churches, women's groups, elders, or other local groups and discuss with them support they can provide or other what roles they can play, like resolving disputes. ensure you have a list of these resources available.

COMMUINTY SUPPORT FOR MATERNAL AND NEWBORN HEALTH

I2 ESTABLISH LINKS
Coordinate with other health care providers and community groups
Establish links with traditional birth attendants and traditional healers

I3 INVOLVE THE COMMUNITY IN QUALITY OF SERVICES

- Everyone in the community should be informed and involved in the process of improving the health of their community members. This section provides guidance on how their involvement can help improve the health of women and newborns.
- Different groups should be asked to give feedback and suggestions on how to improve the services the health facilities provide.
- Use the following suggestions when working with families and communities to support the care of women and newborns during pregnancy. delivery. Post-abortion and postpartum periods.

ESTABLISH LINKS

Coordinate with other health care providers and community groups

- Meet with others in the community to discuss and agree messages related to pregnancy. delivery. **postpartum and post-abortion care of women and newborns.**
- Work together with leaders and community groups to discuss the most common health problems and find solutions. Groups to contact and establish relations which include:
  - → other health care providers
  - → traditional birth attendants and healers
  - → maternity waiting homes
  - → adolescent health services
  - → schools
  - → nongovernmental organizations
  - → breastfeeding support groups
  - → district health committees
  - → women's groups
  - → agricultural associations
  - → neighbourhood committees
  - → youth groups
- Establish links with peer support groups and referral sites for women with special needs, including women living with HIV, adolescents and women living with violence. Have available the names and contact information for these groups and referral sites, and encourage the woman to seek their support.

Establish links with traditional birth attendants and traditional healers

- Contact traditional birth attendants and healers who are working in the health facility's catchment area. Discuss how you can support each other.
- Respect their knowledge, experience and influence in the community.
- Share with them the information you have and listen to their opinions on this. Provide copies of health education materials that you distribute to community members and discuss the content with them. Have them explain knowledge that they share with the community. Together you can create new knowledge which is more locally appropriate.
- Review how together you can provide support to women, families and groups for maternal and newborn health.
- Involve TBAs and healers in counselling sessions in which advice is given to families and other community members. Include TBAs in meetings with community leaders and groups.
- Discuss the recommendation that all deliveries should be performed by a skilled birth attendant. When not possible or not preferred by the woman and her family, discuss the requirements for safer delivery at home, postpartum care, and when to seek emergency care.
- Invite TBAs to act as labour companions for women they have followed during pregnancy, if this is the woman's wish.
- Make sure TBAs are included in the referral system.
- Clarify how and when to refer, and provide TBAs with feedback on women they have referred.

INVOLVE THE COMMUNITY IN QUALITY OF SERVICES

All in the community should be informed and involved in the process of improving the health of their members. ask the different groups to provide feedback and suggestions on how to improve the services the health facility provides.

- Find out what people know about maternal and newborn mortality and morbidity in their locality. Share data you may have and reflect together on why these deaths and illnesses may occur. Discuss with them what families and communities can do to prevent these deaths and illnesses. Together **prepare an action plan, defining responsibilities.**
- Discuss the different health messages that you provide. Have the community members talk about their knowledge in relation to these messages. Together determine what families and communities can do to support maternal and newborn health.
- Discuss some practical ways in which families and others in the community can support women during pregnancy. Post-abortion, delivery and postpartum periods:
  - →Recognition of and rapid response to emergency/danger signs during pregnancy, delivery and postpartum periods
  - →Provision of food and care for children and other family members when the woman needs to be away from home during delivery, or when she needs to rest
  - →Accompanying the woman after delivery
  - →Support for payment of fees and supplies
  - →Motivation of male husbands to help with the workload, accompany the woman to the clinic, allow her to rest and ensure she eats properly. motivate communication between husbands and their wives, including discussing postpartum family planning needs.
- Support the community in preparing an action plan to respond to emergencies. Discuss the following with them:
  - →Emergency/danger signs - knowing when to seek care
  - →importance of rapid response to emergencies to reduce mother and newborn death, disability and illness
  - →Transport options available, giving examples of how transport can be organized
  - →Reasons for delays in seeking care and possible difficulties, including heavy rains
  - →What services are available and where
  - →What options are available
  - →Costs and options for payment
  - →A plan of action for responding in emergencies, including roles and responsibilities.

NEWBORN CARE

J2 EXAMINE THE NEWBORN

J3 IF PRETERM, BIRTH WEIGHT less than 2500 G OR TWIN

J4 ASSESS BREASTFEEDING

J5 CHECK FOR SPECIAL TREATMENT NEEDS

J6 LOOK FOR SIGNS OF JANUDICE AND LOCAL INFECTION

J7 IF DANGER SIGNS

J8 IF SWELLING, BRUISES OR MALFORMATION

J9 ASSESS THE MOTHER'S BREASTS IF COMPLANING OF NIPPLE OR BREAST PAIN

J10 CARE OF THE NEWBORN

J11 ADDITIONAL CARE OF A SMALL BABY (OR TWIN)

J12 ASSESS REPLACEMENT FEEDING

- Examinine routinely all babies around an hour of birth, for discharge, at routine and follow-up postnatal visits in the first weeks of life, and when the provider or mother observes danger signs.
- Use the chart Assess the mother's breasts if the mother is complaining of nipple or breast pain **J9**.
- During the stay at the facility. Use the Care of the newborn chart **J10** If the baby is small but does not need referral, also use the Additional care for a small baby or twin chart **J11**.
- Use the Breastfeedig, care, preventive measures and treatment for the newborn sections for details of care, resuscitation and treatments **K1-K13**.
- Use Advise on when to return with the baby **K14** **for advising the** mother when to return with the baby for routine and follow-up visits and to seek care or return if baby has danger signs. Use information and counselling sheets **M5-M6**.
- For care at birth and during the first hours of life, use Labour and delivery **D19**.

ALSO SEE:

- Counsel on choices of infant feeding and HIV-related issues **G2**.
- Equipment, supplies and drugs **L1-L5** .
- Records **N1-N7**.
- Baby died **D24**.

EXAMINE THE NEWBORN

Use this chart to assess the newborn after birth, classify and treat, possibly around an hour; for discharge (not before 12 hours); and during the first week of life at routine, follow-up, or sick newborn visit. record the findings on the postpartum record N6.

Always examine the baby in the presence of the mother.

ASK, CHECK RECORD	LOOK, LISTEN, FEEL
Check maternal and newborn record or ask the mother: ■ How old is the baby? ■ Preterm (less than 37 weeks or 1 month or more early)? ■ Breech birth? ■ Difficult birth? ■ Resuscitated at birth? ■ Has baby had convulsions? **Ask the mother:** ■ Do you have concerns? ■ How is the baby feeding? **Is the mother very ill or transferred?**	■ Assess breathing (baby must be calm) → listen for grunting → count breaths: are they 30-60 per minute? Repeat the count if elevated → look at the chest for in-drawing- ■ Look at the movements: are they normal and symmetrical? ■ Look at the presenting part -- is there swelling and bruises? ■ Look at abdomen for pallor. ■ Look for malformations. ■ Feel the tone: is it normal? ■ Feel for warmth. If cold, or very warm, measure temperature. ■ Weigh the baby.

SIGNS	CLASSIFY	TREAT AND ADVISE
■ Normal weight baby (2500-g or more). ■ Feeding well -- suckling effectively 8 times in 24 hours, day and night. ■ **No danger signs.** ■ No special treatment needs or treatment completed. ■ Small baby feeding well and gaining weight adequately	**WELL BABY**	If first examination: ■ Ensure care for the newborn J10. ■ Examine again for discharge. If pre-discharge examination: ■ Immunize if due K13. ■ Advise on baby care K2 K9-K10. ■ Advise on routine visit at age 3-7 days K14. ■ Advise on when to return if danger signs K14. ■ Record in home-based record. ■ If further visits, repeat advices.
■ **Body temperature 35-36-4°C.**	**MILD HYPOTHERMIA**	■ Re-warm the baby skin-to-skin K9. ■ If temperature not rising after 2 hours, reassess the baby.
■ **Mother not able to breastfeed due to receiving special treatment.** ■ **Mother transferred.**	**MOTHER NOT ABLE TO TAKE CARE FOR BABY**	■ Help the mother express breast milk K5. ■ Consider alternative feeding methods until mother is well K5-K6. ■ Provide care for the baby ensure warmth K9. ■ Ensure mother can see the baby regularly. ■ Transfer the baby with the mother if possible. ■ Ensure care for the baby at home.

NEXT: If preterm, birth weight less than2500 g or twin

IF PRETERM, BIRTH WEIGHT less than2500-G OR TWIN

ASK, CHECK RECORD	LOOK, LISTEN, FEEL
■ Baby just born. ■ Birth weight → less than1500 g → 1500 g to less than 2500 g. ■ Preterm → less than 32 weeks → 33-36 weeks. ■ Twin.	■ If this is repeated visit. assess weight gain

SIGNS	CLASSIFY	TREAT AND ADVISE
■ Birth weight less than1500g. ■ Very preterm less than 32 weeks or more than2 months early).	**VERY SMALL BABY**	■ Refer baby urgently to hospital K14. ■ Ensure extra warmth during referral.
■ Birth weight 1500g less than 2500g ■ Preterm baby (32-36 weeks or 1-2 months early). ■ Several days old and weight gain inadequate. ■ Feeding difficulty.	**SMALL BABY**	■ Give special support to breastfeed the small baby K4. ■ Ensure additional care for a small baby J11. ■ Reassess daily J11. ■ Do not discharge before feeding well. Gaining weight and body temperature stable. ■ If feeding difficulties persist for 3 days and otherwise well, refer for breastfeeding counselling.
■ Twin	**TWIN**	■ Give special support to the mother to breastfeed twins K4. ■ Do not discharge until both twins can go home.

ASSESS BREASTFEEDING

Assess breastfeeding in every baby as part of the examination.
If mother is complaining of nipple or breast pain, also assess the mother's breasts J9 .

ASK, CHECK RECORD	LOOK, LISTEN, FEEL
Ask the mother ■ How is the breastfeeding going? ■ Has your baby fed in the previous hour? ■ Is there any difficulty? ■ Is your baby satisfied with the feed? ■ Have you fed your baby any other foods or drinks? ■ How do your breasts feel? ■ Do you have any concerns? **If baby more than one day old:** ■ How many times has your baby fed in 24 hours?	■ **Observe a breastfeed.** If the baby has not fed in the previous hour, ask the mother to put the baby on her breasts and observe breastfeeding for about 5 minutes. **Look** ■ Is the baby able to attach correctly? ■ Is the baby well-positioned? ■ Is the baby suckling effectively? If mother has fed in the last hour, ask her to tell you when her baby is willing to feed again.

SIGNS	CLASSIFY	TREAT AND ADVISE
■ Suckling effectively. ■ Breastfeeding 8 times in 24 hours on demand day and night	**FEEDING WELL**	■ Encourage the mother to continue breastfeeding on demand K3 .
■ Not yet breastfed (first hours of life). ■ Not well attached. ■ Not suckling effectively. ■ Breastfeeding less than 8 times per 24 hours. ■ Receiving other foods or drinks. ■ Several days old and inadequate weight gain.	**FEEDING DIFFICULTY**	■ Support exclusive breastfeeding K2-K3 . ■ Help the mother to initiate breastfeeding K3 . ■ Teach correct positioning and attachment K3 . ■ Advise to feed more frequently, day and night. Reassure her that she has enough milk. ■ Advise the mother to stop feeding the baby other foods or drinks. ■ Reassess at the next feed or follow-up visit in 2 days.
■ Not suckling (after 6 hours of age). ■ Stopped feeding.	**NOT ABLE TO FEED**	■ Refer baby urgently to hospital K14 .

To assess replacement feeding see J12 .

NEXT: Check for special treatment needs

CHECK FOR SPECIAL TREATMENT NEEDS

ASK, CHECK RECORD / LOOK, LISTEN, FEEL

Check record for special treatment needs

- Has the mother had within 2 days of delivery.
  - → fever more than38 °C?
  - → infection treated with antibiotics?
- Membranes ruptured more than18 hours before delivery?
- Mother tested RPR-positive?
- Mother tested HIV-positive?
  - → is or has been on ARV
  - → has she received infant feeding counselling?
- Is the mother receiving TB treatment which began less than 2 months ago?

SIGNS	CLASSIFY	TREAT AND ADVISE
■ Baby less than1 day old and membranes ruptured more than18 hours before delivery, **or** ■ Mother being treated with antibiotics for infection, **or** ■ Mother has fever more than38°C.	**RISK OF BACTERIAL INFECTION**	■ Give baby 2 IM antibiotics for 5 days K12. ■ Assess baby daily J2-J7.
■ Mother tested RPR-positive.	**RISK OF CONGENITAL SYPHILIS**	■ Give baby single dose of benzathine penicillin K12. ■ Ensure mother and husband are treated F5. ■ Follow up in 2 weeks.
■ Mother known to be HIV positive	**RISK OF HIV TRANSMISSION**	■ Refer to PPTCT M10.
■ Mother started TB treatment less than 2 months before delivery.	**RISK OF TUBERCULOSIS**	■ Give baby isoniazid propylaxis for 6 months K13. ■ Give BCG vaccination to the baby only when baby's treatment completed. ■ Follow up in 2 weeks.

LOOK FOR SIGNS OF JAUNDICE AND LOCAL INFECTION

ASK, CHECK RECORD	LOOK, LISTEN, FEEL
■ What has been applied to the umbilicus?	■ Look at the skin, is it yellow? → if baby is less than 24 hours old, look at skin on the face → if baby is 24 hours old or more, look at palms and soles. ■ Look at the eyes. Are they swollen and draining pus? ■ Look at the skin, especially around the neck, armpits, inguinal area: → Are there skin pustules? → Is there swelling, hardness or large bullae? ■ Look at the umbilicus: → Is it red? → Draining pus? → Does redness extend to the skin?

SIGNS	CLASSIFY	TREAT AND ADVISE
■ Yellow skin on face and only less than 24 hours old. ■ Yellow palms and soles and more than 24 hours old.	**JAUNDICE**	■ **Refer baby urgently to hospital K14.** ■ Encourage breastfeeding on the way. ■ If feeding difficulty, give expressed breast milk by cup K6.
■ Eyes swollen and draining pus.	**GONOCOCCAL EYE INFECTION**	■ Give single dose of appropriate antibiotic for eye infection K12. ■ Teach mother to treat eyes K13. ■ Follow up in 2 days. If no improvement or worse, refer urgently to hospital. ■ Assess and treat mother and her husband for possible gonorrhea E8.
■ Red umbilicus or skin around it.	**LOCAL UMBILICAL INFECTION**	■ Teach mother to treat umbilical infection K13. ■ If no improvement in 2 days, or if worse, refer urgently to hospital.
■ Less than 10 pustules	**LOCAL SKIN INFECTION**	■ Teach mother to treat skin infection K13. ■ Follow up in 2 days. ■ If no improvement of pustules in 2 days or more. refer urgently to hospital.

NEXT: If danger signs

IF DANGER SIGNS

SIGNS	CLASSIFY	TREAT AND ADVISE
Any of the following signs: ■ Fast breathing (more than 60 breaths per minute). ■ Slow breathing (less than 30 breaths per minute). ■ Severe chest in-drawing. ■ Grunting. ■ Convulsions. ■ Floppy or stiff. ■ Fever (temperature more than38 °C) ■ Temperature less than 35 °C or not rising after rewarming. ■ Umbilicus draining pus or umbilical redness and swelling extending to Skin . ■ More than 10 skin pustules. or bullae, or swelling, redness, hardness of skin. ■ Bleeding from stump or cut. ■ Pallor.	**POSSIBLE SERIOUS ILLNESS**	■ Give first dose of 2 IM antibiotics K12. ■ **Refer baby urgently to hospital** K14. **In addition:** ■ Re-warm and keep warm during referral K9. ■ Treat local umbilical infection before referral K13. ■ Treat skin infection before referral K13. ■ Stop the bleeding.

NEXT: If swelling, bruises or malformation

IF SWELLING, BRUISES OR MALFORMATION

SIGNS	CLASSIFY	TREAT AND ADVISE
■ Bruises, swelling on buttocks. ■ Swollen bed -- bump on one or both sides. ■ Abnormal position of legs (after breech presentation). ■ Asymmetrical arm movement, arm does not move.	**BIRTH INJURY**	■ Explain to parents that it does not hurt the baby, it will disappear in a week or two and no special treatment is needed. ■ DO NOT force legs into a different position- ■ Gently handle the limb that is not moving. do not pull.
■ Club foot. ■ Cleft palate or lip. ■ Odd looking, unusual appearance. ■ Open tissue on head, abdomen or back. ■ Hypospedias ■ Look for imperforate anus	**MALFORMATION**	■ Refer for special treatment if availbale. ■ Help mother to breastfeed. If not successful, teach her alternative feeding methods K5-K6. Plan to follow up. ■ Advise on surgical correction at age of several months. ■ Refer for special evaluation. ■ Cover with sterile tissues soaked with sterile saline solution before referral. ■ Refer for special treatment if available.
■ Other abnormal appearance.	**SEVERE MALFORMATION**	■ Manage according to national guidelines.

NEXT: Assess the mother's breasts if complaining of nipple or breast pain

ASSESS THE MOTHER'S BREASTS IF COMPLAINING OF NIPPLE OR BREAST PAIN

ASK, CHECK RECORD	LOOK, LISTEN, FEEL
■ How do your breasts feel?	■ Look at the nipple for fissure ■ Look at the breasts for: → swelling → shininess → redness. ■ Feel gently for painful part of the breast. ■ Measure temperature. ■ Observe a breastfeed if not yet done J4.

SIGNS	CLASSIFY	TREAT AND ADVISE
■ No swelling, redness or tenderness. ■ Normal body temperature. ■ Nipple not sore and no fissure visible. ■ Baby well attached.	**BREASTS HEALTHY**	■ Reassure the mother.
■ Nipple sore or fissured. ■ Baby not well attached.	**NIPPLE SORENESS OR FISSURE**	■ Encourage the mother to continue breastfeeding. ■ Teach correct positioning and attachment K3. ■ Reassess after 2 feeds (or 1 day). If not better, teach the mother how to express breast milk from the affected breast and feed baby by cup, and continue breastfeeding on the healthy side.
■ Both breasts are swollen, shiny and patchy red. ■ Temperature less than38 °C. ■ Baby not well attached. ■ Not yet breastfeeding.	**BREAST ENGORGEMENT**	■ Encourage the mother to continue breastfeeding. ■ Teach correct positioning and attachement K3. ■ Advise to feed more frequently. ■ Reassess after 2 feeds (1 day). If not better, teach mother how to express enough breast milk before the feed to relieve discomfort K5.
■ Part of breast is painful, swollen and red. ■ Temperature more than38 °C ■ Feels ill.	**MASTITIS**	■ Encourage mother to continue breastfeeding. ■ Teach correct positioning and attachment K3. ■ Give cloxacillin for 10 days F5. ■ Reassess in 2 days. If no improvement or worse, refer to hospital. ■ If mother is HIV+ let her breastfeed on the healthy breast. Express milk from the affected breast and discard until no fever K5. ■ If severe pain, give paracetamol F4.

NEXT: **Return to J2 and complete the classification, then go to J10.**

CARE OF THE NEWBORN

Use this chart for care of all babies until discharge.

CARE AND MONITORING	RESPOND TO ABNORMAL FINDINGS
■ Ensure the room is warm (not less than 25 C and no draught). ■ Keep the baby in the room with the mother, in her bed or within easy reach. ■ Let the mother and baby sleep under a bednet.	■ If the baby is in a cot, ensure baby is dressed or wrapped and covered by a blanket. ■ Cover the head with a hat.
■ Support exclusive breastfeeding on demand day and night. ■ Ask the mother to alert you if breastfeeding difficulty. ■ Assess breastfeeding in every baby before planning for discharge. **DO NOT** discharge if baby **is not yet feeding well.**	■ If mother reports breastfeeding difficulty. assess breastfeeding and help the mother with positioning and attachment J3.
■ Teach the mother how to care for the baby. → Keep the baby warm K9. → Give cord care K10. → Ensure hygiene K10. **DO NOT** expose the baby in direct sun. **DO NOT** put the baby on any cold surface. **DO NOT** bath the baby before 6 hours.	■ If the mother is unable to take care of the baby. provide care or teach the companion K3-K10. ■ Wash hands before and after handling the baby.
■ Ask the mother and companion to watch the baby and alert you if → Feet cold. → Breathing difficulty: grunting, fast or slow breathing, chest in-drawing. → Any bleeding.	■ If feet are cold: → Teach the mother to put the baby skin-to-skin K3. → Reassess in 1 hour; if feet still cold, measure temperature and re-warm the baby K9. ■ If bleeding from cord. Check if tie is loose and retie the cord. ■ If other bleeding, assess the baby immediately J2-J7. ■ If breathing difficulty or mother reports any other abnormality, examine the baby as on J2-J7.
■ Give prescribed treatments according to the schedule K12.	
■ Examine every baby before planning to discharge mother and baby J2-J9. **DO NOT** discharge before baby is 12 hours old.	

NEXT: Additional care of a small baby (or twin)

ADDITIONAL CARE OF A SMALL BABY (OR TWIN)

Use this chart for additional care of a small baby: preterm, 1-2 months early or weighing 1500 less than 2500g. Refer to hospital a very small baby: more than2 months early, weighing less than1500g

CARE AND MONITORING	RESPONSE TO ABNORMAL FINDINGS
■ Plan to keep the small baby longer before discharging. ■ Allow visits to the mother and baby.	
■ Give special support for breastfeeding the small baby (or twins) K4 : → Encourage the mother to breastfeed every 2-3 hours. → Assess breastfeeding daily: attachment, suckling, duration and frequency of feeds, and baby satisfaction with the feed J4 K6. → If alternative feeding method is used, assess the total daily amount of milk given. Weigh daily and assess weight gain K7.	■ If the small baby is not suckling effectively and does not have other danger signs, consider alternative feeding methods K5-K6 . → Teach the mother how to hand express breast milk directly into the baby's mouth K5. → Teach the mother to express breast milk and cup feed the baby K5-K6. → Determine appropriate amount for daily feeds by age K6 . ■ If feeding difficulty persists for 3 days, or weight loss greater than 10% birth weight and no other problems, refer for breastfeeding counselling and management.
■ Ensure additional warmth for the small baby K9. → Ensure the room is very warm (25°-28° C). → Teach the mother how to keep the small baby warm in skin-to-skin contact → Provide extra blankets for mother and baby. ■ Ensure hygiene K10 . **DO NOT** bath the small baby. Wash as needed.	
■ Assess the small baby daily: → Measure temperature. → Assess breathing (baby must be quiet, not crying):: listen for grunting: count breaths per minute, repeat the count if more than 60 or less than 30; look for chest in-drawing. → Look for jaundice (first 10 days of life): first 24 hours on the abdomen, then on palms and soles.	■ If difficult to keep body temperature within the normal range (36.5°C to 37.5°C): → Keep the baby in skin-to-skin contact with the mother as much as possible → If body temperature below 36.5 °C persists for 2 hours despite skin-to-skin contact with mother, assess the baby J2-J8. ■ If breathing difficulty, assess the baby J2-J8. ■ If jaundice, refer the baby for phototherapy ■ If any maternal concern, assess the baby and respond to the mother J2-J8.
■ Plan to discharge when: → Breastfeeding well. → Gaining weight adequately on 3 consecutive days. → Body temperature between 36.5° and 37.5°C on 3 consecutive days. → Mother able and confident in caring for the baby. → No maternal concerns. ■ Assess the baby for discharge.	■ If the mother and baby are not able to stay, ensure daily (home) visits or send to hospital.

ASSESS REPLACEMENT FEEDING

If mother chose replacement feeding assess the feeding in every baby as part of the examination.
Advise the mother on how to relieve engorgement K8 .If mother is complaining of breast pain, also assess the mother's breasts J9.

ASK, CHECK RECORD	LOOK, LISTEN, FEEL
Ask the mother ■ What are you feeding the baby? ■ How are you feeding your baby? ■ Has your baby fed in the previous hour? ■ Is there any difficulty? ■ How much milk is baby taking per feed? ■ Is your baby satisfied with the feed? ■ Have you fed your baby any other foods or drinks? ■ Do you have any concerns? **If baby more than one day old:** ■ How many times has your baby fed in 24 hours? ■ How much milk is baby taking per day? ■ How do your breasts feel?	**Observe a feed** ■ If the baby has not fed in the previous hour, ask the mother to feed the baby and observe feeding for about 5 minutes. Ask her to prepare the feed. **Look** ■ Is she holding the cup to the baby's lips? ■ Is the baby alert, opens eyes and mouth? ■ Is the baby sucking and swallowing the milk effectively, spilling little? If mother has fed in the last hour, ask her to tell you when her baby is willing to feed again.

SIGNS	CLASSIFY	TREAT AND ADVISE
■ Sucking and swallowing adequate amount of milk, spilling little. ■ Feeding 8 times in 24 hours on demand day and night.	**FEEDING WELL**	■ Encourage the mother to continue feeding by cup on demand K6.
■ Not yet fed (first 6 hours of life). ■ Not fed by cup. ■ Not sucking and swallowing effectively, spilling. ■ Not feeding adequate amount per day. ■ Feeding less than 8 times per 24 hours. ■ Receiving other foods or drinks. ■ Several days old and inadequate weight gain.	**FEEDING DIFFICULTY**	■ Teach the mother replacement feeding K3. ■ Teach the mother cup feeding K6 ■ Advise to feed more frequently, on demand, day and night. ■ Advise the mother to stop feeding the baby other foods or drinks or by bottle. ■ Reassess at the next feed or follow-up visit in 2 days.
■ Not sucking (after 6 hours of age). ■ Stopped feeding.	**NOT ABLE TO FEED**	■ **Refer baby urgently to hospital K14.**

BREASTFEEDING, CARE, PREVENTIVE MEASURES AND TREATMENT FOR THE NEWBORN

K2 COUNSEL ON BREASTFEEDING (1)
Counsel on importance exclusive breast feeding
Help the mother to initiate breastfeeding

K3 COUNSEL ON BREASTFEEDING (2)
Support exclusive breastfeeding
Teach correct positioning and attachment for breastfeeding

K8 OTHER BREASTFEEDING SUPPORT
Give special support to the mother who is not yet breastfeeding
Advise the mother who is not breastfeeding at all on how to relieve engorgement
if the baby does not have a mother

K9 ENSURE WARMTH FOR THE BABY
Keep the baby warm
Keep a small baby warm
Rewarm the bay skin-to-skin

K14 ADVISE WHEN TO RETURN WITH THE BABY
Routine visits
Follow-up visits
Advise the mother to seek care for the baby
Refer baby urgently to hospital

K4 COUNSEL ON BREASTFEEDING (3)
Give special support to breastfeed the small baby (preterm and/or low birth weigh)
Give special support to breastfeed twins

K5 ALTERNATIVE FEEDING METHODS (1)
Express breast milk
Hand express breast milk directly into the baby's mouth

K10 OTHER BABY CARE
Cord care
Sleeping
Hygiene

K11 NEWBORN RESUSCITATION
Keep the baby warm
Open the airway
if still not breathing, ventilate
if breathing or crying stop ventilating
if not breathing or gasping at all after 20 minutes of ventilation

- This section has details on breastfeeding, care of the baby. treatments, immunization, routine and follow-up visits and urgent referral to hospital.
- General principles are found in the section on good care A1-A6.
- If mother HIV-Positive, see also G2.

K6 ALTERNATIVE FEEDING METHODS (2)
Cup feeding expressed breast milk
Quantity to feed by cup
Signs that baby is reciving adequate amount of milk.

K7 WEIGH AND ASSESS WEIGHT GAIN
Weigh baby in the first month of life
Assess weight gain
Scale maintenance

K12 TREAT AND IMMUNIZE THE BABY (1)
Treat the baby
Give 2 IM antibiotics (first week of life)
Give IM benzathine penidllin to baby (single dose) if mother tested RPR. Positive
Give IM antibiotic for possible gonococcal eye intection (single dose)

K13 TREAT AND IMMUNIZE THE BABY (2)
Treat local infection
Give isoniarid (INH) prophylaxis to newborn
Immuntre the newborn

COUNSEL ON BREASTFEEDING

Counsel on importance of exclusive breastfeeding during pregnancy and after birth

INCLUDE HUSBAND OR OTHER FAMILY MEMBERS IF POSSIBLE

Explain to the mother that:

- Breast milk contains exactly the nutrients a baby needs
  - → is easily digested and efficiently used by the baby's body
  - → protects a baby against infection.
- Babies should start breastfeeding within 1 hour of birth. They should not have any other food or drink before they start to breastfeed.
- Babies should be exclusively breastfeed for the first 6 months of life.

- **Breastfeeding**
  - → helps baby's development and mother/baby attachment
  - → can help delay a new pregnancy (see D27 for breastfeeding and family planning).

For counselling if mother HIV positve, refer to PPTCT M10.

Help the mother to initiate breastfeeding within 1 hour, when baby is ready

- After birth, let the baby rest comfortably on the mother's chest in skin-to-skin contact.
- Tell the mother to help the baby to her breast when the baby seems to be ready, usually within the first hour. signs of readiness to breastfeed are:
  - → baby looking around/moving
  - → mouth open
  - → searching.
- Check that position and attachment are correct at the first feed. Offer to help the mother at any time K3.
- Let the baby release the breast by her/himself, then offer the second breast.
- If the baby does not feed in 1 hour, examine the baby J2-J9 If healthy, leave the baby with the mother to try later. Assess in 3 hours, or earlier if the baby is small J4.
- If the mother is ill and unable to breastfeed, help her to express breast milk and feed the baby by cup K6. On day 1 express in a spoon and feed by spoon.
- If mother cannot breastfeed at all, use one of the following options:
  - → donated heat treated breast milk.
  - → If not available, then commercial infant formula.
  - → If not available, then home-made formula from modified animal milk .

Support exclusive breastfeeding

- Keep the mother and baby together in bed or within easy reach. DO NOT separate them.
- Encourage breastfeeding on demand, day and night, as long as the baby wants.
  - → A baby needs to feed day and night, 8 or more times in 24 hours from birth. Only on the first day may a full-term baby sleep many hours after a good feed.
  - → A small baby should be encouraged to feed, day and night, at least 8 times in 24 hours from birth.
- Help the mother whenever she wants, and especially if she is a first time or adolescent mother.
- Let baby release the breast, then offer the second breast.
- If mother must be absent, let her express breast milk and let some body else feed the expressed breast milk to the baby by cup.

DO NOT force the baby to take the breast.
DO NOT interrupt feed before baby wants.
DO NOT give any other feeds or water.
DO NOT use artificial teats or pacifiers.

- Advise the mother on medication and breastfeeding
  - → Most drugs given to the mother in this guide are safe and the baby can be breastfed.
  - → If mother is taking cotrimoxazole or fansidar, monitor baby for jaundice.

Teach correct positioning and attachment for breastfeeding

- Show the mother how to hold her baby. She should:
  - → make sure the baby's head and body are in a straight line
  - → make sure the baby is facing the breast, the baby's nose is opposite her nipple
  - → hold the baby's body close to her body
  - → support the baby's whole body, not just the neck and shoulders
- Show the mother how to help her baby to attach. She should:
  - → touch her baby's lips with her nipple
  - → wait until her baby's mouth is opened wide
  - → move her baby quickly onto her breast, aiming the infant's lower lip well below the nipple.
- Look for sign of good attachment:
  - → more of areola visible above the baby's mouth
  - → mouth wide open
  - → lower lip turned outwards
  - → baby's chin touching breast
- Look for signs of effective suckling (that is, slow, deep sucks, sometimes pausing).
- If the attachment or suckling is not good, try again. Then reassess.
- If breast engorgement, express a small amount of breast milk before starting breastfeeding to soften nipple area so that it is easier for the baby to attach.

Teach the mother replacement feeding

- Ask the mother what kind of replacement feeding she chose.
- For the first few feeds after delivery, prepare the formula for the mother, then teach her how to prepare the formula and feed the baby by cup:
  - → Wash hands with water and soap
  - → Boil the water for few minutes
  - → Clean the cup thoroughly with water, soap and, if possible, boil or pour boiled water in it
  - → Decide how much milk the baby needs from the instructions
  - → Measure the milk and water and mix them
  - → Teach the mother how to feed the baby by cup
  - → Let the mother feed the baby 8 times a day (in the first month). Teach her to be flexible and respond to the baby's demands
  - → If the baby does not finish the feed within 1 hour of preparation, give it to an older child or add to cooking. DO NOT give the milk to the baby for the next feed
  - → Wash the utensils with water and soap soon after feeding the baby
  - → Make a new feed every time.
- Give her written instructions on safe preparation of formula.
- Explain the risks of replacement feeding and how to avoid them.
- Advise when to seek care.
- Advise about the follow-up visit.

Explain the risks of replacement feeding

- Her baby may get diarrhoea if:
  - → hands, water, or utensils are not clean
  - → the milk stands out too long.
- Her baby may not grow well if:
  - → s/he receives too little formula each feed or too few feeds
  - → the milk is too watery
  - → s/he has diarrhoea.

Follow-up for replacement feeding

- Ensure regular follow-up visits for growth monitoring.
- Ensure the support to provide safe replacement feeding.
- Advise the mother to return if:
  - → the baby is feeding less than 6 times, or is taking smaller quantities
  - → the baby has diarrhoea
  - → there are other danger signs.

COUNSEL ON BREASTFEEDING

Give special support to breastfeed the small baby (preterm and/ or low birth weight)

COUNSEL THE MOTHER:

- Reasssure the mother that she can breastfeed her small baby and she has enough milk.
- Explain that her milk is the best food for such a small baby. Feeding for her/him is even more important than for a big baby.
- Explain how the milk's appearance changes: milk in the first days is thick and yellow, then it becomes thinner and whiter. Both are good for the baby.
- A small baby does not feed as well as a big baby in the first days:
  - → may tire easily and suck weakly at first
  - → may suckle for shorter periods before resting
  - → may fall asleep during feeding
  - → may have long pauses between suckling and may feed longer
  - → does not always wake up for feeds.
- Explain that breastfeeding will become easier if the baby suckles and stimulates the breast her/himself and when the baby becomes bigger.
- Encourage skin-to-skin contact since it makes breastfeeding easier.

HELP THE MOTHER:

- Initiate breastfeeding within 1 hour of birth.
- Feed the baby every 2-3 hours. Wake the baby for feeding, even if she/he does not wake up alone, 2 hours after the last feed.
- Always start the feed with breastfeeding before offering a cup. If necessary, improve the milk flow (let the mother express a little breast milk before attaching the baby to the breast).
- Keep the baby longer at the breast. Allow long pauses or long, slow feed. Do not interrupt feed if the baby is still trying.
- If the baby is not yet suckling well and long enough, do whaterver works better in your setting:
  - → Let the mother express breast milk into baby's mouth K5
  - → Let the mother express breast milk and feed baby by cup K6 On the first day express breast milk into, and feed colostrum by spoon.
- Teach the mother to observe swallowing if giving expressed breast milk.
- Weigh the baby daily (if accurate and precise scales available), record and assess weight gain K7

Give special support to breastfeed twins

COUNSEL THE MOTHER:

- Reassure the mother that she has enough breast milk for two babies.
- Encourage her that twins may take longer to establish breastfeeding since they are frequently born preterm and with low birth weight.

HELP THE MOTHER:

- Start feeding one baby at a time until breastfeeding is well established.
- Help the mother find the best method to feed the twins:
  - → If one is weaker, encourage her to make sure that the weaker twin gets enough milk.
  - → If necessary, she can express milk for her/him and feed her/him by cup after initial breastfeeding.
  - → Daily alternate the side each baby is offered.

ALTERNATIVE FEEDING METHODS

Express breast milk

- The mother needs clean containers to collect and store the milk. A wide necked jug, jar, bowl or cup can be used.
- Once expressed, the milk should be stored with a well-fitting lid or cover-
- Teach the mother to express breast milk:
  - To provide milk for the baby when she is away. To feed the baby if the baby is small and too weak to suckle
  - To relieve engorgement and to help baby to attach
  - To drain the breast when she has severe mastitis or abscesses.
- Teach the mother to express her milk by herself. DO NOT do it for her.
- Teach her how to:
  - → Wash her hands thoroughly.
  - → Sit or stand comfortably and hold a clean container underneath her breast.
  - → Put her first finger and thumb on either side of the areola, behind the nipple.
  - → Press slightly inwards towards the breast between her finger and thumb.
  - → Express one side until the milk flow slows. Then express the other side.
  - → Continue alternating sides for at least 20-30 minutes.
- If milk does not flow well:
  - → Apply warm compresses.
  - → Have someone massage her back and neck before expressing.
  - → Teach the mother breast and nipple massage.
  - → Feed the baby by cup immediately. If not, store expressed milk in a cool, clean and safe place.
- If necessary, repeat the procedure to express breast milk at least 8 times in 24 hours. Express as much as the baby would take or more, every 3 hours.
- When not breastfeeding at all, express just a little to relieve pain K5.
- If mother is very ill, help her to express or do it for her.

Hand express breast milk directly into the baby's mouth

- Teach the mother to express breast milk.
- Hold the baby in skin-to-skin contact, the mouth close to the nipple.
- Express the breast until some drops of breast milk appear on the nipple.
- Wait until the baby is alert and opens mouth and eyes, or stimulate the baby lightly to awaken her/him.
- Let the baby smell and lick the nipple, and attempt to suck.
- Let some breast milk fall into the baby's mouth.
- Wait until the baby swallows before expressing more drops of breast milk.
- After some time, when the baby has had enough, she/he will close her/his mouth and take no more breast milk.
- Ask the mother to repeat this process every 1-2 hours if the baby is very small (or every 2-3 hours if the baby is not very small).
- Be flexible at each feed, but make sure the intake is adequate by checking daily weight gain.

ATLERNATIVE FEEDING METHODS

Cup feeding expressed breast milk

- Teach the mother to feed the baby with a cup. Do not feed the baby yourself. The mother should:
- Measure the quantity of milk in the cup
- Hold the baby sitting semi-upright on her lap
- Hold the cup of milk to the baby's lips:
  - →rest cup lightly on lower lip
  - →touch edge of cup to outer part of upper lip
  - →tip cup so that milk just reaches the baby's lips
  - →but do not pour the milk into the baby's mouth.
- Baby becomes alert, opens mouth and eyes, and starts to feed.
- The baby will suck the milk, spilling some.
- Small bebies will start to take milk into their mouth using the tongue.
- Baby swallows the milk.
- Baby finishes feeding when mouth closes or when not interested in taking more.
- If the baby does not take the calculated amount:
  - →Feed for a longer time or feed more often
  - →Teach the mother to measure the bay's intake over 24 hours, not just at each feed.
- If mother does not express enough milk in the first few days, or if the mother cannot breastfeed at all,use one of the following feeding options:
  - → donated heat-treated breast milk
  - → home-made or commercial formula.
- Feed the baby by cup if the mother is not available to do so.
- Baby is cup feeding well if required amount of milk is swallowed, spilling little, and weight gain is maintained.

Quantity to feed by cup

- Start with 80 ml/kg body weight per day for day 1. Increase total volume by 10-20 ml/kg per day, until baby takes 150 ml/kg/day. See table below.
- Divide total into 8 feeds. Give every 2-3 hours to a small size or ill baby.
- Check the baby's 24 hour intake. Size of individual feeds may vary.
- Continue until baby takes the required quantity.
- Wash the cup with water and soap after each feed.

APPROXIMATE QUANITITY TO FEED BY CUP (IN ML) EVERY 2-3 HOURS FROM BIRTH (BY WEIGHT

Weight (kg)	Day0	1	2	3	4	5	6	7
1.5-1.9	15ml	17ml	19ml	21ml	23ml	25ml	27ml	27+ml
2.0-2.4	20ml	22ml	25ml	27ml	30ml	32ml	35ml	35+ml
2.5+	25ml	28ml	30ml	35ml	35ml	40+ml	45+ml	50+ml

Signs that baby is receiving adequate amount of milk

- Baby is satisfied with the feed.
- Weight loss is less than 10% in the first week of life.
- Baby gains at least 160 g in the following weeks or a minimum 300 g in the first month.
- Baby wets every day as frequently as baby is feeding.
- Baby's stool is changing from dark to light brown or yellow by day 3.

WEIGH AND ASSESS WEIGHT GAIN

Weigh baby in the first month of life

WEIGH THE BABY

- Monthly if birth weight normal and breastfeeding well. Every 2 weeks if replacement feeding or treatment with isoniazid.
- When the baby is brought for examination because not feeding well, or ill.

WEIGH THE SMALL BABY

- Every day until 3 consecutive times gaining weight (at least 15 g/day).
- Weekly until 4-6 weeks of age (reached term).

Assess weight gain

Use this table for guidance when assessing weight gain in the first month of life

Age	Acceptable weight loss/ gain in the first month of life
1 week	Loss up to 10%
2-4 weeks	Gain at least 160 g per week (at least 15 g/day)
1 month	Gain at least 300 g in the first month

If weighing daily with a precise and accurate scale	
First week	**No weight loss or total less than 10%**
Afterward	**daily gain in small babies at least 20 g**

Scale maintenance

Daily/weekly weighing requires precise and accurate scale (10 g increment):

- → Calibrate it daily according to instructions.
- → Check it for accuracy according to instructions.

Simple spring scales are not precise enough for daily/weekly weighing.

OTHER BREASTFEEDING SUPPORT

Give special support to the mother who is not yet breastfeeding

(Mother or baby ill, or baby too small to suckle)

- Teach the mother to express breast milk K5. Help her if necessary.
- Use the milk to feed the baby by cup.
- If mother and baby are separated, help the mother to see the baby or inform her about the baby's condition at least twice daily.
- If the baby was referred to another institution, ensure the baby gets the mother's expressed breast milk if possible.
- Encourage the mother to breastfeed when she or the baby recovers.

If the baby does not have a mother

- Give donated heat treated breast milk or home-based or commercial formula by cup.
- Teach the carer how to prepare milk and feed the baby K6.
- Follow up in 2 weeks; weigh and assess weight gain.

Advise the mother who is not breastfeeding at all on how to relieve engorgement

(Baby died or stillborn, mother chose replacement feeding)

- Breast may be uncomfortable for a while.
- Avoid stimulating the breasts.
- Support breasts with a well-fitting bra or cloth. Do not bind the breasts tightly as this may increase her discomfort.
- Apply a compress. Warmth is comfortable for some mothers, others prefer a cold compress to reduce swelling.
- Teach the mother to express enough milk to relieve discomfort. Expressing can be done a few times a day when the breasts are overfull. It does not need to be done if the mother is uncomfortable. It will be less than her baby would take and will not stimulate increased milk production.
- Relieve pain. An analgesic such as ibuprofen, or paracetamol may be used, Some women use plant products such as teas made from herbs, or plants such as raw cabbage leaves placed directly on the breast to reduce pain and swelling.
- Advise to seek care if breasts become painful, swollen, red, if she feels ill or temperature greater than 38 °C.

Pharmacological treatments to reduce milk supply are not recommended.
The above methods are considered more effective in the long term.

ENSURE WARMTH FOR THE BABY

Keep the baby warm

AT BIRTH AND WITHIN THE FIRST HOUR(S)

- Warm delivery room: for the birth of the baby the room temperature should be 25-28° C, no draught.
- Dry baby: immediately after birth, place the baby on the mother's abdomen or on a warm, clean and dry surface. Dry the whole body and hair thoroughly, with a dry cloth.
- Skin-to-skin contact: Leave the baby on the mother's abdomen (before cord cut) or chest (after cord cut) after birth for at least 2 hours. Cover the baby with a soft dry cloth.
- If the mother cannot keep the baby skin-to-skin because of complications, wrap the baby in a clean, dry, warm cloth and place in a cot. Cover with blanket Use a radiant warmer if room not warm or baby small.

SUBSEQUENTLY (FIRST DAY)

- Explain to the mother that keeping baby warm is important for the baby to remain healthy.
- Dress the baby or wrap in soft dry clean cloth. Cover the head with a cap for the first few days, especially if baby is small.
- Ensure the baby is dressed or wrapped and covered with a blanktet.
- Keep the baby within easy reach of the mother. Do not separate them (rooming-in).
- If the mother and baby must be separated, ensure baby is dressed or wrapped and covered with a blanket.
- Assess warmth every 4 hours by touching the baby's feet: if feet are cold use skin-to-skin contact, add extra blanket and reassess (see Rewarm the newborn).
- Keep the room for the mother and baby warm. If the room is not warm enough, always cover the baby with a blanket and/or use skin-to-skin contact.

AT HOME

- Explain to the mother that babies need one more layer of clothes than other children or adults.
- Keep the room or part of the room warm, especially in a cold climate.
- During the day. dress or wrap the baby.
- At night, let the baby sleep with the mother or within easy reach to facilitate breastfeeding.

Do not put the baby on any cold or wet surface.
Do not bath the baby at birth. Wait at least 6 hours before bathing.
Do not swaddle - wrap too tightly. Swaddling makes them cold.
Do not leave the baby in direct sun.

Keep a small baby warm

- The room for the baby should be warm (not less than 25° C) with no draught.
- Explain to the mother the importance of warmth for a small baby.
- After birth, encourage the mother to keep the baby in skin-to-skin contact as long as possible.
- Advise to use extra clothes, socks and a cap, blankets, to keep the baby warm or when the baby is not with the mother.
- Wash or bath a baby in a very warm room, in warm water, after bathing, dry immediately and thoroughly. Keep the baby warm after the bath. avoid bathing small babies.
- Check frequently if feet are warm. If cold, rewarm the baby (see below).
- Seek care if the baby's feet remain cold after rewarming.

Rewarm the baby skin-to-skin

- Before rewarming. remove the baby's cold clothing.
- Place the newborn skin-to-skin on the mother's chest dressed in a pre-warmed shirt open at the front, a nappy (diaper). hat and socks.
- Cover the infant on the mother's chest with her clothes and an additional (pre-warmed) blanket.
- Check the temperature every hour until normal.
- Keep the baby with the mother until the baby's body temperature is in normal range.
- If the baby is small, encourage the mother to keep the baby in skin-to-skin contact for as long as possible, day and night.
- Be sure the temperature of the room where the rewarming takes place is at least 25°C.
- If he baby's temperature is not 36.5° C or more after 2 hours of rewarning, reassess the baby J2-J7.
- If referral needed, keep the baby in skin-to-skin position/contact with the mother or other person accompanying the baby.

OTHER BABY CARE

Always wash hands before and after taking care of the baby. DO NOT share supplies with other babies.

Cord care

- Wash hands before and after cord care.
- Put nothing on the stump.
- Fold nappy (diapper) below stump.
- Keep cord stump loosely covered with clean clothes.
- If stump is soiled, wash it with clean water and soap. Dry it thoroughly with clean cloth.
- If umbilicus is red or draining pus or blood, examine the baby and manage accordingly J2-J7.
- Explain to the mother that she should seek care if the umbilicus is red or draining pus or blood.

DO NOT bandage the stump or abdomen.
DO NOT apply any substances or medicine to stump.
Avoid touching the stump unnecessarily.

Sleeping

- Use the bednet day and night for a sleeping baby.
- Let the baby sleep on her/his back or on the side.
- Keep the baby away from smoke or people smoking.
- Keep the baby, especially a small baby, away from sick children or adults.

Hygiene (washing, bathing)

AT BIRTH:

- Only remove blood or meconium.

DO NOT remove vernix.
DO NOT bathe the baby until at least 6 hours of age.

LATER AND AT HOME:

- Wash the face, neck, underarms daily.
- Wash the buttocks when soiled. Dry thoroughly.
- Bath when necessary:
  - → Ensure the room is warm, no draught
  - → Use warm water for bathing
  - → Thoroughly dry the baby. dress and cover after bath.

OTHER BABY CARE:

- Use cloth on baby's bottom to collect stool. Dispose off the stool as for woman's pads. Wash hands.

DO NOT bathe the baby before 6 hours old or if the baby is cold.
DO NOT apply anything in the baby's eyes except an antimicrobial at birth.

SMALL BABIES REQUIRE MORE CAREFUL ATTENTION:

- The room must be warmer when changing, washing, bathing and examining a small baby.

NEWBORN RESUSCITATION

Start resuscitation within 1 minute of birth if baby is not breathing or is gasping for breath.
Observe universal precautions to prevent infection A4.

Keep the baby warm

- Clamp and cut the cord if necessary.
- Transfer the baby to a dry, clean and warm surface.
- Inform the mother that the baby has difficulty initiating breathing and that you will help the baby to breathe.
- Keep the baby wrapped and under a radiant heater if possible.

Open the airway

- Position the head so it si slightly extended.
- Suction first the mouth and then the nose.
- Introduce the suction tube into the newborn's mouth 5-cm form lips and suck while withdrawing.
- Introduce the suction tube 3-cm into each nostril and suck while withdrawing until no mucus.
- Repeat each suction if necessary but no more than twice and no more than 20 seconds in total.

If still no breathing, VENTILATE:

- Place mask to cove chin, mouth, and nose.
- Form seal.
- Squeeze bag attached to the mask with 2 fingers or whole hand, according to bag size, 2 or 3 times.
- Observe rise of chest. If chest is not rising:
  - → reposition head
  - → check mask seal.
- Squeeze bag harder with whole hand.
- Once good seal and chest rising, ventilate at 40 squeezes per minute until newborn starts crying or breathing spontaneously.

If breathing or crying, stop ventilating

- Look at the chest for in-drawing.
- Count breaths per minute.
- If breathing more than 30 breaths per minute and no severe chest in-drawing:
  - → do not ventilate any more
  - → put the baby in skin-to-skin contact on mother's chest and continue care as on D19
  - → monitor every 15 minutes for breathing and warmth
  - → tell the mother that the baby will probably be well.

DO NOT leave the baby alone

If breathing less than 30 breaths per minute or Severe chest in-drawing:

- continue ventilating
- arrange for immediate referral
- explain to the mother what happened, what you are doing and why
- ventilate during referral
- record the event on the referral form and labour record.

If no breathing or gasping at all after 20 minutes of ventilation

- Stop ventilating. The baby is dead.
- Explain to the mother and give supportive care D24
- Record the event.

TREAT THE BABY

Treat the baby

- Determine appropriate drugs and dosage for the baby's weight.
- Tell the mother the reasons for giving the drug to the baby.
- Give intramuscular antibiotics in thigh- Use a new syringe and needle for each antibiotic.

Give 2 IM antibiotics (first week of life)

- Give first dose of both ampicillin and gentamicin IM in thigh before referral for possible serious illness, severe umbilical infection or severe skin infection.
- Give both ampicillin and gentamicin IM for 5 days in asymptomatic babies classified at risk of infection.
- Give intramuscular antibiotics in thigh. Use a new syringe and needle for each antibiotic.

	Ampicillin IM Dose: 50 mg per kg every 12 hours Add 2.5 ml sterile water	Gentamicin IM Dose: 5 mg per kg every 24 hours if term; 4 mg per kg every 24 hours if preterm
weight	to 500 mg vial -- 200 mg/ml	20 mg per 2 ml vial -- 10 mg/ml
1.0 -- 1.4 kg	0.35 ml	0.5 ml
1.5 -- 1.9 kg	0.5 ml	0.7 ml
2.0 -- 2.4 kg	0.6 ml	0.9 ml
2.5 -- 2.9 kg	0.75 ml	1.35 ml
3.0 -- 3.4 kg	0.85 ml	1.6 ml
3.5 -- 3.9 kg	1 ml	1.85 ml
4.0 -- 4.4 kg	1.1 ml	2.1 ml

Give IM benzathine penicillin to baby (single dose) if mother tested RPR-positive

Weight	Benzathine penicillin IM Dose: 50 000 units/kg once Add 5 ml sterile water tp vial containing 1.2 million units -- 1.2 million units/(6ml total volume) -- 200 000 units/ml
1.0 - 1.4 kg	0.35 ml
1.5 - 1.9 kg	0.5 ml
2.0 - 2.4 kg	0.6 ml
2.5 - 2.9 kg	0.75 ml
3.0 - 3.4 kg	0.85 ml
3.5 - 3.9 kg	1.0 ml
4.0 - 4.4 kg	1.1 ml

Give IM antibiotic for possible gonococcal eye infection (single dose)

Weight	Certrlacone (1st choice) Dose: 50 mg per kg once 250 mg per 5 ml vial-mg/ml	Kanamycin (2nd choice) Dose: 25 mg per kg once, max 75 mg 75 mg per 2 ml vial = 37.5 mg/ml
1.0 - 1.4 kg	1 ml	0.7 ml
1.5 - 1.9 kg	1.5 ml	1 ml
2.0 - 2.4 kg	2 ml	1.3 ml
2.5 - 2.9 kg	2.5 ml	1.7 ml
3.0 - 3.4 kg	3 ml	2 ml
3.5 - 3.9 kg	3.5 ml	2 ml
4.0 - 4.4 kg	4 ml	2 ml

Teach the mother to give treatment to the baby at home

- Explain carefully how to give the treatment. Label and package each drug separately.
- Check mother's understanding before she leaves the clinic.
- Demonstrate how to measure a dose.
- Watch the mother practice measuring a dose by herself.
- Watch the mother give the first dose to the baby.

Treat local infection

TEACH MOTHER TO TREAT LOCAL INFECTION

- Explain and show how the treatment is given.
- Watch her as she carries out the first treatment.
- Ask her to let you know if the local infection gets worse and to return to the clinic if possible.
- Treat for 5 days.

TREAT SKIN PUSTULES OR UMBILICAL INFECTION

Do the following 3 times daily:

- Wash hands with clean water and soap.
- Gently wash off pus and crusts with boiled and cooled water and soap.
- Dry the area with clean cloth.
- Paint with gentian violet.
- Wash hands.

TREAT EYE INFECTION

Do the following 6-8 times daily:

- Wash hands with clean water and soap.
- Wet clean cloth with boiled and cooled water.
- Use the wet cloth to gently wash off pus from the baby's eyes.
- Apply 1% tetracycline eye ointment in each eye 3 times daily.
- Wash hands.

REASSESS IN 2 DAYS:

- Assess the skin, umbilicus or eyes.
- If pus or redness remains or is worse, refer to hospital.
- If pus and redness have improved, tell the mother to continue treating local infection at home.

Give isoniazid (INH) prophylaxis to newborn

If the mother is diagnosed as having tuberculosis and started treatment less than 2 months before delivery:

- Give 5mg/kg isoniazid (INH) orally once a day for 6 months (1 tablet -- 200-mg).
- Delay BCG vaccination until INH treatment completed, or repeat BCG.
- Reassure the mother that it is safe to breastfeed the baby.
- Follow up the baby every 2 weeks, or according to national guidelines, to assess weight gain.

Immunize the newborn

- Give BCG, OPV-O, Hepatitis B (HB-1) vaccine in the first week of life, preferable before discharge.
- If un-immunized newborn first seen 1-4 weeks of age, give BCG only.
- Record on immunization card and child record.
- Advise when to return for next immunization.

Age	Vaccine
Birth less than 1 week	BCG OPV-O HB1
6 weeks	BCG OPV-1 HB2

Teach mother to give oral medicines at home

- Explain and show how the medicine is given.
  - → Wash hands.
  - → Demonstrate how to measure the dose on the spoon.
  - → Begin feeding the baby by cup.
  - → Give medicine by spoon before the end of the feed.
  - → Complete the feed.
- Watch her as she carries out the next treatment.
- Explain to the mother that she should watch her baby after giving a dose of medicine. If baby vomits or spills within 30 minutes, she should repeat the dose.

ADVISE WHEN TO RETURN WITH THE BABY

For maternal visits see schedule on D28.

Routine visits

	Return
Postnatal visit	Within the first week, preferably within 2-3 days
Immunization visit (If BCG, OPV-O and HB-1 given in the first week of life)	At age 6 weeks

Follow-up visits

If the problem was:	Return in
Feeding difficulty	2 days
Red umbilicus	2 days
Skin infection	2 days
Eye infection	2 days
Thrush	2 days
Mother has either:	
→ breast endorsement or	2 days
→ mastitis.	2 days
Low birth weight, and either	
→ first week of life or	2 days
→ not adequately gaining weight	2 days
Low birth weight, and either	
→ older than 1 week or	7 days
→ gaining weight adequately	7 days
Orphan baby	14 days
INH prophylaxis	14 days
Treated for possible congenital syphilis	14 days
Mother HIV-positive	14 days

Advise the mother to seek care for the baby

Use the counselling sheet to advise the mother when to seek care, or when to return, if the baby has any of these danger signs:

RETURN OR GO TO THE HOSPITAL IMMEDIATELY IF THE BABY HAS

- difficulty breathing.
- convulsions.
- fever or feels cold.
- bleeding.
- diarrhoea.
- very small, just born.
- not feeding at all.

GO TO HEALTH CENTRE AS QUICKLY AS POSSIBLE IF THE BABY HAS

- difficulty feeding.
- pus from eyes.
- skin pustules.
- yellow skin.
- a cord stump which is red or draining pus.
- feeds less than5 times in 24 hours.

Refer baby urgently to hospital

- After emergency treatment, explain the need for referral to the mother/father.
- Organize safe transportation.
- Always send the mother with the baby, if possible.
- Send referral note with the baby.
- Inform the referral centre if possible by radio or telephone.

DURING TRANSPORTATION

- Keep the baby warm by skin-to-skin contact with mother or someone else.
- Cover the baby with a blanket and cover her/his head with a cap.
- Protect the baby from direct sunshine.
- Encourage breastfeeding during the journey.
- If the baby does not breastfeed and journey is more than 3 hours, consider giving expressed breast milk by cup K8.

EQUIPMENT, SUPPLIES, DRUGS AND LABORATORY TESTS

L2 EQUIPMENT, SUPPLIES, DRUGS AND TESTS FOR ROUTINE AND EMERGENCY CARE

L3 EQUIPMENT, SUPPLIES, AND DRUGS FOR CHILDBIRTH CARE

L4 LABORATORY TEST (1)
Check urine for protein
Check haemoglobin

EQUIPMENT, SUPPLIES, DRUGS AND TESTS FOR PREGNANCY AND EMERGENCY PREGNANCY AND POSTPARTUM CARE

Warm and clean room

- Examination table or bed with clean linen
- Light source
- Heat source

Hand washing

- Clean water supply
- Soap
- Nail brush or stick
- Clean towels

Waste

- Bucket for soiled pads and swabs
- Receptacle for soiled linens
- Container for sharps disposal

Sterilization

- Instrument sterilizer
- Jar for forceps

Miscellaneous

- Wall clock
- Torch with extra batteries and bulb
- Log book
- Records
- Refrigerator

Equipment

- Blood pressure machine and stethoscope
- Body thermometer
- Fetal stethoscope
- Baby scale

Supplies

- Gloves:
  - → utility
  - → sterile or highly disinfected
  - → long sterile for manual removal of placenta
- Urinary catheter
- Syringes and needles
- IV tubing
- Suture material for tear or episiotomy repair
- Antiseptic solution (iodomphors or chlorhexidine)
- Spirit (70% alcohol)
- Swabs
- Bleach (chlorine base compound)
- Impregnated bednet
- Condoms
- Alcohol-based handrub

Tests

- Blood Glucose
- Proteinurra dip sticks
- Container for catching urine
- Malaria RDT
- Hepatitis B & Hepatitis C RDT
- Haemoglobin testing kit

Disposable delivery kit

- Plastic sheet to place under mother
- Cord ties (sterile)
- Sterile balde

Drugs

- Oxytocin
- Ergometrine
- Magnesium sulphate
- Calcium gluconate
- Diazepam
- Hydralazine
- Ampicillin
- Gentarnicin
- Metronidazole
- Benzathine penicillin
- Cloxacillin
- Amoxycillin
- Ceftriaxone
- Trimethoprim + sulfamethoxazole
- Clotrimazole vaginal pessary
- Erythromycin
- Ciprofloxacin
- Tetracycline or doxycycline
- Arthermether or quinine
- Chloroquine tablet
- Lignocaine
- Adrenaline
- Ringer lactate
- Normal saline 0.9%
- Glucose 50% solution
- Water for injection
- Paracetamol
- Gentian violet
- Iron/folic acid tablet
- Mebendazole
- Sulphadoxine-pyrimethamine
- Nevirapine (adult, infant)
- Zidovudine (AZT) (adult, infant)
- Lamivudine (3TC)

Vaccine

- Tetanus toxoid

EQUIPMENT, SUPPLIES AND DRUGS FOR CHILDBIRTH CARE

Warm and clean room

- Delivery bed: a bed that supports the woman in a semi-sitting or lying in a lateral position, with removable stirrups (only for repairing the perineum or instrumental delivery)
- Clean bed linen
- Curtains if more than one bed
- Clean surface (for alternative delivery position)
- Work surface for resuscitation fo newborn near delivery beds
- Light source
- Heat source
- Room thermometer

Hand washing

- Clean water supply
- Soap
- Nail brush or stick
- Clean towels

Waste

- Container for sharps disposal
- Receptacle for soiled linens
- Bucket for soiled pads and swabs
- Bowl and plastic bag for placenta

Sterilization

- Instrument sterilizer
- Jar for forceps

Miscellaneous

- Wal clock
- Torch with extra batteries and bulb
- Log book
- Records
- Refrigerator

Equipment

- Blood pressure machine and stethoscope
- Body thermometer
- Fetal stethoscope
- Baby scale
- Self inflating bag and mask - neonatal size
- Mucus extractor with suction tube

Delivery instruments (sterile)

- Scissors
- Needle holder
- Artery forceps or clamp
- Dissecting forceps
- Sponge forceps
- Vaginal speculum

Supplies

- Gloves:
  - →utility
  - →sterile or highly disinfected
  - →long sterile for manual removal of placenta
  - →Long plastic apron
- Urinary catheter
- Syringes and needles
- IV tubing
- Suture material for tear or episiotomy repair
- Antiseptic solution (iodophors or chlorhexidine)
- Spirit (70% alcohol)
- Swabs
- Bleach (chorine-base compound)
- Clean (plastic) sheet to place under mother
- Sanitary pads
- Clean towels for drying and wrapping the baby
- Cord ties (sterile)
- Blanket for the baby
- Baby feeding cup
- Impregnated bednet
- Alcohol-based handrub

Drugs

- Oxytocin
- Ergometrine
- Magnesium sulphate
- Calcium gluconate
- Diazepam
- Hydralazine
- Ampicillin
- Gentarnicin
- Metronidazole
- Benzathine penicillin
- Lignocaine
- Adrenaline
- Ringer lactate
- Normal saline 0.9%
- Water for injection
- Eye antimicrobial (1% silver nitrate or 2.5% povidone iodine)
- Tetracycline 1% eye ointment
- Vitamin A
- Izoniazid
- Nevirapine (adult, infant)
- Zidovudine (AZT) (adult, infant)
- Lamivudine (3TC)

Vaccine

- BCG
- OPV
- Pentavalent

Contraceptives

(see tools for family planning providers and clients)

Test

- Blood Glucose
- Proteinuria dip sticks
- Container for catching urine
- HIV testing kits (2 types)
- Haemoglobin testing kit

LABORATORY TESTS

Check urine for protein

- Label a clean container.
- Give woman the clean container and explain where she can urinate.
- Teach woman how to collect a clean-catch urine sample, Ask her to:
  - Clean vulva with water
  - Spread labia with fingers
  - Urinate freely (urine should not dribble over vulva; this will ruin sample)
  - Catch the middle part of the stream of urine in the cup. Remove container before urine stops.
- Analyse urine for protein using either dipstick or boiling method.

DIPSTICK METHOD

- Dip coated end of paper dipstick in urine sample.
- Shake off excess by tapping against side of container.
- Wait specified time (see dipstick instructions).
- Compare with colour chart on label. Colours range from yellow (negative) through yellow-green and green-blue for positive.

BOILING METHOD

- Put urine in test tube and boil top half. Boiled part may become cloudy. After boiling allow the test tube to stand. A thick precipitate at the bottom of the tube indicates protein.
- Add 2-3 drops of 2-3% acetic acid after boiling the urine (even if urine is not cloudy)
  - If the urine remains cloudy, protein is present in the urine.
  - If cloudy urine becomes clear, protein is not present.
  - If boiled urine was not cloudy to begin with, but becomes cloudy when acetic acid is added, protein is present.

Check haemoglobin

- Draw blood with syringe and needle or a sterile lancet
- Insert below instructions for method used locally.

INFORMATION AND COUNSELLING SHEETS

M2 CARE DURING PREGNANCY

Visit the health worker during pregnancy
Care for yourself during pregnancy
Routine visits to the health centre
Know the signs of labour
When to seek care on danger signs

M3 PREPARING A BIRTH AND EMERGENCY PLAN

Preparing a birth plan
Planning for delivery at home
Preparing an emergency plan
Planning for delivery at the hospital or health centre

M4 CARE FOR THE MOTHER AFTER BIRTH

Care of the mother
Family planning
Routine visits to the health centre
When to seek care for danger signs

M5 CARE AFTER AN ABORTION

Self-care
Family planning
Know these DANGER signs
Additional support

M6 CARE FOR THE BABY AFTER BIRTH

Care of the newborn
Routine visits to the health centre
When to seek care for danger signs

M7 BREASTFEEDING

Breastfeeding has many advantages for the baby and the mother
Suggestions for successful breastfeeding
Health worker support
Breastfeeding and family planning

M8 CLEAN HOME DELIVERY (1)

Delivery at home with an attendant
Instructions to mother and family for a clean and safer delivery at home

M9 CLEAN HOME DELIVERY (2)

Avoid harmful practices
Encourage helpful traditional practices
Danger signs during delivery
Routine visits to the health centre

- These individual sheets have key information for the mother, her husbands and family on care during pregnancy, preparing a birth and emergency plan, clean home deliver, care for the mother and baby after deliver, breastfeeding and care after an abortion.
- Individual sheets are used so that the woman can be given the relevant sheet at the appropriate stage of pregnancy and childbirth.

CARE DURING PREGNANCY

Visit the health worker during pregnancy

- Go to the health centre if you think you ar pregnant. It is important to begin care as early in your pregnancy as possible.
- Visit the health centre at least 4 times during your pregnancy, even if you do not have any problems. The health worker will tell you when to return
- If at any time you have any concerns about your or your baby's health, go to the health centre.
- During your visits to the health centre, the health worker will:
  - → Check your health and the progress of the pregnancy
  - → Help you make a birth plan
  - → Answer questions or concerns you may have
  - → Provide treatment for malaria and anaemia
  - → Give you a tetanus toxoid immunization
- Advise and counsel on:
  - → breastfeeding
  - → birthspacing after delivery
  - → nutrition
  - → correct and consistent condom use
  - → laboratory tests
  - → other matters related to your and your baby's health.
  - → HIV counselling and testing

Bring your home-based maternal record to every visit.

Care for yourself during pregnancy

Eat more and healthier foods, including more fruits and vegetables, beans, meat, fish, eggs, cheese, milk

Take iron tablets every day as explained by the health worker.

Rest when you can. Avoid lifting heavy objects.

Sleep under a bednet treated with insecticide.

Do not take medication unless prescribed at the health centre.

Do not drink alcohol or smoke.

HIV/AIDS if you or your companion are at risk of infection.

PREGNANCY IS A SPECIAL TIME, CARE FOR YOURSELF AND YOUR BABY.

Routine visits to the health centre

1st visit	Before 4 months
2nd visit	6-7 months
3rd visit	8 months
4th visit	9 months

Know the signs of labour

If you have any of these signs, go to the health centre as soon as you can.

If these signs continue for 12 hours or more, you need to go immediately.

- Painful contractions every 20 minutes or less.
- Bag of water breaks.
- Bloody sticky discharge.

When to seek care on danger signs

Go to the hospital or health centre immediately, day or night, DO NOT wait, if any of the following signs:

- vaginal bleeding
- convulsions/fits
- severe headaches with blurred vision
- fever and too weak to get out of bed
- severe abdominal pain
- fast or difficult breathing.

Go to the health centre **as soon as possible** if any of the following signs:

- fever
- abdominal pain
- water breaks and not in labour after 6 hours
- feel ill
- swollen fingers, face and legs.

PREPARING A BIRTH AND EMERGNCY PLAN

Preparing a birth plan

The health worker will provide you with information to help you prepare a birth plan. Based on your health condition, the health worker can make suggestions as to where it would be best to delvier- Whether in a hospital. Health centre or at home, it is important to deliver with a skilled attendant.

AT EVERY VISIT TO THE HEALTH CENTRE, REVIEW AND DISCUSS YOU BIRTH PLAN. The plan can change if complications develop.

Planning for delivery at home

- Who do you choose to be the skilled attendant for delivery?
- Who will support you during labour and delivery?
- Who will be close by for at teast 24 hours after delivery?
- Who will help you to care for your home and other children?
- Organize the following:
  - → A clean and warm room or corner of room.
  - → Home-based maternal record.
  - → A clean deilvery kit which includes soap, a stick to clean under the nails, a new razor blade to cut
  - → the baby's cord, 3 pieces of string (about 20 cm. each) to tie the cord.
  - → Clean cloths of different sizes: for the bed, for drying and wrapping the baby, for cleaning the baby's eyes, and for you to use as sanitary pads.
  - → Warm covers for you and the baby.
  - → Warm spot for the birth with a clean surface or clean cloth.
  - → Bowls: two for washing and one for the placenta.
  - → Plastic for wrapping the placenta.
  - → Buckets of clean water and some way to heat this water.
  - → For handwashing, water, soap and a towel or cloth for drying hands of the birth attendant.
  - → Fresh drinking water, fluids and food for the mother.

Preparing an emergency plan

- To plan for an emergency, consider:
  - → Where should you go?
  - → How will you get there?
  - → Will you have to pay for transport to get there? How much will it cost?
  - → What costs will you have to pay at the health centre? How will you pay for this?
  - → Can you start saving for these possible costs now?
  - → Who will go with you to the health centre?

    Who will help to care for your home and other children while you are away?

Planning for delivery at the hospital or health centre

- How will you get there? Will you have to pay for transport to get there?
- How much will it cost to deliver at the facility? How will you pay for this?
- Can you start saving for these costs now?
- Who will go with you and support you during labour and delivery?
- Who will help you while you are away and care for your home and other children?
- Bring the following:
  - → Home-based maternal record.
  - → Clean cloths of different sizes: for the bed, for drying and wrapping the baby, and for you to use as
  - → sanitary pads.
  - → Clean clothes for you and the baby.
  - → Food and water for you and the support person.

CARE FOR THE MOTHER AFTER BIRTH

Care of the mother

- Eat more and healthier foods, including more meat, fish, oils, coconut, nuts, cereals, beans. vegetables, fruits, cheese and milk.
- Take iron tablets as explained by the health worker.
- Rest when you can.
- Drink plenty of clean, safe water.
- Sleep under a bednet treated with insecticide.
- Do not take medication unless prescribed at the health centre.
- Do not drink alcohol or smoke.
- Wash all over daily, particularly the perineum.
- Change pad every 4 to 6 hours. Wash pad or dispose it off safely.

Family planning

- You can become pregnant within several weeks after delivery if you have sexual relations and are not breastfeeding exclusively.
- Talk to the health worker about choosing a family planning method which best meets you and your husband's needs.

Routine visits to the health centre

First week after birth:

6 weeks after birth:

When to seek care for danger signs

Go to hospital or health centre **immediately, day or night, DO NOT** wait, if any of the following signs:

Vaginal bleeding has increased.
Fits.
Fast or difficult breathing.
Fever and too weak to get out of bed.
Severe headaches with blurred vision.

Go to health centre as soon as possible if any of the following signs:

Swollen, red or tender breasts or nipples.
Problems urinating, or leaking.
Increased pain or infection in the perineum.
Infection in the area of the wound.
Smelly vaginal discharge.

CARE AFTER AN ABORTION

Self-care

- Rest for a few days, especially if you feel tired.
- Change pads every 4 to 6 hours. Wash used pad or dispose of it safely. Wash perineum.
- Do not have sexual intercourse until bleeding stops.
- You and your husband should use a condom correctly in every act sexual intercourse if at risk of STI or HIV.
- Return to the health worker as indicated.

Family planning

- Remember you can become pregnant as soon as you have sexual realtions. Use a family planning method to prevent an unwanted pregnancy.
- Talk to the health worker about choosing a family planning method which best meets your and your partner's needs.

Know these danger signs

If you have any of these signs, go to the health centre immediately, day or night, DO NOT wait:

- Increased bleeding or continued bleeding for 2 days.
- Fever, feeling ill.
- Dizziness or fainting.
- Abdominal pain.
- Backache.
- Nausea, vomiting.
- Foul-smelling vaginal discharge.

Additional support

- The health worker can help you identify persons or groups who can provide you with additional support if you should need it.

CARE FOR THE BABY AFTER BIRTH

Care of the newborn

KEEP YOUR NEWBORN CLEAN

- Wash your baby's face and neck daily. Bathe her/him when necessary. After bathing. thoroughly dry your baby and then dress and keep her/him warm.
- Wash baby's bottom when soiled and dry it thoroughly.
- Wash your hands with soap and water before and after handling your baby. Especially after touching her/his bottom.

CARE FOR THE NEWBORN'S UMBILICAL CORD

- Keep cord stump loosely covered with a clean cloth. Fold diaper and clothes below stump.
- Do not put anything on the stump.
- If stump area is soiled, wash with clean water and soap. Then dry completely with clean cloth.
- Wash your hands with soap and water before and after care.

KEEP YOUR NEWBORN WARM

- In cold climates, keep at least an area of the room warm.
- Newborns need more clothing than other children or adults.
- If cold, put a hat on the baby's head. During cold nights, cover the baby with an extra blanket.

OTHER ADVICE

Let the baby sleep on her/his back or side.

- Keep the baby away from smoke.

Routine visits to the health centre

First week after birth:

____

____

At 6 weeks:

____

____

At these visits your baby will be vaccinated. Have your baby immunized-

When to seek care for danger signs

Go to hospital or health centre immediately, day or night, DO NOT wait, if your baby has any of the following signs:

- Difficulty breathing
- Fits
- Fever
- Feels cold
- Bleeding
- Stops feeding
- Diarrhoea.

Go to the health centre as soon as possible if your baby has any of the following signs:

- Difficulty feeding.
- Feeds less than every 5 hours.
- Pus coming from the eyes.
- Irritated cord with pus or blood.
- Yellow eyes or skin.

Breastfeeding has many advantages

FOR THE BABY

- During the first 6 months of life, the baby needs nothing more than breast milk -- not water, not other milk, not cereals, not teas, not juices.
- Breast milk contains exactly the water and nutrients that a baby's body needs. It is easily digested and efficiently used by the baby's body. it helps protect against infections and allergies and helps the baby's growth and development.

FOR THE MOTHER

- Postpartum bleeding can be reduced due to uterine contractions caused by the baby's sucking.
- Breastfeeding can help delay a new pregnancy.

FOR THE FIRST 6 MONTHS OF LIFE, GIVE ONLY BREAST MILK TO YOUR BABY, DAY AND NIGHT AS OFTEN AND AS LONG AS SHE/HE WANTS.

Suggestions for successful breastfeeding

- Immediately after birth, keep your baby in the bed with you, or within easy reach.
- Start breastfeeding within 1 hour of birth.
- The baby's suck stimulates your milk production. The more the baby feeds, the more milk you will produce.
- At each feeding, let the baby feed and release your breast, and then offer your second breast. At athe next feeding. alternate and begin with the second breast.
- Give your baby the first milk (colostrum). It is nutritious and has antibodies to help keep your baby healthy.
- At night, let your baby sleep with you, within easy reach.
- While breastfeeding, you should drink plenty of clean, safe water. You should eat more and healthier foods and rest when you can.

The health worker can support you in starting and maintaining breastfeeding

- The health worker can help you to correctly position the baby and ensure she/he attaches to the breast. this will reduce breast problems for the mother.
- The health worker can show you how to express milk from your breast with your hands. If you should need to leave the baby with another caretaker for short periods, you can leave your milk and it can be given to the baby in a cup.
- The health worker can put you in contact with breastfeeding support group.

If you have aby difficulties with breastfeeding, see the health worker immediately.

Breastfeeding and family planning

- During the first 6 months after birth, if you breastfeed exclusively, day and night, and your menstruation has not returned, you are protected against another pregnancy.
- If you do not meet these requirements, or if you wish to use another family planning method while breastfeeding, discuss the different options available with the health worker.
- You can get pregnant even without having a period.

CLEAN HOME DELIVERY

Regardless of the site of delivery, it is strongly recommended that all women deliver with a skilled attendant.

For a woman who prefers to deliver at home the following recommedndations are provided for a clean home delivery to be reviewed during antenatal care visits.

Delivery at home with an attendant

- Ensure the attendant and other family members know the emergency plan and are aware of danger signs for yourself and your baby.
- Arrange for a support person to assist the attendant and to stay with you during labour and after delivery.
  - Have these supplies organized for a clean delivery: new razor blade, 3 pieces of string about 20 cm each to tie the cord, and clean cloth to cover the birth place.
  - Prepare the home and the supplies indicate for a safe birth:
    - Clean, warm birth place with fresh air and a source of light
    - Clean warm blanket to cover you
  - Clean cloths:
    - for drying and wrapping the baby
    - for cleaning the baby's eyes
    - to use as sanitary pads after birth
    - to dry your body after washing
    - for birth attendant to dry her hands.
  - Clean clothes for you to wear after delivery
  - Fresh drinking water, fluids and food for you
  - Buckets of clean water and soap for washing, for you and the skilled attendant
  - Means to heat water
  - Three bowls, two for washing and one for the placenta
  - Plastic for wrapping the placenta
  - Bucket for you to urinate in.

Instructions to mother and family for a clean and safer delivery at home

- Make sure there is a clean delivery surface for the birth of the baby.
- Ask the attendant to wash her hands before touching you or the baby. The nails of the attendant should be short and clean.
- When the baby is born, place her/him on your abdomen/chest where it is warm and clean. Dry the baby thoroughly and wipe the face with a clean cloth. then cover with a clean dry cloth.
- Cut the cord when it stops pulsating, using the disposable delivery kit, according to instructions.
- Wait for the placenta to deliver on its own.
- Make sure you and your baby are warm. Have the baby near you, dressed or wrapped and with head covered with a cap.
- Start breastfeeding when the baby shows signs of readiness, within the first hour of birth.
- Dispose of placenta ______________________________
  (describe correct, safe culturally accepted way to dispose of placenta)

DO NOT be alone for the 24 hours after delivery.

DO NOT bath the baby on the first day.

Avoid harmful practices

FOR EXAMPLE:
DO NOT use local medications to hasten labour.
DO NOT wait for waters to stop before going to health facility.
DO NOT insert any substances into the vagina during labour or after delivery.
DO NOT push on the abdomen during labour or delivery.
DO NOT pull on the cord to deliver the placenta.
DO NOT put ashes, cow dung or other substance on umbilical cord/stump.
DO NOT allow any unauthorized or untrained person to give you IV fluids at home

Encourage helpful traditional practices:

Danger signs during delivery

If you or your baby has any of these signs, go to the hospital or health centre immediately. day or night, DO NOT wait.

MOTHER
- If waters break and not in labour after 6 hours.
- Labour pains (contractions) continue for more than 12 hours.
- Heavy bleeding (soaks more than 2-3 pads in 15 minutes).
- Placenta not expelled 1 hour after birth of baby.

BABY
- Very small.
- Difficulty in breathing.
- Fits.
- Fever.
- Feels cold.
- Bleeding.
- Not able to feed.

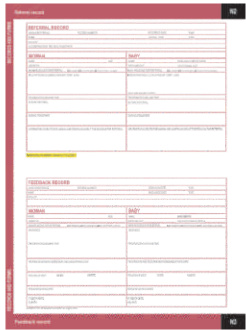
Routine visits to the health centre

- Go to the health centre or arrange a home visit by a skilled attendant as soon as possible after delivery. preferably within the first days, for the examination of you and your baby and to receive preventive measures.
- Go for a routine postpartum visit at 6 weeks.

PPTCT Centers of Pakistan*

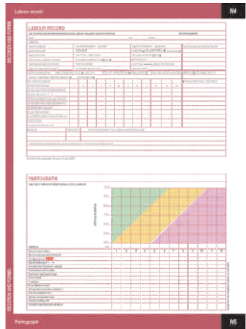
	Facility	City	Contact Number
1	MCHC, PIMS	Islamabad	051-9260450-3226
2	Services Hospital	Lahore	042-99200982
3	Lady wallingdon	Lahore	042-99201098
4	Aziz Bhatti Hospital	Gujrat	
5	Hayatabed medical Complex	Peshawar	091-921-7056
6	Civil Hospital	Karachi	021-99215740-486032
7	Qatar Hospital	Karachi	
8	Sheikh Zaid Women Hospital	Larkana	
9	Sindamon Hospital	Quetta	081-9213282 081-9213398
10	Liaquat University of Medical & Health Sciences (LUMHS)	Hyderabad	

RECORDS AND FORMS



N2 REFERRAL RECORD

N3 FEEDBACK RECORD



N4 LABOUR RECORD

N5 PARTOGRAPH

N6 PSTPARTUM RECORD

N7 INTERNATIONAL FORM OF MEDICAL CERTIFICATE OF CAUSE OF DEATH

- Records are suggested not so much for the format as for the content. The content of the records is adjusted to the content of the Guide.
- Modify national or local records to include all the relevant sections needed to record important information for the provider, the woman and her family, for the purposes of monitoring and surveillance and official reporting.
- Fill out other required records such as immunization cards for the mother and baby.

REFERRAL RECORD

WHO IS REFERRING | RECORD NUMBER | REFERRED DATE | TIME

NAME | ARRIVAL DATE | TIME

FACILITY

ACCOMPANIED BY THE HEALTH WORKER

WOMAN	BABY
NAME / AGE	NAME / DATE AND HOUR OF BIRTH
ADDRESS	BIRTH WEIGHT / GESTATIONAL AGE
MAIN REASONS FOR REFERRAL ☐ Emergency ☐ Non-emergency ☐ To accompany the baby	MAIN REASONS FOR REFERRAL ☐ Emergency ☐ Non-emergency ☐ To accompany the baby
MAJOR FINDINGS (CLINICA AND BP, TEMP., LAB.)	MAJOR FINDINGS (CLINICA AND BP, TEMP., LAB.) LAST (BREAST)FEED (TIME)
TREATMENTS GIVEN AND TIME	TREATMENTS GIVEN AND TIME
BEFORE REFERRAL	BEFORE REFERRAL
DURING TRANSPORT	DURING TRANSPORT
INFORMATION GIVEN TO THE WOMAN AND COMPANION ABOUT THE REASONS FOR REFERRAL	INFORMATION GIVEN TO THE WOMAN AND COMPANION ABOUT THE REASONS FOR REFERRAL

Revised on 13 June 2003.

FEEDBACK RECORD

WHO IS REFERRING	RECORD NUMBER	ADMISSION DATE	TIME
NAME		DISCHARGE DATE	TIME
FACILITY			

WOMAN	BABY
NAME AGE	NAME DATE OF BIRTH
ADDRESS	BIRTH WEIGHT AGE AT DISCHARGE (DAYS)
MAIN REASONS FOR REFERRAL ☐ Emergency ☐ Non-emergency ☐ To accompany the baby	MAIN REASONS FOR REFERRAL ☐ Emergency ☐ Non-emergency ☐ To accompany the baby
DIAGNOSIS TREATMENTS GIVEN AND TIME	DIAGNOSIS TREATMENTS GIVEN AND TIME
TREATMENTS AND RECOMMENDATIONS ON FURTHER CARE	TREATMENTS AND RECOMMENDATIONS ON FURTHER CARE
FOLLOW-UP VISIT WHEN WHERE	FOLLOW-UP VISIT WHEN WHERE
PREVENTIVE MEASURES	PREVENTIVE MEASURES
IF DEATH: DATE CAUSES	IF DEATH: DATE CAUSES

Sample form to be adapted. Revised on 25 August 2003.

LABOUR RECORD

USE THIS RECORD FOR MONITORING DURING LABOUR, DELIVERY AND POSTPARTUM **RECORD NUMBER**

NAME AGE PARITY

ADDRESS

DURING LABOUR	**AT OR AFTER BIRTH -- MOTHER**	**AT OR AFTER BIRTH -- NEWBORN**	**PLANNED NEWBORN TREATMENT**
ADMISSION DATE	BIRTH TIME	LIVEBIRTH ☐ STILLBIRTHFRESH ☐ MACERATED ☐	
ADMISSION TIME	OXYTOCIN -- TIME GIVEN	RESUSCITATION NO ☐ YES ☐	
TIME ACTIVE LABOUR STARTED	PLACENTA COMPLETE NO ☐ YES ☐	BIRTH WEIGHT	
TIME MEMBRANES RUPTURED	TIME DELIVERED	GEST. AGE ——— WEEKS OR PRETERM	
TIME SECOND STAGE STARTS	ESTIMATED BLOOD LOSS	SECOND BABY	

ENTRY EXAMINATION MORE THAN ONE FETUS ☐ - SPECIFY FETAL LIE: LONGITUDINAL ☐ TRANSVERSE ☐ FETAL PRESENTATION: HEAD ☐ BREECH ☐ OTHER ☐ SPECIFY

STAGE OF LABOUR NOT IN ACTIVE LABOUR ☐ ACTIVE LABOUR ☐

NOT IN ACTIVE LABOUR													PLANNED MATERNAL TREATMENT
HOURS SINCE ARRIVAL	1	2	3	4	5	6	7	8	9	10	11	12	
HOURS SINCE RUPTURED MEMBRANES													
VAGINAL BLEEDING (0 + ++)													
STRONG CONTRACTIONS IN 10 MINUTES													
FETAL HEART RATE (BEATS FOR MINUTE)													
TEMPERATURE (AXILLARY)													
PULSE (BEATS/MINUTE)													
BLOOD PRESSURE (SYSTOLIC/DIASTOLIC)													
URINE VOIDED													
CERVICAL DILATATION (CM)													

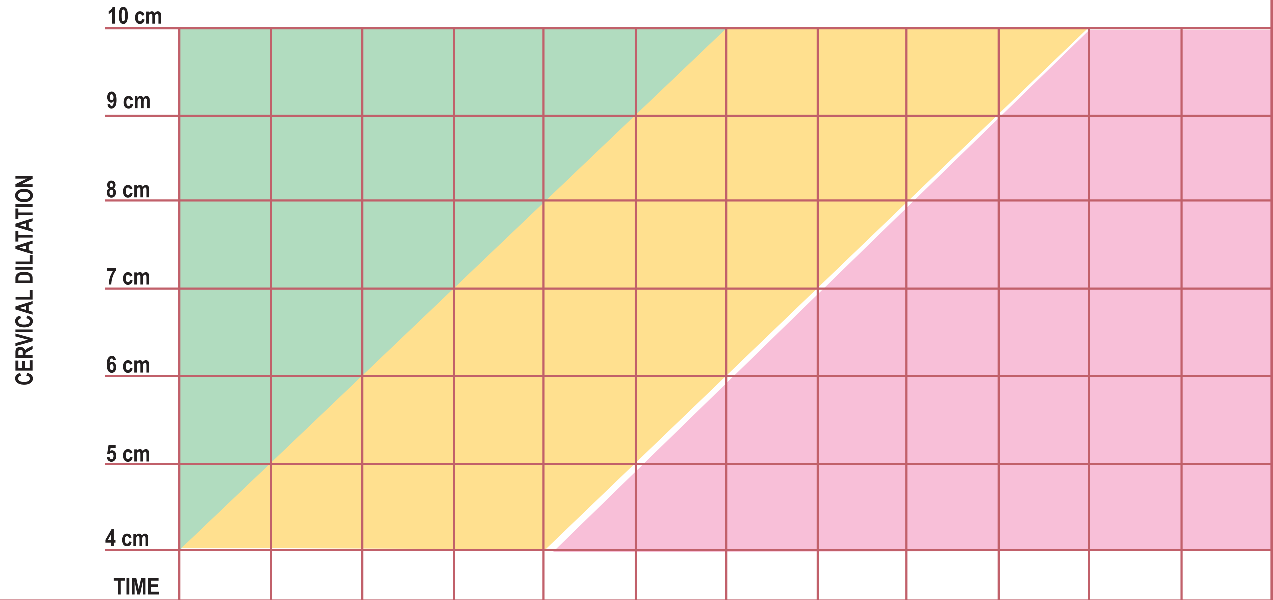
PROBLEM	TIME ONSET	TREATMENTS OTHER THAN NORMAL SUPPORTIVE CARE

IF MOTHER REFERRED DURING LABOUR OR DELIVERY, RECORD TIME AND EXPLAIN

Sample form to be adapted. Revise on 13 June 2003.

PARTOGRAPH

USE THIS FORM FOR MONITORING ACTIVE LABOUR



FINDINGS	TIME											
Hours in active labour	1	2	3	4	5	6	7	8	9	10	11	12
Hours since ruptured membranes												
Rapid assessment B3-B7												
Vaginal bleeding (0 + ++)												
Amniotic fluid (meconium stained)												
Contractions in 10 minutes												
Fetal heart rate (beats/minute)												
Urine voided												
T (axillary)												
Pulse (beasts/minute)												
Blood pressure (systolic/ diastolic)												
Cervical dilatation (cm)												
Delivery of placenta (time)												
Oxytocin (time/given)												
Problem-note onset/describe below												

Sample from to e adapted revised on 13 June 2003.

POSTPARTUM RECORD

MONITORING AFTER BIRTH	EVERY 5-15 MIN FOR 1ST HOUR				2 HR	3 HR	4 HR	8 HR	12 HR	16 HR	20 HR	24 HR
TIME												
RAPID ASSESSMENT												
BLEEDING (0 + ++)												
UTERUS HARD/ROUND?												
MATERNAL: BLOOD PRESSURE												
PULSE												
URINE VOIDED												
VULVA												
NEWBORN:BREATHING												
WARMTH												

NEWBORN ABNORMAL SIGNS (LIST)

TIME FEEDING OBSERVED ☐ FEEDING WELL ☐ DIFFICULTY

COMMENTS

PLANNED TREATMENT	TIME	TREATMENT GIVEN
MOTHER		
NEWBORN		

IF REFERRED (MOTHER OR NEWBORN), RECORD TIME AND EXPLAIN:

IF DEATH (MOTHER OR NEWBORN), DATE, TIME AND CAUSE:

Sample form to be adapted. Revise on 25 August 2003.

ADVISE AND COUNSEL

MOTHER

- ☐ Postpartum care and hygiene
- ☐ Nutrition
- ☐ Birth spacing and family planning
- ☐ Danger signs
- ☐ Follow-up visits

BABY

- ☐ Exclusive breastfeeding
- ☐ Hygiene, cord care and warmth
- ☐ Special advice if low birth weight
- ☐ Danger signs
- ☐ Follow-up visits

PREVENTIVE MEASURES

FOR MOTHER

- ☐ Iron/folate
- ☐ Vitamin A
- ☐ Mebendazole
- ☐ Sulphadoxine-pryrimethamine
- ☐ Tetanus toxoid immunization
- ☐ RPR test result and treatment
- ☐ ARV

FOR BABY

- ☐ Risk of bacterial infection and treatment
- ☐ BCG, OPV-O, Hep-O
- ☐ RPR result and treatment
- ☐ TB test result and prophylaxis
- ☐ ARV

INTERNATIONAL FORM OF MEDICAL CERTIFICATE OF CAUSE OF DEATH

	CAUSE OF DEATH	APPROXIMATE INTERVAL BETWEEN ONSET AND DEATH
I Disease or condition directly leading to death	(a).. Due to (or as consequence of) .... (b)..	....
Antecedent causes Morbid conditions, if andy, giving rise to the above cause, stating	Due to (or as consequence of) (c).. Due to (or as consequence of) (d)..	....
II Other significant conditions contributing to the death, but not related to the disease or condition causing it.	....	

* This does not mean the mode of dying. e.g. Heart failure, respiratory failure. It means the disease, injury or complication that caused death.

CONSIDER COLLECTING THE FOLLOWING INFORMATION

III

If the deceased is female, was she

- ☐ Not pregnant
- ☐ Not pregnant, but pregnant within 42 days of death
- ☐ Pregnant at the time of death
- ☐ Unknown if pregnant or was pregnant within 42 days of death

IV

If the deceased is an infant and less than one month old

What was the birth weight.................. g

If exact birth weight not know, was baby weighing:

- ☐ 2500 g or more
- ☐ less than 2500 g

Glossary and acronyms

ABORTION
Termination of pregnancy from whatever cause before the fetus is capable of extrauterine life.

ADOLESCENT
Young person 10-19 years old.

ADVISE
To give information and suggest to someone a course of action.

ANEMIA
A pathological condition in which the oxyegen-carrying capacity of red blood cells is insufficient to meet the body's needs.

ANTENATAL CARE
Care for the woman and fetus during pregnancy.

ASSESS
To consider the relevant information and make a judgement As used in this guide, to examine a woman or baby and identify signs of illness.

BABY
A very young boy or girl in the first week(s) or life.

BIRTH
Expulsion or extraction of the baby (regardless of whether the cord has been cut).

BIRTH AND EMERGENCY PLAN
A plan for safe childbirth developed in antenatal care visit which considers the woman's condition, preferences and available resources. a plan to seek care for danger signs during pregnancy, childbirth and postpartum period, for the woman and newborn.

BIRTH WEIGHT
The first of the fetus or newborn obtained after birth.

For live births, birth weight should preferably be measured within the first hour of life before significant postnatal weight loss has occurred, recorded to the degree of accuracy to which it is measured.

CHART
As used in this guide, a sheet presenting information in the form of a table.

CHILDBIRTH
Giving birth to a baby or babies and placenta.

CLASSIFY
To select a category of illness and severity based on a woman's or baby's signs and symotoms

CLINIC
As used in this guide, any first-level outpatient health facility such as a dispensary. Rural health post, health centre or outpatient department of a hospital.

COMMUNITY
As used in this guide, a group of people sometimes living in a defined geographical area, who share common culture, values and norms. Economic and social differences need to be taken into account when determining needs and establishing links within a given community.

BIRTH COMPANION
Husband, other family member of friend who accompanies the woman during labour and delivery.

CHILDBEARING AGE (WOMAN)
15-49 years. As used in this guide, also a girl 10-14 years, or woman more than 49 years, when pregnant, after abortion after delivery.

COMPLAINT
As described in this guide, the concerns or symptoms of illness or complication need to be assessed and classified in order to select treatment

CONCERN
A worry or an anxiety that the woman may have about herself or the baby(ies).

COMPLICATION
A condition occurring during pregnancy or aggravating it. This classification includes conditons such as obstructed labour or bleeding.

CONFIDENCE
A feeling of being able to succeed.

CONTRAINDICATION
A condition occurring during another disease or aggravating it. This classification includes conditions such as obstructed labour or bleeding.

COUNSELLING
As used in this guide, interaction with a woman to support her in solving actual or anticipated problems, reviewing options, and making decisions. It places emphasis on provider support for helping the woman make decisions.

DANGER SIGNS
Terminology used to explain to the woman the signs of life-threatening and other serous conditions which require immediate intervention.

EMERGENCY SIGNS
Signs of life-threatening conditions which require immediate intervention.

ESSENTIAL
Basic, indispensable, necessary.

FACILITY
A place where organized care is provided: a health post, health centre, hospital maternity or emergency unit, or ward.

FAMILY
Includes relationships based on blood, marriage, sexual partnership, and adoption and a broad range of groups whose bonds are based on feelings of trust, mutual support, and a shared destiny.

FOLLOW-UP VISIT
A return visit requested by a health worker to see if further treatment or referral is needed.

GESTATIONAL AGE
Duration of pregnancy from the last menstrual period. In this guide. Duration of pregnancy (gestational age) is expressed in 3 different ways:

Trimester	Months	Weeks
First	less than 4 months	less than 16 weeks
Second	4-6 months	16-28 weeks
Third	7-9+ months	29-40+ weeks

GRUNITING
Soft short sounds that a baby makes when breathing out. Grunting occurs when a baby is having difficulty breathing.

HOME DELIVERY
Delivery at home (with a skilled attendant, a traditional birth attendant, a family member, or by the woman herself).

HOSPITAL
As used in this guide, any health facility with inpatient beds, supplies and expertise to treat a woman or newborn with complications.

HYPOSPADIAS
A Birth defect of the urethra in the male that involves an abnormally placed urinary meatus instead of opening at the tip of the glans of the penis a hypspadic urethra opens anywhere along a line running from the tip along the underside of penis and scrotum or perineum.

IMPERFORATE ANUS
A birth defect in which rectum is male formed

INTEGRATED MANAGEMENT
A process of caring for the woman in pregnancy, during and after childbirth, and for her newborn, that includes considering all necessary elements: care to ensure they remain healthy, and prevention, detection and management of complications in the context of her environment, and according to her wishes.

LABOUR
As used in this guide, a period from the onset of regular contractions to complete delivery of the placenta.

LOW BIRTH WEIGHT BABY
Weighing less than 2500-g at birth.

MATERNITY CLINIC
Health centre with beds or a hospital where women and their newborns receive care during childbirth and delivery, and emergency first aid.

MSICHRRIAGE
Premature expulsion of a non-viable fetus from the uterus.

MONITORING
Frequently repeated measurements of vital signs or observations of danger signs.

NEWBORN
Recently born infant. In this guide used interchangeable with baby.

POSTNATAL CARE
Care for the baby after birth. For the purposes of this guide, up to two weeks.

POSTPARTUM CARE
Care for the woman provided in the postpartum period, e.g. From complete delivery of the placenta to 42 days after delivery.

PRE-REFERRAL
Before referral to a hospital.

PREGNANCY
Period from when the woman misses her menstrual period or the uterus can be felt, to the onset of labour/elective caesarian section or abortion.

PREMATURE
Before 37 completed weeks of pregnancy.

PRETERM BABY
Born early. Before 37 completed weeks of pregnancy. If number of weeks not known, 1 month early.

PRIMARY HEALTH CARE*
Essential health care accessible at a cost the country and community can afford, with methods that are practical, scientifically sound and socially acceptable. (Among the essential activities are maternal and child health care, including family planning: immunization: appropriate treatment of common diseases and injuries: and the provision of essential drugs).

PRIMARY HEALTH CARE LEVEL
Health post, health centre or maternity clinic; a hospital providing care for normal pregnancy and childbirth.

PRIORITY SIGNS
Signs of serious conditions which require interventions as soon as possible, before they become life-threatening.

QUICK CHECK
A quick check assessment of the health status of the woman or her baby at the first contact with the health provider or services in order to assess if emergency care is required.

RAPID ASSESSMENT AND MANAGEMENT
Systematic assessment of vital functions of the woman and the most severe presenting signs and symptoms; immediate initial management of the life-threatening conditions; and urgent and safe referral to the next level of care.

REASSESSMENT
As used in this guide, to examine the woman or baby again for signs of a specific illness or condition to see if she or the newborn are improving.

RECOMMENDATION
Advice. Instruction that should be followed.

REFERRAL, URGENT
As used in this guide, sending a woman or baby. Or both, for further assessment and care to a higher level of care; including arranging for transport and care during transport,preparing written information (referral form). And communicating with the referral instituion.

REFERRAL HOSPITAL
A hospital with a full range of obstetric service including surgery and blodd transfusion and care for newborns with problems.

REINFECTION
Infection with same or a different strain of HIV virus.

REPLACEMENT FEEDING
The process of feeding a baby who is not receiving breast milk with a diet that provides all the nutrients she/he needs until able to feed entirely on family foods.

SECONDARY HEALTH CARE
More specialized care offered at the most peripheral level, for example radiographic diagnostic, general surgery, care of women with complications of pregnancy and childbirth, and diagnosis and treatment of uncommon and severe diseases. (This kind of care is provided by trained staff at such institutions as district or provincial hospitals)-

SHOCK
A dangerous condition with severe weakness, lethargy, or unconsciousness, cold extremities, and fast, weak pulse. It is caused by severe bleeding. Severe infection, or obstructed labour.

SIGN
As used in this guide, physical evidence of a health problem which the health worker observes by looking, listening, feeling or measuring. Examples of signs: bleeding, convulsions, hypertension, anaemia, fast breathing.

SKILLED ATTENDANT

Refers exclusively to people with midwifery skills (for example, midwives, doctors and nurses) who have been trained to proficiency in the skills necessary to manage normal deliveries and diagnose or refer obstetric complications.

For the purposes of this guide, a person with midwifery skills who:

- has acquired the requisite qualifications to be registered and/or legally licensed to practice training and licensing requirements are country-specific;
- May practice in hospitals, clinics, health units, in the home, or in any other service setting
- Is able to do the following:
  - → give necessary care and advice to women during pregnancy and postpartum and for their newborn infants;
  - → conduct deliveries on her/his own and care for the mother and newborn; this includes provision of preventive care, and detection and appropriate referral of abnormal conditions.
  - → provide emergency care for the woman and newborn; perform selected obstetrical procedures such as manual removal of placenta and newborn resuscitation; prescribe and give drugs (im/iv) and infusions to the mother and baby as reeded, including for post-abortion care.
  - → provide health information and counselling for the woman, her family and community.

SMALL BABY

A newly born infant born preterm and/ or with low birth weight.

STABLE

Staying the same rather than getting worse.

STILLBIRTH

Birth of a baby that shows no signs of life at birth (no gasping. breathing or heart beat).

SURVEILLANCE, PERMANENT

Continuous presence and observation of a woman in labour.

SYMPTOM

As used in this guide, a health problem reported by a woman, such as pain or headache.

TERM, FULL-TERM

Word used to describe a baby born after 37 completed weeks of pregnancy.

TRIMESTER OF PREGNANCY

See Gestational age.

VERY SMALL BABY

Baby with birth weight less than 1500-g or gestational age less than 35 weeks.

WHO definitions have been used where possible but, for the purposes of this guide, have been modified where necessary to be more appropriate to clinical care (reasons for modification are given). For conditions where there are no official WHO definitions, operational terms are proposed, again only for the purposes of this guide.

ACRONYMS

AIDS Acquired immunodeficiency syndrome, caused by infection with human immunodeficiency virus (HIV)- AIDS is the final and most severe phase of hiv infection.

ANC Care for the woman and fetus during pregnancy.

ARV Antiretroviral drug, a drug to treat HIV infecition, or to prevent mother-to-child transmission of HIV.

BCG An immunization to prevent tuberculosis, give at birth.

BP Blood pressure.

BPM Beats per minute.

EDD Expected date of delivery

FHR Fetal heart rate.

Hb Haemoglobin.

HB-1 Vaccine given at birth to prevent hepatitis B.

HMBR Home-based maternal record: pregnancy, delivery and inter-pregnancy record for the woman and some information about the newborn.

HIV Human immunodeficiency virus. HIV is the virus that causes AIDS.

INH Isoniazid, a drug to treat tuberculosis.

IV Intravenous (injection or infusion)

IM Intramuscular injection.

IU International unit.

IUD Intrauterine device.

IUCD intra uterine contraceptive devise

LAM Lactation amenorrhea.

LBW Low birth weight: birth weight less than 2500 g.

LMP Last menstrual period: a date from which the date of delivery is estimated.

MNCH Maternal Newborn & Child Health

MTCT Mother-to-child transmission of HIV.

NCMNH National Committee for maternal & Newborn Health

NG Naso-gastric tube, a feeding tube put into the stomach through the nose.

ORS Oral Rehydration Solution.

OPV-O Oral polio vaccine. To prevent poliomyelitis, OPV-O is given at birth.

POG period of gestation

PNS Pakistan Nursing Society

PPTCT Preventing parent to child transmission

QC A quick check assessment of the health status of the woman or her baby at the first contact with the health provider or services in order to assess if emergency care is required.

RAM Systematic assessment of vital functions of the woman and the most severe presenting signs and symptoms; immediate initial management of the life-threatening conditions; and urgent and safe referral to the next level of care.

RPR Rapid plasma reagin, a rapid test for syphilis. it can be performed in the clinic.

STI sexually transmitted infection.

SOGP Society of Obstetricians & Gynaecologists of Pakistan

TBA A person who assists the mother during childbirth. In general, a TBA would initially acquire skills by delivering babies herself or through apprenticeship to other TBAs.

TT An immunization against tetanus

more than More than

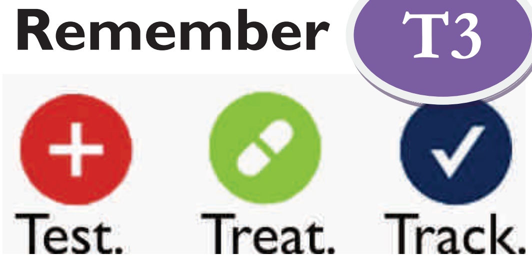
more than Equal or more than

Less than Less than

Less than Equal or less than

VCCT Voluntary Confidential Counseling and Testing

MALARIA CASE MANAGEMENT CHART



In Settings where Blood smear microscopy and RDT not available and the patient is sick child <5 yrs or patient of any age with severe/ complicated malaria

Patient with fever (temp>37.5c) or history of fever in the last 72 hours associated with headach, nausea/vomiting with no other obvious cause of fever

Suspected Malaria

Test with Microscopy or RDT

Negative result

Look for other Cause of fever

No

Refer to higher centres

Yes

Treat the Cause

Positive result

P. Vivax

Chloroquine oral for 3 days

Primaquine for 14 days Where not contraindicated

If symptoms persist after 3days repeat microscopy or RDT

Negative

Still Positive Oral Quinine for 7 days

Mixed

Artemether plus Lumefantrine (Co-Artem) for 3 days

Primaquine for 14 days Where not contraindicated

In pregnant women give Oral Quinine for 7 days

P.falc

Classify malaria

Uncomplicated Malaria

Artesunate + SP for 3 days+ (Single Dose of P.Q 0.75mg/Kg body weight)

If symptoms or parasitaemia persist after 3days repeat microscopy or RDT

Negative

Still Positive Artemether plus Lumefantrine (Co-Artem) for 3 days

Severe/ complicated

If sign/symptoms of severe malaria give pre-referral treatment with IV / IM or Suppository of Artesunate and reffer to secondry care hospital

ARTEMETHER PLUS LUMEFANTRINE

Bodyweight (kg)	Age in years	Day 1 (0hrs)	Day 1 (8 hrs after)	Day 2 (Morning)	Day 2 (Evening)	Day 3 (Morning)	Day 3 (Evening)
	HRS	0	8	24	36	48	60
5 - 14	1 - 3	1	1	1	1	1	1
15 - 24	⩾3 8	2	2	2	2	2	2
25 - 34	8 - 12	3	3	3	3	3	3
⩾ 35	**⩾ 12**	**4**	**4**	**4**	**4**	**4**	4

ARTESUNATE + SP

2.4 mg/kg body weight 12 hourly injection to be prepared in 5% sods bicarbonate and further diluted in 5ml of 5% dextrose and injected slowly and parenteral quinine is same

Weight (kg)	Artesunate 50 mg tablets			Sulfadoxine-pyrimethamine (500/25)
	Day 1	Day 2	Day 3	Day 1
5–10	1/4	1/4	1/4	1/2
>10-24	1/2	1/2	1/2	1
>24–50	1	1	1	2
> 50	2	2	2	3

QUININE (ORAL)

20mg/kg body weight followed by 10mg/kg body weight 8 hourly
The dose for oral and parenteral quinine is same

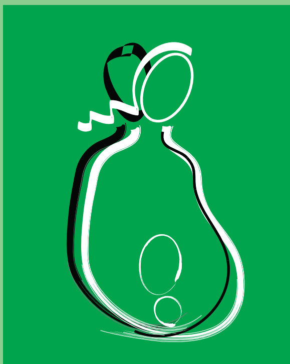
CHOLOROQUINE

Age	Day1	Day2	Day3
	Choloroquine(150mg base tablets)		
1–11 months	½	½	½
12–24 months	1	1	1
3–4 years	1½	1½	1½
5–6 years	2	2	2
7–14 years	3	3	3
15+ years	4	4	4

PRIMAQUINE

15MG TABLETS, (0.25mg base/kg wt./day – for 14 days)

Weight-kg (AGE)	Days													
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**
5-18 kg(0-4)														
19-24 kg(5-7)	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
24-24 kg(8-10)	2/4	2/4	2/4	2/4	2/4	2/4	2/4	2/4	2/4	2/4	2/4	2/4	2/4	2/4
36-50 kg(11-13)	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
50 kg(Above 14)	1	1	1	1	1	1	1	1	1	1	1	1	1	1



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