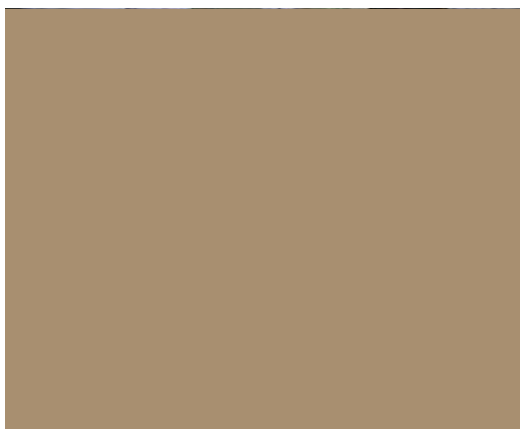
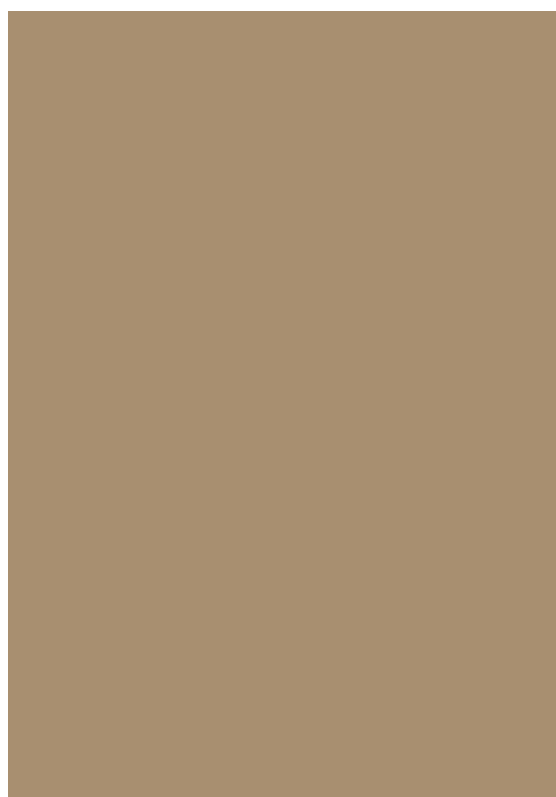


SKILLED BIRTH ATTENDANCE (SBA)



# A Handbook for Auxiliary Nurse Midwives Lady Health Visitors & Staff Nurses 2010





Maternal Health Division  
Ministry of Health and Family Welfare  
Government of India







**For CD**

**Designed & Produced by:**

MATRIX PUBLISHERS

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SKILLED BIRTH ATTENDANCE (SBA)

A Handbook for  
Auxiliary Nurse Midwives  
Lady Health Visitors & Staff Nurses  
2010





गुलाम नबी आजाद  
**Ghulam Nabi Azad**  
Union Minister  
for Health & Family Welfare



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स्वास्थ्य और परिवार कल्याण मंत्रालय  
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Government of India  
Ministry of Health & Family Welfare  
Nirman Bhawan, New Delhi - 110 108

## Health Minister's Message



Women are strong pillars of any vibrant society. Motherhood is an event of joy and celebration for every family. However, high maternal mortality during pregnancy and childbirth is a matter of great concern worldwide. Maternal mortality is a strong indicator for measuring the attention paid to the health care of the women.

The burden of maternal mortality is quite high in India at 254 deaths per 100,000 live births as per the data of Sample Registration System (SRS) for the period 2004-06. However, India is committed to meet the MDG 5 target of less than 100 deaths per 100,000 live births by the year 2015.

Gol's strategy for maternal mortality reduction focuses on building a well functioning Primary Health Care System, which can provide essential obstetric care services with a backbone of skilled birth attendant for every birth, whether it takes place in the facility or at home, which is linked to a well developed referral system with an access to emergency obstetric care for all women who experience complications.

The revised guidelines are meant for orientation and training of our ANMs/LHVs and SNs who are there at the Primary level of health care and are the first contact of care, particularly for women residing in rural areas. I hope these guidelines will help in knowledge and skill acquisition of all the service providers involved in mid-wifery services and will thus help in reduction of maternal mortality.

I compliment Maternal Health division for bringing out the guidelines along with the training tools.

New Delhi  
April 2010

**(Ghulam Nabi Azad)**



**K Sujata Rao**  
Secretary, Health & FW  
Ministry of Health & Family Welfare



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Nirman Bhawan, New Delhi - 110 108

## Preface



Government of India has a commitment under National Population Policy, NRHM/RCH to ensure universal coverage of all births with skilled attendance both in the institution and at community level and to provide access to emergency obstetric and neonatal care services for women and the new born.

In accordance with the Gol's commitment for universal skilled birth attendance, a policy decision was taken to permit ANMs/LHVs/SNs to give certain injections and undertake interventions for Basic Management of Complications which might develop while providing care during pregnancy and child birth. Accordingly, guidelines for Ante-Natal Care & Skilled Attendance at Birth by ANMs/LHVs and SNs as well as training tools were published in the year 2005.

However, based on the evidence of implementation and also due to certain technical advancements, there was a need to revise these guidelines and also the training package. The revised Guidelines for Antenatal Care and Skilled Attendance at Birth by ANMs/LHVs/SNs have been updated, which will help the trainees in skill and acquisition of knowledge in various technical interventions.

The Maternal Health Division of the Ministry based on inputs from experts, NGOs and development partners, has revised the guidelines accordingly for use by State and District program Officers, Trainers and also ANMs/LHVs/SNs who are involved in practising midwifery. It is hoped that the revised guidelines would improve the quality of SBA Training in the states and help in providing quality essential obstetric services, thereby accelerating the reduction of maternal mortality.

New Delhi  
April 2010

(K Sujatha Rao)



**P K Pradhan**  
AS & MD, NRHM  
Ministry of Health & Family Welfare



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## Foreword



NRHM has a commitment for reduction of maternal and infant mortality/morbidity so as to meet the National and Millennium Development goals. The quality of services rendered, and also handling of Basic and Comprehensive Obstetric Care services at the health facilities particularly at primary and secondary level has a bearing on reduction of maternal mortality ratio.

To achieve these objectives, steps have been taken under NRHM to appropriately strengthen and operationalise the 24X7 PHCs and designated FRUs in handling Basic and Comprehensive Obstetric Care including Care at Birth. For improvement of service delivery, it is important that the service providers particularly the ANMs/LHVs/SNs are oriented on care during pregnancy & childbirth so that the primary and secondary health facilities can effectively handle complications related to pregnancy and care of new born.

Gol has already launched the guidelines and training package for training of paramedical workers i.e., Nurses; ANMs & LHVs for developing their skills in provision of care during pregnancy and child birth. However, based on the feedback received and due to new technical advancements, there was a need to revise the guidelines and also the training package.

The training guidelines for Antenatal Care and Skilled Attendance at Birth by ANMs/LHVs/SNs have now been updated and revised. This will assist the health personnel involved in midwifery practice particularly at sub-centre and 24x7 PHCs to effectively provide the requisite quality-based services for women and newborns nearest to their place of residence.

It is expected that the trainers as well as the trainees will be benefitted in updating their knowledge and skills by using these guidelines along-with the training tools and thus help reducing the maternal mortality and morbidity by early identification and management of basic complications during pregnancy, childbirth and in post partum period.

New Delhi  
April 2010

(P K Pradhan)





**Amit Mohan Prasad**  
Joint Secretary (RCH)  
Ministry of Health & Family Welfare



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## Acknowledgement



National and international evidences indicate that reduction of maternal and infant mortality and morbidity can be accelerated if women are provided skilled care during pregnancy and child birth.

Based on these evidences, the Government of India has taken a policy decision that every birth, both institutional and domiciliary, should be attended by a skilled birth attendant. Accordingly, necessary policy decisions were taken for empowering ANMs/LHVs and SNs for handling basic obstetric care and common complications including Essential Newborn Care and Resuscitation Services. Pre-service and in-service training for these paramedical workers has already been initiated and is being implemented in the states to make them proficient in the provision of care during pregnancy and child birth.

From time to time, there is a need to update the technical knowledge and training tools. As these were first published in the year 2005, Maternal Health Division of this Ministry, with inputs from development partners like WHO, UNFPA, UNICEF and Professional Bodies like FOGSI, IAP, NNF, has now revised the first edition of the guidelines. The revised version has to be now disseminated to the states.

The second edition of the Guidelines would not have been possible without the active interest and encouragement provided by Ms K. Sujatha Rao, Secretary (H&FW) and Shri Naresh Dayal, Ex Secretary, Ministry of Health & Family Welfare. I also take this opportunity to appreciate the inputs given by development partners specially Dr. Rajesh Mehta, Dr. Sunanda Gupta and Dr. Vinod Anand of WHO- India, Dr Sonia Trikha, UNICEF-India and Dr. Dinesh Aggarwal, UNFPA. Contribution of TNAI, INC, JICA, USAID, DFID and also from states, particularly Dr. Ajeesh Desai from Gujarat and Dr. Archana Mishra from Madhya Pradesh, is also acknowledged.

I also take this opportunity to thank Dr. Bulbul Sood, Dr. Aparajita Gogoi, Ms. Medha Gandhi, Dr. Annie Mathew of CEDPA India and Dr. Manju Chhugani, Faculty, College of Nursing from Jamia Hamdard University for extending their support while the guidelines and training tools were being drafted. The contributions from FOGSI and other experts particularly Dr. Sudha Salhan & Dr. H.P. Anand from Safdarjung Hospital, Dr. Kamla Ganesh, Ex HOD & Dr. Sagar Trivedi and her team from

Lady Harding Medical College Hospital, Dr. Reva Tripathi from Maulana Azad Medical College hospital also needs special mention.

For achieving the revision of the guidelines, hard-work and untiring efforts of Dr. Himanshu Bhushan, AC(MH), Dr. Manisha Malhotra, AC(MH), Dr. Avani Pathak and Rajeev Agarwal of Maternal Health Division is highly appreciated. The inputs from RCH, Family Planning & Child Health Division helped in firming up various components of these guidelines. I hope the guidelines and the training tools will help the states in strengthening the technical interventions and in better implementation of SBA Training.

New Delhi  
April 2010

  
(Amit Mohan Prasad)



**Dr. Himanshu Bhushan**  
Assistant Commissioner  
Maternal Health Division  
Ministry of Health & Family Welfare



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## Programme Officer's Message


Gol has a commitment under NRHM/RCH to ensure universal coverage of all births with skilled attendance both in the institution and at community level and to provide access to emergency obstetric and neonatal care services for women and the new born. With this objective in mind, SBA Training for ANMs/LHVs/SNs is presently been undertaken in all the State/UTs to equip Staff Nurses (SNs) and Auxillary Mid-Wives (ANMs) for managing normal deliveries, identify complications, do basic management and then refer at the earliest to higher facilities thereby empowering them to save the life of both the mother and new born.

The earlier Guidelines in the year 2005 for Antenatal Care and Skilled Attendance at Birth by ANMs/LHVs/SNs has been revised and updated based on current scientific evidence and certain technical updates in the field. The revised Guidelines along with the Handbook provides up-to-date, comprehensive, evidence based information and defines and illustrates the skills needed to keep pregnant women, mothers and their newborns healthy, including routine and preventive care as well as early detection and management of life threatening problems. It will require effective training, logistics and supportive supervision to make skilled attendance at every birth in the country, a reality.

I hope that states will adopt the revised training package for effective implementation of the SBA training to enhance the quality. It is suggested that the training centres must be proficient and practicing the technical protocols defined and illustrated in the guideline before they take up the training batches. The first step for this should be the orientation/training of all the health professionals involved in care during pregnancy and child birth at the training centre itself. Timely nomination, Provision of essential supplies such as Partographs, mannequins, drugs and structured monitoring through Quality Assurance Cell at the State, District and Facility level should be the next step. Up-scaling SBA Training by creating more training centres either at the government health facility or through Public-Private Partnership is another important step for achieving our commitment for attending every births by skilled personnel.

I am optimistic that if all the above inputs are implemented in a coordinated manner, the time is not far away for achieving universal coverage of births with skilled attendance both in the institution and at community level. I take this opportunity to thank everyone who has contributed in framing the training package.

New Delhi  
April 2010

  
(Dr. Himanshu Bhushan)

## Abbreviations

AIDS	:	Acquired Immune Deficiency Syndrome
AMTSL	:	Active Management of the Third Stage of Labour
ANC	:	Antenatal Check-Up
ANM	:	Auxiliary Nurse Midwife
BP	:	Blood Pressure
CCT	:	Controlled Cord Traction
CHC	:	Community Health Centre
DDK	:	Disposable Delivery Kit
DH	:	District Hospital
DLHS	:	District Level Household Survey
EDD	:	Expected Date of Delivery
FHR	:	Foetal Heart Rate
FHS	:	Foetal Heart Sound
FRU	:	First Referral Unit
GoI	:	Government of India
Hb	:	Haemoglobin
HBsAg	:	Hepatitis B Surface Antigen
HCl	:	Hydrochloric Acid
HIV	:	Human Immunodeficiency Virus
HLD	:	High Level Disinfection
IFA	:	Iron Folic Acid
INJ	:	Injection
IUCD	:	Intrauterine Contraceptive Device
JSY	:	Janani Suraksha Yojana
LAM	:	Lactational Amenorrhea Method
LHV	:	Lady Health Visitor
LLIN	:	Long-Lasting Insecticidal Net
LMP	:	Last Menstrual Period
MO	:	Medical Officer
MoHFW	:	Ministry of Health and Family Welfare
MoWCD	:	Ministry of Women and Child Development
NRHM	:	National Rural Health Mission
NVBDCP	:	National Vector-Borne Disease Control Programme
P/V	:	Per Vaginum
PHC	:	Primary Health Centre
PIH	:	Pregnancy-Induced Hypertension
POC	:	Products of Conception
PPH	:	Post-Partum Haemorrhage
PROM	:	Premature Rupture of Membranes
RCH	:	Reproductive and Child Health
RDK	:	Rapid Diagnostic Kit
RPR	:	Rapid Plasma Reagin



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## Introduction

Pregnancy and childbirth are normal events in the life of a woman. Though most pregnancies result in normal birth, it is estimated that about 15% may develop complications which cannot be predicted. Some of these may be life threatening for the mother and/or her baby. The presence of skilled attendants is, therefore, crucial for the early detection and also for appropriate and timely management of such complications. The Government of India (GoI) has a commitment under its National Rural Health Mission (NRHM)/Reproductive and Child Health (RCH)-II Programme to ensure universal coverage of all births with skilled attendance, both at the institution and at the community level, and to provide access to emergency obstetric and neonatal care services for women and newborns, and thereby restrict the number of maternal and newborn deaths in the country.

Women below the age of 18 years or above 40 years have greater chances of having pregnancy related complications. Primigravidas and grand multiparas (those who have had four or more pregnancies) are at a higher risk of developing complications during pregnancy and labor. Research shows that women who have spaced their children less than 36 months apart have greater chances of delivering premature and low birth weight babies, thereby increasing risk of infant mortality. An interval of less than two years from the previous pregnancy or less than three months from the previous abortion increases the chances of the mother developing anemia. Since any pregnancy can develop complications at any stage, so timely provision of obstetric care services is extremely important for management of such cases and as such, every pregnancy needs to be cared for by a Skilled Birth Attendant (SBA) during pregnancy, childbirth and the postpartum period.

To be called a SBA, the health workers (Auxiliary Nurse Midwives (ANMs), Lady Health Visitors (LHVs) and Staff Nurses(SNs)) must possess technical competence related to routine care provision including identification and immediate management of complications arising during pregnancy and childbirth.

In India, 52.3% of births take place at home and of these, just 5.7% of births are attended by a skilled person (District Level Household and Facility Survey [DLHS]-3, 2007–08). These figures highlight that a high proportion of births in the country are still being undertaken by an unskilled person. In such situations, women who experience life-threatening complications may not receive the required life-saving emergency services. Conducting deliveries by unqualified persons can contribute to large number of maternal deaths.

Moreover, with the launch of demand promotion schemes such as the Janani Suraksha Yojana (JSY), the delivery load at the institution level has also increased manifold. This has led to a huge gap between demand and provision of services. Therefore, the presence of an SBA at every delivery, along with the availability of an effective referral system, can help reduce maternal morbidity and mortality to a considerable extent.

The major causes of maternal death have been identified as haemorrhage, sepsis, obstructed labor, toxemia and unsafe abortion. Most of these can be prevented if complications during pregnancy and childbirth can be identified and managed early. This can be achieved only if deliveries at an institution/health facility or in the community are conducted by a skilled birth attendant (SBA). However, as per the DLHS-III, 2007–08, only 52.7% of deliveries are safe deliveries and are attended by SBAs.

International evidence based practices have demonstrated that presence of skilled birth attendance at birth can effectively reduce maternal mortality and that a package of essential obstetric services provided close to the woman's home in the event of an obstetric emergency is effective in reducing maternal mortality.

Gol considers the SBA as a person who can manage normal pregnancies, childbirth and immediate postpartum care, including care of the newborn, and who can handle common obstetric and neonatal emergencies, recognize when the situation reaches a point beyond his/her capability, and refer the woman or newborn to an FRU/appropriate facility without delay.

In an effort to reduce maternal mortality, the Gol has taken policy initiatives to empower auxiliary nurse midwives (ANMs)/lady health visitors (LHVs)/staff nurses (SNs) and make them competent to take certain life-saving measures. They have been permitted to take the following measures:

1. Use uterotonic drugs for the prevention of postpartum hemorrhage (PPH).
2. Use certain drugs in emergency situations to stabilize the patient prior to referral.
3. Perform basic procedures in emergency situations.

The details of the same are at **Annexure I**. However, there is a need to train these para medical workers in the requisite skills to empower them as SBA.

### Objectives of the SBA Training Programme

The overall objective of SBA training is to enhance the knowledge and skills of the ANMs/LHVs/SNs posted at the outreach centers, sub-centers (SCs) or primary health centers (PHCs)/first referral units (FRUs), so that they are proficient in the skills needed for:

1. Managing normal (uncomplicated) pregnancies, childbirth and the immediate postnatal period.
2. Identifying and managing complications in women and newborns, and making referrals.

### Knowledge-based Objectives

By the end of the training, the trainees will be able to understand:

1. The care and importance of the health of the woman and newborn during the antenatal period, labor and postnatal period.
2. Essential care of the newborn and its importance for the health of the baby.
3. Clinical features and initial management of common obstetric complications during the antenatal period, labor and postnatal period.

4. Importance of the quality of care provided by midwifery services, and the need for a client-centered approach, the use of infection prevention practices, community involvement and provision of a supportive environment for the mother and family.

### Skill-based Objectives

By the end of the training, the trainees are expected to be Proficient at the following skills.

1. Measuring the blood pressure, pulse and foetal heart rate (FHR), checking for pallor and oedema, and determining the fundal height, foetal lie and presentation accurately.
2. Performing hemoglobin estimation and testing urine for proteins and sugar.
3. Counseling on birth preparedness, complication readiness, diet and rest, infant feeding, sex during pregnancy; domestic violence and contraception.
4. Conducting pelvic assessment to determine pelvic adequacy.
5. Plotting the partograph and knowing when to refer the woman.
6. Conducting safe deliveries, with active management of the third stage of labour (AMTSL), using infection prevention practices.
7. Providing essential care and undertaking resuscitation of the newborn.
8. Inserting an intravenous line for the management of shock and PPH.
9. Inserting a catheter for the management of PPH and convulsions.
10. Giving deep intramuscular injection (Magsulph).
11. Preparing sterilized/high-level disinfected (HLD) gloves and instruments.
12. Following infection prevention practices.

### Trainees' Profile

All ANMs/LHVs/SNs are to be trained as SBAs; preference is to be given to those who are actively involved in midwifery practices, particularly at SCs and 24-hour PHCs. The trainees should be well-versed in providing basic care during pregnancy, labor, delivery and the postpartum period; be interested in providing the new/upgraded midwifery services; be willing to attend the residential training; and be interested in learning.

### Duration of Training

This is a Residential Training and trainees have to join on the first day of the training, the duration of which shall be as follows: For staff nurses and LHVs: 2–3; weeks for ANMs: 3–6 weeks

- **However, it is suggested that the duration of the training be three weeks for all categories.**
- The first three days of training will consist of modular teaching and will solely have classroom sessions.
- From day 4 to day 6, the trainee will attend classes and also visit clinical areas, as per the schedule.
- From day 7 to day 21, all trainees will be posted in the labor ward, OB/GYN OPD, postnatal ward and laboratory by rotation, to enable them to have hands-on experience of history-

taking, antenatal check-ups, intranatal care, care of the newborn, postpartum care, management of complications and infection prevention practices.

### Training Schedule

Since this is a residential training with a focus on the acquisition of skills, trainees are not permitted to join late. You must be regular in attending the training as per the schedule placed at **Annexure-2**.

### Experience Record of the Trainees

You have to fill in the format placed at **Annexure-3** at the time of joining this training. This will help the trainers to understand your background and clinical experience.

### Training Material

The following training material shall be provided to you for knowledge and also for practicing the skills in order to attain proficiency.

- Guidelines for Antenatal Care and Skilled Attendance at Birth for ANMs/LHVs/SNs, serves as a text for all essential and technical information that is needed to provide skilled attendance at birth.
- Handbook for Antenatal Care and Skilled Birth Attendance by ANMs/LHVs/SNs, which contains step wise checklists and case studies on the skills that the SBA is expected to master in order to attain proficiency.

### Record Keeping by the Trainees

Each trainee must maintain the log book of the skills practiced during the clinical practice duly signed by the trainer every day after practicing the skills as per the **Annexure 4**.

### Filling of Mother and Child Protection Card

Mother and Child Protection Card has been developed jointly by the Ministry of Health and Family Welfare (MoHFW) and Ministry of Women and Child Development (MoWCD) to ensure uniformity in record keeping. This card should be duly completed for every woman registered by you. The case record should be handed over to the woman. She should be instructed to bring this card with her during all subsequent check-ups/visits and also to carry it along with her at the time of delivery. This will also help the service provider to know the details of previous ANC/PNCs both for routine and emergency care.

While examining the women during ANC/ PNC, the important findings should be noted down in the relevant columns of the MCH Card. Similarly, the outcome of delivery and immunization details of the child should also be recorded by you. You must sign the recordings after every ANC/ PNC. The information contained in the card should also be recorded in the antenatal register. Mother and Child Protection Card is given at **Annexure-6**.

### Tracking of all pregnant women

It is important for you as a health provider to ensure that the pregnant woman receives all the ANC check-ups, prior to the expected date of delivery. In this direction, and to ensure a better coverage, the Government of India has put in place a name based pregnancy tracking system whereby all the pregnant women and children can be tracked and followed-up for their ANCs and immunization. The system envisages that all pregnant women are registered within 12 weeks and get first Ante-Natal Care. Subsequently, the women should also receive their other ante-natal care check-ups (ANCs) before delivery. The system also envisages tracking of post-natal care (PNCs) check-ups along-with receiving of complete immunization of the children as per the National Immunization Schedule. The information on the services rendered along with identification and contact details of pregnant women and children etc is to be recorded in the relevant registers and reported in the specified format (**Annexure-7**). This information is to be reported on a monthly basis to the block headquarters/block PHC from where it will be transmitted to the district headquarters. You may also refer to the operational guidelines for further details which are available on the Web-Portal-<http://nrhm-mis.nic.in/Downloads.aspx>

To further strengthen the tracking, a web based system is being developed that will generate a work plan for the ANM and also assist in tracking the drop-outs in ANC, PNC during pregnancy and after the child birth along with immunization for children.

## How to use the Handbook

This Handbook is designed to guide and improve the actual performance of skills of practising auxiliary nurse midwives (ANMs)/lady health visitors (LHVs)/staff nurses (SNs) for skilled attendance at birth, as articulated in the 'Guidelines for Antenatal Care and Skilled Attendance at Birth by ANMs/LHVs/SNs' of the Ministry of Health and Family Welfare, Government of India, 2010. It is simple, easy to understand and extremely useful for health-care workers providing care to mothers and newborns at sub-centres (SCs), primary health centres (PHCs) and in domiciliary settings. It is meant to be used in addition to the 'Guidelines for Antenatal Care and Skilled Birth Attendance by ANMs/LHVs/SNs', which serves as a textbook for all essential information on maternal and newborn care. The trainee will use both the Handbook and the Guidelines throughout the training and during clinical practice at her place of work.

The Handbook serves a dual purpose. The checklists in it are intended to assist the trainee in learning the correct steps and the sequence for providing antenatal check-ups, care during delivery and in the postpartum period; care and resuscitation of the newborn; and the initial management of complications. They also give the trainees an idea of when to refer a woman to a higher centre. Besides, the checklists serve as a ready reckoner during the learning of skills in practice sessions on anatomical models and clients.

The checklists are designed to help in developing practical skills, and trainers must ensure that trainees are assessed on the basis of the skills mentioned in the checklists. In particular, they must take care to base their rating (scoring) on the critical steps performed by the trainees. The Handbook also contains annexures which provide detailed information on the training schedule, drugs and life-saving interventions (procedures and drugs) which ANMs/LHVs/SNs are now allowed to use.



# CHECKLISTS

# CHECKLIST FOR ANTENATAL CARE

## 1.0: CHECKLIST FOR ANTENATAL CARE

## CHECKLIST 1.1: ANTENATAL HISTORY-TAKING

STEP	TASK	CASES				
		1	2	3	4	5
<b>1.</b>	<b>GETTING READY</b>					
	<p><b>a.</b> Keep the following necessary items ready for antenatal care: Examination table, stepping stool, screen/curtain, measuring tape (tailor's tape made of non-stretchable material), foetoscope, blood pressure (BP) apparatus, stethoscope, thermometer, maternal and child protection card and register, weighing scale, watch with seconds hand, sterile gloves and 0.5% chlorine solution in a plastic container, syringes and needles, hub cutter, cotton, spirit swabs, iron and folic acid (IFA) tablets, tetanus toxoid (TT) injection and clean bottles for urine samples.</p>					
	<p><b>b.</b> Greet the woman respectfully and introduce yourself.</p>					
	<p><b>c.</b> Ask the woman to sit comfortably and tell her (and her support person) what is going to be done. Listen to her problems and concerns attentively and respond to her questions. Fill the mother and child protection card with all the relevant information you gathered from the pregnant women.</p>					
<b>2.</b>	<b>HISTORY (ASK/CHECK RECORD)</b>					
	<p><b>a. Personal information (first visit)</b></p> <p>i. Ask the woman her name, age, occupation, husband's name, address and duration of marriage.</p> <p>ii. Find out the date of the first day of her last menstrual period (LMP). Calculate the expected date of delivery (EDD) using the formula <math>EDD = LMP + 9 \text{ months and } 7 \text{ days}</math>.</p>					
	<p><b>b. Ask the woman if she has any of the following symptoms which have to be attended to immediately (first and return visits)</b></p> <ul style="list-style-type: none"> <li>• Fever</li> <li>• Vomiting</li> <li>• Vaginal discharge/itching/leaking of watery fluid</li> <li>• Vaginal bleeding</li> <li>• Severe headache/blurring of vision</li> <li>• Difficulty in breathing, palpitations, easy fatigability</li> <li>• Severe pain in the abdomen</li> <li>• Decreased or absent foetal movement</li> <li>• Generalized swelling of the body, puffiness of the face</li> <li>• Reduced urine output or burning on micturition</li> </ul> <p>If any of the above is positive then take a quick history and initiate appropriate management. Rest of the history can be undertaken when the pregnant women is comfortable.</p>					

STEP	TASK	CASES				
		1	2	3	4	5
c.	<b>Obstetric history</b>					
	i. <b>History of previous pregnancies (first visit)</b> Inquire about the number of previous pregnancies, mode, place and outcome of previous delivery, number of living children, menstrual history, contraceptive history, birth weight and age of the last child and history of all abortions, the last abortion, if any.					
	ii. <b>Conditions which need referral</b> <ul style="list-style-type: none"> <li>• Previous stillbirth or neonatal loss</li> <li>• Three or more spontaneous abortions</li> <li>• Prolonged or obstructed labour</li> <li>• Pre-term births</li> <li>• Weight of previous baby less than 2.5 kg or above 4.5 kg</li> <li>• Congenital anomaly</li> <li>• Admission for pregnancy-induced hypertension (PIH) or pre-eclampsia, eclampsia</li> <li>• Surgery on the reproductive tract, including caesarean section</li> <li>• Treatment for infertility</li> <li>• Rh negative in the previous pregnancy.</li> </ul>					
d.	<b>History of systemic illness (first visit)</b>					
	<ul style="list-style-type: none"> <li>• High BP</li> <li>• Diabetes</li> <li>• Breathlessness on exertion, palpitations</li> <li>• Tuberculosis</li> <li>• Attacks of breathlessness/asthma</li> <li>• Renal disease</li> <li>• Convulsions</li> <li>• Jaundice</li> <li>• Malaria</li> <li>• Respiratory tract infection (RTI)/ sexually transmitted infection (STI); human immunodeficiency virus (HIV)/acquired immune deficiency syndrome (AIDS).</li> </ul>					
e.	<b>Family history</b>					
	i. <b>Family history of systemic illnesses (first visit)</b> <ul style="list-style-type: none"> <li>• High BP</li> <li>• Diabetes</li> <li>• Tuberculosis.</li> </ul>					
	ii. History of thalassaemia or h/o repeated blood transfusion.					
	iii. History of delivery of twins or delivery of an infant with congenital abnormalities in the family.					
f.	<b>History of drug intake, allergies, intake of habit-forming or harmful substances, blood transfusion (first visit)</b>					
	<ul style="list-style-type: none"> <li>• Allergies to drugs</li> </ul>					

STEP	TASK	CASES				
		1	2	3	4	5
	<ul style="list-style-type: none"> <li>• Taking drugs (that might be harmful to the foetus)</li> <li>• Treatment for infertility</li> <li>• Consumption of alcohol, tobacco</li> <li>• Blood transfusion.</li> </ul>					
g.	<b>Record all relevant information on the woman's Mother and Child Protection Card.</b>					

CHECKLIST 1.2: GENERAL EXAMINATION						
STEP	TASK	CASES				
		1	2	3	4	5
	<b>ASSESSMENT OF GENERAL WELL-BEING (every visit)</b>					
<b>1.</b>	<b>LOOK FOR PALLOR</b>					
a.	Look for conjunctival pallor—ask the woman to look up and pull down the lower lid gently with the index finger. Observe the colour of the inside of the lid. It should be bright pink or red. If it is pale pink or white, the woman has pallor.					
b.	Examine the tongue. If it is white and smooth, the woman has pallor.					
c.	Examine the nails. If they look white instead of the usual pink, the woman has pallor.					
<b>2.</b>	<b>LOOK FOR SIGNS OF JAUNDICE</b>					
a.	Look for yellowish discoloration of the skin and conjunctiva in natural light.					
b.	If discoloration present, refer the woman to the MO.					
<b>3.</b>	<b>CHECK PULSE</b>					
a.	Palpate (feel) the woman's radial pulse by placing the finger tips of 3 fingers on her wrist, below her thumb.					
b.	Press against the radial artery and then slowly release the pressure until you can feel the pulse.					
c.	Count the beats for a full minute. The normal pulse rate is between 60 and 90 beats per minute.					
<b>4.</b>	<b>CHECK RESPIRATION</b>					
a.	Count the respiratory rate (RR) by placing your hand on the woman's chest and observing the rise and fall of the chest for 1 minute.					
b.	The normal RR is 16–20 breaths per minute.					
<b>5.</b>	<b>CHECK FOR OEDEMA</b>					
a.	Look for oedema over the ankles and shin by pressing your thumb against the bone for 5 seconds. If your thumb leaves an impression, it indicates the presence of oedema.					
<b>6.</b>	<b>MEASURE BP</b>					
a.	Ask the woman to sit or lie down comfortably and relax. If the woman has come walking, let her rest for 5–10 minutes before checking her BP.					
b.	Place the BP instrument on a flat surface, level with the woman's heart. Ensure that the pointer on the dial or scale is at zero. If not, adjust it by					

STEP	TASK	CASES				
		1	2	3	4	5
	rotating the knob attached to the dial. The dial/ manometer should be at the same level as the examiner's eyes.					
c.	Remove all clothing from the upper arm. Wrap the cuff around the upper arm and secure it. The lower border of the cuff should be about 2.5 cm (2 fingers) above the hollow of the elbow.					
d.	<b>Palpatory method</b> i. With the left hand, feel for the pulse over the hollow of the elbow. Alternatively, feel for the pulse at the wrist of the arm to which the cuff is tied. ii. With the right hand, tighten the screw of the rubber bulb and squeeze the bulb repeatedly with the right hand to inflate the cuff until the pulse is not felt. iii. Note the manometer reading at the level where the pulse is not felt. Increase the pressure by 10 mmHg above the level at which the pulse disappears. iv. Deflate the cuff gradually till you feel the pulse again. v. Note this reading on the manometer. <i>This is the systolic pressure.</i> vi. Deflate the cuff by loosening the screw of the rubber bulb and remove the cuff from the woman's arm and proceed to measure the BP by the auscultatory method. <b>Note:</b> You cannot measure diastolic BP by palpatory method.					
e.	<b>Auscultatory method</b> i. Follow the first five steps of the palpatory method and note down the woman's systolic BP. Raise the pressure of the cuff to 30 mmHg above the level at which the brachial/radial pulse is no longer felt. ii. Put the stethoscope in your ears with the earpieces facing forwards. Place the flat part (diaphragm) of the stethoscope over the brachial pulse in the hollow of the elbow (cubital fossa) and hold it in place. You should not be able to hear any sound. iii. Slowly release the valve to lower the pressure in the cuff, and listen for repetitive thumping sounds. iv. Note the reading on the instrument when the first thumping sound is heard. <i>This is the systolic pressure.</i> v. Continue lowering the pressure until the thumping sound first gets muffled and finally disappears. Note the reading when the thumping sound disappears. <i>This is the diastolic pressure.</i> vi. Release the valve and quickly allow all the air to go out of the cuff. Remove the cuff. vii. Record the BP reading as 'systolic/diastolic' in mmHg.					

STEP	TASK	CASES				
		1	2	3	4	5
<b>7.</b>	<b>RECORD WEIGHT</b> (Ensure that the woman is wearing light clothing and is barefoot.)					
a.	Check the weighing machine for 'zero error' before taking the weight.					
b.	Ask the woman to stand straight on the weighing machine, look straight ahead and hold her head upright.					
c.	Record the weight to the nearest 100 g.					
<b>8.</b>	<b>CONDUCT BREAST EXAMINATION (take verbal consent)</b>					
a.	Help the woman on to the examination table, place a pillow under her head and upper shoulders, and help her to relax.					
b.	Examine the breasts. Examine each breast up to the axilla separately with the pad of your fingers for any lumps or tenderness. If either lumps or tenderness is present, refer the woman to the MO at the PHC.					
c.	Observe the size and shape of the nipples. Look for inverted or flat nipples, and crusted or sore nipples.					

**CHECKLIST 1.3: ABDOMINAL EXAMINATION (every visit)**

STEP	TASK	CASES																				
		1	2	3	4	5																
<b>1.</b>	<b>Note:</b> <ul style="list-style-type: none"> <li>It is important that abdominal examination during pregnancy be done with an empty bladder. Ask the woman to empty her bladder.</li> <li>Give the woman a clean bottle and ask her to collect a little urine in the bottle before emptying her bladder completely. The urine will be required later to test for sugar and proteins.</li> <li>Maintain privacy and obtain the woman's verbal consent.</li> </ul>																					
<b>2.</b>	Help the woman lie comfortably on her back, supported by cushions or pillows, on the examination table. Ask her to loosen her clothes and uncover her abdomen.																					
<b>3.</b>	Check the abdomen for any scars. If there is a scar, find out if it is from a caesarean section or any other uterine surgery.																					
<b>4.</b>	<b>FUNDAL HEIGHT</b>																					
a.	Ask the woman to keep her legs straight.																					
b.	Measuring Fundal Height <ul style="list-style-type: none"> <li>To estimate the gestational age through the fundal height, the abdomen is divided into parts by imaginary lines. The most important line is the one passing through the umbilicus. Then divide the lower abdomen (below the umbilicus) into three parts, with two equidistant lines between the symphysis pubis and the umbilicus. Similarly, divide the upper abdomen into three parts, again with two imaginary equidistant lines, between the umbilicus and the xiphisternum.               <table border="1" data-bbox="1782 1242 2453 1651"> <tbody> <tr> <td>At 12th week</td> <td>Just palpable above the symphysis pubis</td> </tr> <tr> <td>At 16th week</td> <td>At lower one-third of the distance between the symphysis pubis and umbilicus</td> </tr> <tr> <td>At 20th week</td> <td>At two-thirds of the distance between the symphysis pubis and umbilicus</td> </tr> <tr> <td>At 24th week</td> <td>At the level of the umbilicus</td> </tr> <tr> <td>At 28th week</td> <td>At lower one-third of the distance between the umbilicus and xiphisternum</td> </tr> <tr> <td>At 32nd week</td> <td>At two-thirds of the distance between the umbilicus and xiphisternum</td> </tr> <tr> <td>At 36th week</td> <td>At the level of the xiphisternum</td> </tr> <tr> <td>At 40th week</td> <td>Sinks back to the level of the 32nd week, but the flanks are full, unlike that in the 32nd week.</td> </tr> </tbody> </table> </li> </ul>	At 12th week	Just palpable above the symphysis pubis	At 16th week	At lower one-third of the distance between the symphysis pubis and umbilicus	At 20th week	At two-thirds of the distance between the symphysis pubis and umbilicus	At 24th week	At the level of the umbilicus	At 28th week	At lower one-third of the distance between the umbilicus and xiphisternum	At 32nd week	At two-thirds of the distance between the umbilicus and xiphisternum	At 36th week	At the level of the xiphisternum	At 40th week	Sinks back to the level of the 32nd week, but the flanks are full, unlike that in the 32nd week.					
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c.	Measuring FH (in cm) using Measuring Tape <ul style="list-style-type: none"> <li>Place the ulnar (medial/inner) border of the hand on the woman's abdomen starting from the xiphisternum (the lower end of the sternum/breastbone), and gradually proceed downwards towards</li> </ul>																					

STEP	TASK	CASES				
		1	2	3	4	5
	<p>the symphysis pubis, lifting your hand between each step down, till you finally feel a bulge/ resistance, which is the uterine fundus. Mark the level of the fundus.</p> <p>ii. • Using a measuring tape, measure the distance (in cm) from the upper border of the symphysis pubis along the uterine curvature to the top of the fundus.</p> <ul style="list-style-type: none"> <li>• This is the fundal height. Note it down in the Mother and Child Protection Card.</li> <li>• After 24 weeks of gestation, the fundal height (in cm) corresponds to the gestational age in weeks (within 1–2 cm deviation).</li> </ul> <p><b>Note:</b> When measuring the fundal height, the woman's legs should be kept straight and not flexed.</p>					
<b>5.</b>	<b>FOETAL LIE AND PRESENTATION (32 weeks onwards)</b>					
	Now ask the woman to flex her knees.					
	<b>a. Carry out fundal palpation/grip</b>					
	<ul style="list-style-type: none"> <li>• Place both hands on the sides of the fundus to determine which part of the foetus is occupying the uterine fundus (the foetal head feels hard and globular, whereas the buttocks (breech) feel soft and irregular).</li> </ul>					
	<b>b. Carry out lateral palpation/grip</b>					
	<ul style="list-style-type: none"> <li>• Place your hands on either side of the uterus at the level of the umbilicus and apply gentle pressure. The foetal back feels like a continuous hard, flat surface on one side of the midline, while the limbs feel like irregular small knobs on the other side.</li> <li>• In a transverse lie, the baby's back is felt across the abdomen and the pelvic grip is empty.</li> </ul>					
	<b>c. Carry out superficial pelvic grip</b>					
	<ul style="list-style-type: none"> <li>• Spread your right hand widely over the symphysis pubis, with the ulnar border of the hand touching the symphysis pubis.</li> <li>• Try to approximate the fingers and thumb, by putting gentle but deep pressure over the lower part of the uterus. The presenting part can be felt between the thumb and four fingers. Determine whether it is the head or breech (the head will feel hard and globular, and the breech soft and irregular).</li> <li>• If the presenting part is the head, try to move it from side to side. If it cannot be moved, it is engaged.</li> <li>• If neither the head, nor the buttocks are felt on the superficial pelvic grip, the baby is lying transverse. This is an abnormal lie. Refer the woman to an FRU in the third trimester.</li> </ul>					
	<b>d. Carry out deep pelvic grip (only in 3rd trimester)</b>					
	<ul style="list-style-type: none"> <li>• To perform this grip, face the foot end of the bed.</li> </ul>					

STEP	TASK	CASES				
		1	2	3	4	5
	<ul style="list-style-type: none"> <li>• Place the palms of your hands on the sides of the uterus, with the fingers held close together, pointing downwards and inwards, and palpate to recognize the presenting part.</li> <li>• If the presenting part is the head (feels like a firm, round mass, which is ballotable, unless engaged), this manoeuvre, in experienced hands, will also be able to tell us about its flexion.</li> <li>• If the fingers diverge below the presenting part it indicates engagement of the presenting part. If the fingers converge below the presenting part it indicates that the presenting part has not engaged.</li> <li>• If the woman cannot relax her muscles, tell her to flex her legs slightly and to breathe deeply. Palpate in between the deep breaths.</li> <li>• Feel to assess if there is more than one baby.</li> </ul>					
<b>6.</b>	<b>FOETAL HEART RATE (FHR)</b>					
	<b>Note:</b> Check after 24 weeks.					
	<b>a.</b>					
	<ul style="list-style-type: none"> <li>• Place the foetoscope/bell of the stethoscope on the side of the uterus where the foetal back is felt (foetal heart sounds are best heard midway between the umbilicus and anterior superior iliac spine in the vertex and at the level of the umbilicus, or just above it in the breech).</li> <li>• Count the foetal heart sounds for one full minute. This is the FHR.</li> </ul>					
	<b>b.</b>					
	<ul style="list-style-type: none"> <li>• Record all your findings on the Mother and Child Protection Card and discuss them with the woman.</li> </ul>					

**CHECKLIST 1.4: LABORATORY INVESTIGATIONS**

STEP	TASK	CASES				
		1	2	3	4	5
<b>1.</b>	<b>PREGNANCY DETECTION TEST</b>					
<b>a.</b>	<b>Getting ready</b>					
	<ul style="list-style-type: none"> <li>i. Keep the necessary items ready: pregnancy test kit, disposable dropper and a clean container to collect urine.</li> <li>ii. Ask the woman to collect a random sample of urine. The first morning sample is preferred.</li> </ul>					
<b>b.</b>	<b>Procedure</b>					
	<ul style="list-style-type: none"> <li>i. <ul style="list-style-type: none"> <li>• Remove the pregnancy test card from the pregnancy kit.</li> <li>• Keep this card on a flat surface.</li> </ul> </li> <li>ii. <ul style="list-style-type: none"> <li>• Use the dropper to take urine from the container.</li> <li>• Put 2–3 drops in the well marked 'S'.</li> </ul> </li> <li>iii. Wait for 5 minutes.</li> </ul> <p><b>Result:</b></p> <ul style="list-style-type: none"> <li>• If one red band appears in the result window 'R', the pregnancy test is negative.</li> <li>• If two parallel red bands appear, the pregnancy test is positive.</li> </ul>					
<b>2.</b>	<b>HAEMOGLOBIN TEST</b>					
<b>a.</b>	<b>Getting ready</b>					
	<ul style="list-style-type: none"> <li>i. <ul style="list-style-type: none"> <li>• Keep the following necessary items ready: <ul style="list-style-type: none"> <li>• A pair of gloves, spirit swabs, lancet, N/10 HCl, distilled water and dropper</li> <li>• Haemoglobinometer with a comparator on both sides, pipette (it bears only one mark indicating 20 cmm/.02 ml) and stirrer</li> <li>• Haemoglobin (Hb) tube (it is graduated on one side in g% from 2–24 g% and on the other side in percentage from 20% to 140%. This tube is called the Sahli-Adams tube.</li> </ul> </li> </ul> </li> <li>ii. Wash your hands thoroughly with soap and water. Put on clean/high-level disinfected (HLD) gloves.</li> <li>iii. Clean the Hb tube and pipette.</li> <li>iv. Fill the Hb tube with N/10 HCl up to 20% or 2 g% with the dropper.</li> </ul>					
<b>b.</b>	<b>Procedure</b>					
	<ul style="list-style-type: none"> <li>i. Clean the tip of the woman's ring finger with an alcohol swab.</li> <li>ii. Prick the finger using the lancet and discard the first drop of blood.</li> <li>iii. Allow a large drop of blood to form on the fingertip (do not press the finger tip to take out blood). Dip the tip of the Hb pipette into the blood drop and suck blood up to the 20 cmm mark on the pipette.</li> <li>iv. While sucking blood, care should be taken to prevent the entry of air.</li> </ul>					

STEP	TASK	CASES				
		1	2	3	4	5
	<ul style="list-style-type: none"> <li>v. Wipe the tip of the pipette with cotton. Immediately transfer the 20 cmm (0.02 ml) of blood from the pipette into the Hb tube containing N/10 HCl.</li> <li>vi. Rinse the pipette two to three times by drawing up and blowing out the acid solution.</li> <li>vii. Leave the solution in the tube for about 10 minutes (for conversion of Hb into haematin).</li> <li>viii. After 10 minutes, dilute the acid by adding distilled water drop by drop. Mix it with the stirrer.</li> <li>ix. Note down the reading (lower meniscus) when the colour of the solution exactly matches that of the comparator on both sides of the haemoglobinometer. This expresses the Hb content as g%.</li> </ul>					
<b>c.</b>	<b>Post-test task</b>					
	<ul style="list-style-type: none"> <li>i. Dispose of the lancet in the puncture-proof container.</li> <li>ii. Immerse both gloved hands in 0.5% chlorine solution. Remove the gloves by turning them inside out.</li> <li>iii. <ul style="list-style-type: none"> <li>• If you are using reusable gloves, put them in 0.5% chlorine solution for 10 minutes for decontamination.</li> <li>• If they are disposable gloves, place them in a leak-proof container/plastic bag.</li> </ul> </li> <li>iv. Cleaning of pipette and Hb tube for next use: <ul style="list-style-type: none"> <li>• Rinse the pipette and Hb tube, two to three times by drawing up and blowing out the acid solution.</li> </ul> </li> </ul>					
<b>h.</b>	<b>Interpretation:</b>					
	<ul style="list-style-type: none"> <li>• If the Hb is less than 7 g% (severe anaemia), refer the woman to the FRU immediately.</li> <li>• If it is 7–11 g%, give her IFA tablets (moderate anaemia), to be taken twice a day, and give advice on nutrition.</li> </ul>					
<b>i.</b>	Record the results of the test on the woman's Mother and Child Protection Card.					
<b>3.</b>	<b>URINE TEST FOR PROTEINS AND SUGAR</b>					
<b>a.</b>	<b>Getting ready</b>					
	<ul style="list-style-type: none"> <li>i. Keep the following necessary items ready: <ul style="list-style-type: none"> <li>• Urine specimen collection bottle/container</li> <li>• Test tubes</li> <li>• Spirit lamp</li> <li>• Match box</li> <li>• Test-tube holder</li> <li>• Acetic acid (for protein test)</li> <li>• Dropper</li> <li>• Dipstick</li> </ul> </li> </ul>					



STEP	TASK	CASES				
		1	2	3	4	5
	<ul style="list-style-type: none"> <li>• Benedict solution (for sugar test)</li> <li>• 0.5% chlorine (bleach) solution</li> </ul> ii. Explain to the woman how to collect a clean catch specimen of urine. <ul style="list-style-type: none"> <li>• Give her a labelled container and instruct her to clean her vulva with water, then collect midstream urine.</li> </ul>					
<b>b.</b>	<b>Urine test for proteins</b> <b>Procedure using dipstick</b> <ol style="list-style-type: none"> <li>(i) Remove one strip from the bottle of dipsticks and replace the cap.</li> <li>(ii) Completely immerse the reagent area of the strip in urine and remove immediately to avoid dissolving the reagent.               <ul style="list-style-type: none"> <li>• When removing the strip from the urine, run the edge against the rim of the urine container to remove excess urine.</li> </ul> </li> <li>(iii) Hold the strip horizontally.</li> <li>(iv) Compare the colour of the reagent area to the colour chart on the label of the bottle, after the time specified (usually 60 seconds).</li> <li>(v) Interpretation:               <ul style="list-style-type: none"> <li>Yellow- Albumin absent</li> <li>Yellowish-green - Traces of albumin</li> <li>Light green - Albumin +</li> <li>Green - Albumin ++</li> <li>Greenish-blue - Albumin +++</li> <li>Blue - Albumin ++++</li> </ul> </li> <li>(vi) Place the used strip in a plastic bag or leak-proof container.</li> </ol> <b>Procedure using hot test (boiling)</b> <ol style="list-style-type: none"> <li>(i) Fill three-fourths of the test-tube with urine and heat the upper third of the urine over the spirit lamp and allow it to boil.               <ul style="list-style-type: none"> <li>• Keep the mouth of the test tube away from your face to prevent scalding.</li> </ul> </li> <li>(ii) Turbidity of the sample indicates the presence of either phosphate or albumin.               <ul style="list-style-type: none"> <li>• Add 2–3 drops of 2%–3% acetic acid drop by drop into the test-tube.</li> </ul> </li> <li>(iii) If the sample remains turbid, it indicates the presence of proteins.</li> <li>(iv) If the turbidity clears, it indicates the absence of proteins.</li> </ol>					
<b>c.</b>	<b>Urine test for sugar</b> <ol style="list-style-type: none"> <li>i. <b>Procedure using dipstick</b> Follow the same steps as for protein and match the colour with the label on the bottle.</li> </ol>					

STEP	TASK	CASES				
		1	2	3	4	5
	ii. <b>Procedure using the boiling method (Benedict test)</b> <ol style="list-style-type: none"> <li>(i) Take 5 ml of Benedict solution in a test-tube. Boil it over the spirit lamp, holding the test-tube away from your face.</li> <li>(ii) If the colour of the solution does not change on heating, it is pure.</li> <li>(iii) Add 8 drops of urine with the help of a dropper. Shake it well and boil.</li> <li>(iv) Allow it to cool and observe the colour.</li> <li>(v) Interpretations:               <ul style="list-style-type: none"> <li>Green precipitate: +</li> <li>Green liquid with yellow deposits: ++ sugar</li> <li>Colourless liquid with orange deposits: +++ sugar</li> <li>Brick red: ++++ or more sugar</li> <li>No precipitate: No sugar</li> </ul> </li> </ol>					
	<b>d. Post-procedure task for all urine tests</b> <ol style="list-style-type: none"> <li>i. Discard the urine sample in the toilet.</li> <li>ii. Decontaminate the urine container and test-tube in 0.5% chlorine solution.</li> <li>iii. Wash your hands thoroughly with soap and water.</li> </ol>					
<b>4.</b>	<b>Other laboratory test</b>					
	Other desirable laboratory test like Blood Group, VDRL/RPR and other optional tests like HIV, Blood Sugar, HBsAg, etc., can be undertaken during 3rd ANC visit at PHC/FRU if not undertaken earlier.					

CHECKLIST 1.5: INTERVENTIONS AND COUNSELING						
STEP	TASK	CASES				
		1	2	3	4	5
<b>1.</b>	<b>IFA supplementation and counseling</b>					
a.	Give all pregnant women whose Hb count is above 11 g/dl one IFA tablet daily from the 14th to 16th week of pregnancy (a minimum of at least 100 tablets).					
b.	Give all pregnant women whose Hb count is 7-11 gm/dl one IFA tablet twice daily, for 100 days.					
c.	<b>Give all pregnant women whose Hb count is below 7g/dl, one IFA tablet twice daily and refer them to the FRU immediately.</b>					
d.	Advise the woman to take IFA tablets regularly, preferably in the morning on an empty stomach or at night after meals.					
e.	Dispel the existing misconceptions about IFA tablets.					
f.	Ask the woman not to take IFA tablets with tea, coffee, milk or calcium tablets.					
g.	Ask her to drink extra water if she develops constipation.					
h.	If the woman comes late in pregnancy for ANC, still give IFA as per protocol above.					
<b>2.</b>	<b>TT injection</b>					
a.	Give the woman the first dose of TT injection (0.5 ml, deep intramuscular in the upper arm) during the first antenatal visit.					
b.	Give the woman the second dose of TT injection (0.5 ml, deep intramuscular in the upper arm) one month after the first dose, or whenever she comes for the next antenatal visit.					
c.	<ul style="list-style-type: none"> <li>If the woman skips one antenatal visit, give the injection whenever she comes back for the next visit.</li> <li>If the woman receives the first dose after 38 weeks of pregnancy, then the second dose may be given in the postnatal period, after a gap of four weeks.</li> </ul>					
d.	Inform her that there may be a slight swelling, pain or redness at the site of the injection for a day or two.					
<b>3.</b>	<b>Counseling</b>					
a.	<b>Planning and preparing for birth (birth preparedness)</b>					
i.	Develop a birth plan with the woman. This should include all preparations for normal birth and also in case of an emergency.					
ii.	Encourage every pregnant woman to have an institutional delivery and counsel her on its benefits.					

STEP	TASK	CASES				
		1	2	3	4	5
	<ul style="list-style-type: none"> <li>iii. Identify a skilled provider for the delivery if the woman decides on a home delivery.</li> <li>iv. A disposable delivery kit (DDK) is required for a clean and safe delivery. This consists of a clean plastic sheet, soap, new razor blade, at least three clean pieces of thread, and clean pieces of cotton cloth or gauze. (Keep these items ready in your bag for domiciliary visits).</li> <li>v. The items required during and after delivery are: clean towels/cloth for washing, drying and wrapping the baby, clean clothes for the mother and baby, and pads/cloths for the mother.</li> <li>vi. Provide complete information regarding early identification of the signs of labour. These are: <ul style="list-style-type: none"> <li>• Bloody, sticky discharge</li> <li>• Painful contractions starting from the back and radiating to the front at regular intervals.</li> </ul> </li> <li>vii. Locate the nearest 24-hour PHC/FRU for delivery and referral in case of an emergency.</li> <li>viii. Identify a decision-maker and support person. <ul style="list-style-type: none"> <li>• Help in arranging food and water for the woman and support person.</li> <li>• Arrange for transportation/emergency transportation.</li> <li>• Help in arranging for funds/emergency funds.</li> </ul> </li> </ul>					
b.	<b>Recognizing and preparing for danger signs (complication readiness)</b>					
i.	Tell the woman about the danger signs and where she should go if any of these occur. <ul style="list-style-type: none"> <li>• Refer to FRU if there is: bleeding per vaginam (P/V) during pregnancy/severe headache with blurred vision/ convulsions or loss of consciousness/continuous abdominal pain/pre-term labour/premature rupture of membranes (PROM) / severe anaemia (Hb &lt;7 g/dl)/ decreased or absent foetal movements/high fever with foul-smelling vaginal discharge.</li> <li>• Refer to 24-hour PHC if there is: fever/fast or difficult breathing/excessive vomiting/ reduced urinary output/ breathlessness at rest/high BP (&gt; 140/90 mmHg).</li> </ul> <p><b>Note:</b> If the ANM is not able to decide whether she should send a case to the FRU or PHC, she should refer it to the FRU.</p> <ul style="list-style-type: none"> <li>ii. Identify and arrange for transport to the referral centre. Intimate telephonically the details of referral to the referred health facility.</li> <li>iii. Identify blood donors in case of an emergency.</li> </ul>					
c.	<b>Diet, rest and infant feeding</b>					
i.	Advise the woman to take a balanced diet and a variety of foods: <ul style="list-style-type: none"> <li>• She should have foods rich in iron, proteins and vitamin A, C and calcium.</li> </ul>					

STEP	TASK	CASES				
		1	2	3	4	5
	<ul style="list-style-type: none"> <li>• She should have extra portions of food per day.</li> <li>• She should take IFA tablets daily.</li> </ul> ii. Provide advice and counseling on: <ul style="list-style-type: none"> <li>• Rest and activity.</li> <li>• Maintaining cleanliness and hygiene.</li> <li>• Early and exclusive breastfeeding, including colostrum feeding.</li> </ul>					
	d. Counsel on sex during pregnancy and use of contraception post pregnancy.					
	e. Counsel the husband and the immediate family members of the pregnant women on the consequences of domestic abuse and violence against pregnant women.					
<b>4.</b>	<b>Explain Schedules for the further antenatal visit (also note the dates for next ANC's on her Mother and Child Protection Card)</b>					
	a. Make sure the woman knows when and where to come.					
	b. Answer any additional questions or concerns.					
	c. Advise her to bring her Mother and Child Protection Card with her at every visit.					
	d. Make sure she understands that she can return any time before the next scheduled visit if she has a problem.					
	e. Review the danger signs and the key points of the complication readiness plan.					
	f. Record the relevant details on the Mother and Child Protection Card.					
	g. Counsel her on family planning methods.					
<b>5</b>	<b>Malaria in pregnancy</b>					
	a. Insecticide-treated bed nets or long-lasting insecticidal nets (LLIN) should be given on a priority basis to pregnant women in malaria-endemic areas. These are normally available in NVBDCP.					
	b. <ul style="list-style-type: none"> <li>• In non-endemic areas, all clinically suspected cases should preferably be investigated for malaria with the help of microscopy or a rapid diagnostic kit (RDK).</li> <li>• In high malaria-endemic areas, pregnant women should be routinely tested for malaria at the first antenatal visit and every month subsequently.</li> <li>• Positive/Suspected cases of malaria should be referred to PHC/FRU for treatment.</li> </ul>					

## CARE DURING LABOUR AND DELIVERY – INTRAPARTUM CARE

## 2.0: CARE DURING LABOUR AND DELIVERY—INTRAPARTUM CARE

## CHECKLIST 2.1: ASSESSMENT OF A WOMAN IN LABOUR

STEP	TASK	CASES				
		1	2	3	4	5
<b>1.</b>	<b>GETTING READY</b>					
	<p><b>a.</b> Keep the necessary articles ready for examination and assessment of the woman. These are:</p> <ul style="list-style-type: none"> <li>• Examination table and stepping stool</li> <li>• BP apparatus and stethoscope</li> <li>• Thermometer</li> <li>• Foetoscope</li> <li>• Measuring tape, watch with seconds hand</li> <li>• Mother and Child Protection Card and Partograph</li> <li>• Sterile gloves, sterile/boiled cotton swabs for perineal care</li> <li>• Antiseptic lotion and 0.5% bleach in a plastic container.</li> </ul>					
	<b>b.</b> Greet the woman and her family members respectfully and introduce yourself.					
	<b>c.</b> Make the woman comfortable and help her onto the examination table. Tell those accompanying her where they can wait. Listen to what the woman and her support person have to say (problems/complaints).					
	<b>d.</b> Explain to the woman that you need to ask her some questions about her labour and need to examine her in private in order to evaluate her condition and the condition of her baby.					
	<p><b>e.</b> Make an immediate assessment of whether the delivery is imminent (pushing, grunting, bulging or thin perineum, anal pouting or vulval gaping and head visible):</p> <ul style="list-style-type: none"> <li>• If so, prepare her for birth (checklist 2.3).</li> <li>• If not, continue as below.</li> </ul>					
<b>2.</b>	<b>HISTORY</b>					
	<b>a.</b> Start the labour record by writing the woman's name, age, date and time of arrival.					
	<p><b>b.</b> Ask her for the following information and record her responses. (Avoid asking questions during contractions).</p> <ul style="list-style-type: none"> <li>• When did the labour pains start?</li> <li>• Are you having/did you have any watery discharge or gush of fluid (if so, when, how much and of what colour)?</li> <li>• How often are you having contractions and how long does each one last?</li> <li>• Is there any vaginal bleeding or bloody mucus (show)?</li> <li>• Have you felt the baby move in the past 24 hours?</li> <li>• When did you last eat or drink?</li> <li>• Have you taken any medicine or treatment to enhance labour?</li> </ul>					

STEP	TASK	CASES				
		1	2	3	4	5
	<p>c. Ask the woman how she is feeling and whether she has any problems. Respond immediately to the life-threatening complaints listed below and refer her to an FRU if any of them is present.</p> <ul style="list-style-type: none"> <li>• Vaginal bleeding</li> <li>• High fever</li> <li>• Severe headache or blurred vision</li> <li>• Difficulty in breathing</li> <li>• Severe abdominal pain</li> <li>• Convulsions</li> <li>• h/o heart disease or any other major illnesses.</li> </ul>					
	d. Determine the EDD and gestational age.					
	<p>e. Check the woman's Mother and Child Protection Card for the following information. If she has had no antenatal check-ups or if records are not available, ask the following questions and record her responses.</p> <ul style="list-style-type: none"> <li>• How many months pregnant are you?</li> <li>• Is this your first pregnancy? If not, what is the number of previous pregnancies/deliveries?</li> <li>• Is there a previous history of caesarean section, forceps delivery or vacuum extraction, or any other abdominal or other major surgery? (Refer to FRU if such history present).</li> <li>• Have there been any other problems with previous pregnancies/deliveries?</li> <li>• Have there been any problems during this pregnancy?</li> <li>• Have you received TT vaccinations during pregnancy?</li> <li>• Which investigations have been carried out, what were the results and what treatment was given?</li> <li>• Do you have any general medical problems, such as high BP, asthma, diabetes, heart disease or tuberculosis? (Refer to FRU if such history present).</li> <li>• Are you on any medications? If so, what are they, why have they been prescribed and by whom?</li> </ul>					
<b>3.</b>	<b>EXAMINATION (vital signs and abdominal examination)</b>					
	a. Maintain the woman's privacy during the entire process.					
	b. Wash your hands thoroughly with soap and water, air dry them.					
	c. Record your findings regarding the vital signs, such as BP, pulse, pallor and oedema (refer to checklist 1.2).					
	<p>d. <b>Abdominal examination</b></p> <p>i. Ask the woman to loosen her clothes and uncover her abdomen. Ask her to lie on her back, with her knees slightly bent.</p> <p>ii. Check the surface of the abdomen. The presence of a scar indicates a previous caesarean section or other uterine/abdominal surgery.</p>					

STEP	TASK	CASES				
		1	2	3	4	5
	<p>iii. Check the shape of the uterus, noting if it is longer horizontally than vertically (the latter could mean a transverse lie).</p> <p>iv. Palpate to determine the foetal lie and presentation (make sure that your hands are warm before palpating). The following must be done: fundal grip, lateral grip, superficial pelvic grip and deep pelvic grip. Also count the FHR. Refer to checklist 1.3 for the detailed steps of how to palpate the foetal lie and count the FHR.</p>					
	<p>e. <b>Contractions</b></p> <ul style="list-style-type: none"> <li>• Place your hand on the upper part of the woman's abdomen and palpate to feel for contractions over a 10-minute period. Count the number of contractions during that period (frequency of contractions).</li> <li>• Keep your hand in the same position for the entire 10-minute period and note down the duration of the contractions in seconds.</li> </ul>					
	f. Verify the lie with a P/V examination, if necessary (see checklist 2.2).					
<b>4.</b>	<b>POST-EXAMINATION TASKS</b>					
	a. Inform the woman about your findings.					
	b. Record all the findings.					
	c. <b>If the woman is in active labour (cervix dilated 4 cm or more), start plotting on a partograph.</b>					

CHECKLIST 2.2: VAGINAL EXAMINATION DURING LABOUR						
STEP	TASK	CASES				
		1	2	3	4	5
<b>1.</b>	<b>GETTING READY</b>					
	a. Keep the following equipment ready: <ul style="list-style-type: none"> <li>• Sterile/HLD surgical gloves</li> <li>• Plastic apron</li> <li>• Boiled and cooled/sterile swabs in Savlon or Dettol</li> <li>• 0.5% chlorine solution for decontamination.</li> </ul>					
	b. Tell the woman and her support person what is going to be done and encourage them to ask questions.					
	c. Listen to what the woman and her support person have to say.					
	d. Ask the woman to pass urine and lie down with her knees flexed and legs apart.					
	e. Put on a clean plastic apron.					
	f. Uncover her genital area and cover or drape her to maintain privacy.					
	g. Wash your hands thoroughly with soap and water, dry them with a clean, dry cloth or air dry.					
	h. Wear HLD/sterile gloves on both hands.					
	i. Check the vulva for the presence of: <ul style="list-style-type: none"> <li>• Mucus discharge</li> <li>• Excessive watery discharge</li> <li>• Foul-smelling discharge.</li> </ul>					
	j. Clean the vulva from above downwards with one gloved hand (not the examining hand), using a swab dipped in an antiseptic solution (Dettol/Savlon).					
<b>2.</b>	<b>EXAMINING THE VAGINA</b>					
	a. Use the thumb and forefinger of the left hand to part the labia majora, so that the vaginal opening is clearly visible.					
	b. Gently insert the index and middle fingers of the examining hand into the vagina. (Once your fingers are inserted, do not take them out till the examination is complete).					
	c. <b>Examining the cervix and deciding stages of labour</b> <p>i. Keep the other hand on the women's lower abdomen, just above the pubic symphysis. When the examining fingers reach the end of the vagina, turn your fingers upwards so that they come in contact with the cervix.</p>					

STEP	TASK	CASES				
		1	2	3	4	5
	ii. Locate the cervical os by gently sweeping the fingers from side to side. The os will be felt as an opening in the cervix. The os is normally situated centrally, but sometimes in early labour, it will be far posterior (backwards).					
	iii. Feel the cervix: It should be soft and elastic, and closely applied to the presenting part.					
	iv. Measure the dilatation of the cervical os by inserting your middle and index fingers into the open cervix and gently opening the fingers to reach the cervical rim (distance in centimetres between the outer aspect of both examining fingers). <ul style="list-style-type: none"> <li>• 0 cm indicates a closed external cervical os.</li> <li>• 10 cm indicates full dilatation.</li> </ul> <b>Deciding stages of labour:</b> <ul style="list-style-type: none"> <li>▪ 1st stage of labour: This is the period from the onset of labour pain to the full dilatation of the cervix, i.e. 10 cm.</li> <li>▪ 2nd stage of labour: This is the period from full dilatation of the cervix to the delivery of the baby.</li> <li>▪ 3rd stage of labour: This is the period from after delivery of the baby to delivery of the placenta.</li> <li>▪ 4th stage of labour: This is the first two hours after the delivery of the placenta.</li> </ul>					
	v. Feel the application of the cervix to the presenting part: <ul style="list-style-type: none"> <li>• If the cervix is well applied to the presenting part, it is a favourable sign.</li> <li>• If the cervix is not well applied to the presenting part, you have to be alert.</li> </ul>					
	vi. Feel the membranes: <ul style="list-style-type: none"> <li>• Intact membranes can be felt as a bulging balloon during a contraction through the dilating os.</li> <li>• Feel for the umbilical cord. If it is felt, it is a case of cord presentation and requires urgent <i>referral to an FRU</i>.</li> <li>• If the membranes have ruptured, check whether the amniotic fluid is clear or meconium-stained.</li> </ul>					
	vii. Identify the presenting part: <ul style="list-style-type: none"> <li>• Try and judge if it is hard, round and smooth. If so, it is the head.</li> <li>• In a breech presentation, the buttocks or legs are felt at the cervix. Refer the woman to the FRU.</li> <li>• In a transverse lie, an arm or shoulder is felt at the cervix. <i>Refer the woman to the FRU.</i></li> </ul>					
	viii. Assessing the pelvis <ul style="list-style-type: none"> <li>• Try to reach the sacral promontory if the head is not engaged. If the sacral promontory is felt, the pelvis is contracted. <i>Refer the woman to the FRU</i> for expert care.</li> <li>• If the sacral promontory is not felt, trace downwards and feel for the sacral hollow. A well-curved sacrum is favourable.</li> <li>• Spread your two fingers to feel for the ischial spines. If both ischial spines can be felt at the same time, the pelvic cavity is contracted. <i>Refer her to an FRU</i> for further care.</li> </ul>					

STEP	TASK	CASES				
		1	2	3	4	5
	ix. Gently remove your fingers from the vagina and immerse your gloved hand in 0.5% chlorine solution. x. Remove the gloves by turning them inside out. <ul style="list-style-type: none"> <li>If disposing of the gloves, place them in a leak-proof container or plastic bag.</li> <li>If the surgical gloves are to be re-used, submerge them in 0.5% chlorine solution for 10 minutes to decontaminate them.</li> </ul> xi. Wash your hands thoroughly with soap and water, dry with a clean, dry cloth or air dry.					
d.	Inform the woman about the findings and reassure her.					
e.	Record all your findings from the vaginal examination on the partograph. <i>If the woman is in active labour</i> (cervix dilated 4 cm or more and at least 2 uterine contractions per 10 minutes, each of 20 seconds duration), <i>start noting your findings on the partograph placed at Annexure-5 in this book.</i> If she is not in active labour, note down your findings in the client's case record.					

## CHECKLIST 2.3: MANAGEMENT OF THE FIRST STAGE OF LABOUR USING A PARTOGRAPH

STEP	TASK	CASES				
		1	2	3	4	5
1.	<b>Identification data</b>  <b>Fill in:</b> <ul style="list-style-type: none"> <li>Name</li> <li>Age</li> <li>Parity</li> <li>Date and time of admission</li> <li>Registration number</li> <li>Date and time of rupture of membranes.</li> </ul>					
2.	<b>When not in active labour</b> (latent stage: cervix dilated <4 cm and weak contractions, i.e. <2 contractions in 10 minutes), do not plot on the partograph, but record on the woman's case record.					
3.	<b>Monitor the following every hour:</b> <ul style="list-style-type: none"> <li>Contractions—number of contractions in 10 minutes and their duration (how many seconds each contraction lasts)</li> <li>FHR (normal range 120–160 beats/minute)</li> <li>Presence of an emergency sign (such as difficulty in breathing, shock, vaginal bleeding, convulsions or unconsciousness).</li> </ul>					
4.	<ul style="list-style-type: none"> <li><b>Monitor the cervical dilatation</b> (in cm by P/V examination), Temperature and BP <b>every 4 hours.</b></li> <li>Monitor the maternal pulse every half hour.</li> </ul>					
5.	<b>When in active labour</b> (cervix dilated 4 cm or more), begin to plot the findings on the partograph.					
6.	<b>Monitor the following every 30 minutes:</b> <ul style="list-style-type: none"> <li>Contractions—palpate and note the number of contractions in 10 minutes and measure the duration of each contraction in seconds. (Plot by noting in the appropriate box).</li> <li>FHR—count the foetal heart sounds, using a foetoscope, for one full minute. (Plot by placing a dot on the graph- Foetal condition).</li> <li>Observe the condition of the membranes and the colour of the amniotic fluid visible at the vulva. Plot as follows:               <ul style="list-style-type: none"> <li>Membranes intact (mark 'I')</li> <li>Membranes ruptured (mark 'R')</li> <li>Clear liquid (mark 'C')</li> <li>Meconium-stained liquid (mark 'M')</li> </ul> </li> <li>Maternal pulse—record this half hourly and plot on the graph with a dot.</li> </ul>					
7.	<b>Monitor the following every 4 hours:</b> <ul style="list-style-type: none"> <li>Cervical dilatation in cm by P/V examination               <ul style="list-style-type: none"> <li>Plot by placing the initial recording on the alert line.</li> <li>Write the time accordingly in the row for time.</li> </ul> </li> </ul>					

STEP	TASK	CASES				
		1	2	3	4	5
	<ul style="list-style-type: none"> <li>▪ Continue plotting cervical dilatation every 4 hours in a similar manner.</li> <li>▪ Refer as soon as Alert line is crossed and do not wait for referral till the action line is crossed.</li> <li>• Temperature—record in degrees centigrade (°C).</li> <li>• Blood pressure—record the BP on the graph using a vertical arrow, with the upper end of the arrow indicating the systolic BP and the lower end indicating the diastolic BP. Join both the arrows by a dotted line.</li> </ul>					
8.	<b>Indications for referral to FRU on the basis of the partograph</b> <ul style="list-style-type: none"> <li>• If the FHR is &lt; 120 beats/minute or &gt; 160 beats/minute</li> <li>• If the plotting of cervical dilatation crosses the alert line</li> <li>• If the contractions do not increase in number and duration</li> <li>• If the maternal vital signs cross the normal limit (refer to checklist I.2).</li> </ul>					

## CASE STUDY I

Radha (wife of Gangaram), 26 years of age, third gravida, was admitted at 5:00 am on 11 June 2009 with the complaint of labour pains since 2:00 am. Her membranes had ruptured at 4:00 am. She has two children of the ages of 5 and 2 years. On admission, her cervix was 2 cm dilated.

**Plot the following findings on the partograph:****At 09:00 am:**

- The cervix is dilated 5 cm.
- She had 3 contractions in 10 minutes, each lasting 20–40 seconds.
- The FHR is 120 beats per minute.
- The membranes have ruptured and the amniotic fluid is clear.
- Her BP is 120/70 mmHg.
- Her temperature is 36.8°C.
- Her pulse is 80 per minute.

**9:30 am:** FHR 120, contractions 3/10 each 30 seconds, pulse 80/minute, amniotic fluid clear

**10:00 am:** FHR 136, contractions 3/10 each 35 seconds, pulse 80/minute, amniotic fluid clear

**10:30 am:** FHR 140, contractions 3/10 each 40 seconds, pulse 88/minute, amniotic fluid clear

**11:00 am:** FHR 130, contractions 3/10 each 40 seconds, pulse 88/minute, amniotic fluid clear

**11:30 am:** FHR 136, contractions 4/10 each 45 seconds, pulse 84/minute, amniotic fluid clear

**12:00 noon:** FHR 140, contractions 4/10 each 45 seconds, pulse 88/minute, amniotic fluid clear

**12:30 pm:** FHR 130, contractions 4/10 each 50 seconds, pulse 88/minute, amniotic fluid clear

**1:00 pm:** FHR 140, contractions 4/10 each 55 seconds, pulse 90/minute, temperature 37°C, BP 100/70 mmHg, amniotic fluid clear

**At 1:00 pm:**

- Cervix fully dilated
- Amniotic fluid clear
- BP 100/70 mmHg

**At 1:20 pm:** Spontaneous birth of a live female infant weighing 2.85 kg.



## CASE STUDY 2

Rani (wife of Rambhajan), 18 years of age, was admitted at 10:00 am on 11 June 2009 with complaints of labour pains since 7:00 am. This is her first pregnancy.

**Plot the following findings on the partograph:**

**At 10:00 am:**

- The cervix is dilated 4 cm. She had 2 contractions in 10 minutes, each lasting less than 20 seconds.
- The FHR is 140 per minute.
- The membranes are intact.
- Her BP is 100/70 mmHg.
- Her temperature is 37°C.
- Her pulse is 80 per minute.

**10:30 am:** FHR 140, contractions 2/10 each 20 seconds, pulse 90/minute

**11:00 am:** FHR 136, contractions 2/10 each 20 seconds, pulse 88/minute

**11:30 am:** FHR 140, contractions 2/10 each 20 seconds, pulse 84/minute

**12:00 noon:** FHR 136, contractions 3/10 each 30 seconds, pulse 88/minute, membranes ruptured, amniotic fluid clear

**12:30 pm:** FHR 146, contractions 3/10 each 35 seconds, pulse 90/minute, amniotic fluid clear

**1:00 pm:** FHR 150, contractions 4/10 each 40 seconds, pulse 92/minute, amniotic fluid meconium-stained

**1:30 pm:** FHR 160, contractions 4/10 each 45 seconds, pulse 94/minute, amniotic fluid meconium-stained

**At 2:00 pm:**

- Cervix dilated 6 cm
- Amniotic fluid meconium-stained
- Contractions 4/10 each 45 seconds
- FHR 162/minute
- Pulse 100/minute
- Temperature 37.6°C
- BP 130/80 mmHg.

**What action would you take in Rani's case?**

## CASE STUDY 3

Rubina (wife of Zarif), age 26 years, was admitted at 11:00 am on 12 June 2009 with the complaint of labour pains since 4:00 am. Her membranes ruptured at 9:00 am. She has three children, of the ages of 8, 7 and 2 years. She gave birth to a stillborn child four years ago.

**Plot the following findings on the partograph:**

**At 11:00 am:**

- The cervix is dilated 4 cm.
- She had 3 contractions in 10 minutes, each lasting less than 20 seconds.
- The FHR is 140 per minute.
- The membranes have ruptured and the amniotic fluid is clear.
- Her BP is 100/70 mmHg.
- Her temperature is 37°C.
- Her pulse is 80 per minute.

**11:30 am:** FHR 130, contractions 3/10 each 35 seconds, pulse 88/minute, amniotic fluid clear

**12:00 am:** FHR 136, contractions 3/10 each 40 seconds, pulse 90/minute, amniotic fluid clear

**12:30 pm:** FHR 140, contractions 3/10 each 40 seconds, pulse 88/minute, amniotic fluid clear

**1:00 pm:** FHR 130, contractions 3/10 each 40 seconds, pulse 90/minute, amniotic fluid clear

**1:30 pm:** FHR 120, contractions 3/10 each 45 seconds, pulse 96/minute, amniotic fluid clear

**2:00 pm:** FHR 118, contractions 3/10 each 45 seconds, pulse 96/minute, amniotic fluid clear

**2:30 pm:** FHR 112, contractions 3/10 each 45 seconds, pulse 98/minute, amniotic fluid meconium-stained

**3:00 pm:** FHR 100, contractions 4/10 each 45 seconds, pulse 100/minute, amniotic fluid meconium-stained, temperature 37.8°C, BP 120/80 mmHg, cervix dilated 7 cm.

**What action would you take in Rubina's case?**

**CHECKLIST 2.4: MANAGEMENT OF THE SECOND STAGE OF LABOUR**

STEP	TASK	CASES				
		1	2	3	4	5
<b>I.</b>	<b>GETTING READY</b>					
a.	Keep the equipment, supplies and drugs necessary for conducting a delivery ready. These are: <ul style="list-style-type: none"> <li>• Plastic apron, mask, covered shoes, goggles</li> <li>• Plastic sheet</li> <li>• HLD/sterile gloves</li> <li>• Swabs/pieces of gauze</li> <li>• Antiseptic solution—Savlon, Dettol or Betadine</li> <li>• BP instrument and stethoscope</li> <li>• Foetoscope</li> <li>• Thermometer</li> <li>• Towels for the baby</li> <li>• Delivery tray with 2 artery forceps and scissors/DDK</li> <li>• Cord ligatures</li> <li>• Mucus extractor</li> <li>• Infant Ambu bag</li> <li>• Kidney tray</li> <li>• Pads for mother</li> <li>• Disposable needle and syringe</li> <li>• Oxytocin injection (<b>10 IU, preferred</b>), Misoprostol tablets (200 mcg, 3 tablets)</li> <li>• Intravenous stand, intravenous set, normal saline/ringer lactate (at least 1 bottle)</li> <li>• One leak-proof container to dispose of soiled linen</li> <li>• One puncture-proof container at point of use to discard needle and syringe</li> <li>• One plastic container with biodegradable plastic liner to dispose of the placenta</li> <li>• One plastic container with 0.5% chlorine solution for decontamination</li> <li>• Watch/clock</li> <li>• <b>Client's record and Partograph</b></li> <li>• Measuring tape</li> <li>• Adhesive tape.</li> </ul>					
b.	Allow the woman to adopt the position of her choice: <ul style="list-style-type: none"> <li>• Semi-sitting</li> <li>• Lying on her back with her legs raised/flexed</li> </ul>					
c.	Maintain privacy (place a curtain or screen).					
d.	Tell the woman and her support person what is going to be done and encourage them to ask questions.					
e.	Listen to what the woman and her support person have to say.					
f.	Provide emotional support and reassurance.					

STEP	TASK	CASES				
		1	2	3	4	5
<b>2.</b>	<b>CONDUCTING THE DELIVERY</b>					
a.	Remove all jewellery and put on a clean plastic apron, mask, goggles and shoes/shoe cover.					
b.	Place one clean plastic sheet from the delivery kit under the woman's buttocks.					
c.	Wash your hands thoroughly with soap and water, and dry them with a clean, dry cloth or air dry.					
d.	Wear sterile/HLD gloves on both hands and clean the perineal area from above downward with cotton swabs dipped in antiseptic lotion.					
e.	<b>Delivery of the head</b> <ol style="list-style-type: none"> <li>Keep one hand gently on the head, as it advances with the contractions, to maintain flexion.</li> <li>Support the perineum with the other hand, using a clean pad. Give good perineal support to prevent perineal tears. Leave the perineum visible (between the thumb and the index finger).</li> <li>Ask the mother to take deep breaths and bear down only during a contraction.</li> <li>Once the head is out, gently wipe the baby's face clean of mucus with a clean piece of gauze.</li> <li>Gently feel around the baby's neck for the cord.               <ul style="list-style-type: none"> <li>• If the cord is around the neck but is loose, slide/slip it over the baby's head.</li> <li>• If the cord is tight around the neck, clamp the cord with two artery forceps placed 3 cm apart, and cut the cord between the two clamps and unwind it.</li> </ul> </li> </ol>					
f.	<b>Delivery of the shoulders and the rest of the baby</b> <ol style="list-style-type: none"> <li>Wait for spontaneous rotation and delivery of the shoulders. This happens in about 1–2 minutes.</li> <li>Apply gentle pressure downwards to deliver the anterior shoulder.</li> <li>Then lift the baby up, towards the mother's abdomen, to deliver the posterior shoulder.</li> <li>The rest of the baby's body follows smoothly.</li> </ol>					
<b>3.</b>	Note down the time of the delivery.					
<b>4.</b>	Place the baby on the mother's abdomen and put identification tag on the new born.					
<b>5.</b>	<ul style="list-style-type: none"> <li>• Look for meconium.</li> <li>• If there is no meconium, proceed to dry the baby with a warm towel or piece of clean cloth (do not wipe off the white greasy substance [called vernix] covering the baby's body).</li> </ul>					

STEP	TASK	CASES				
		1	2	3	4	5
6.	<ul style="list-style-type: none"> <li>After drying, the wet towels or clothes should be replaced and the baby wrapped loosely in a clean, dry and warm towel. (If the baby remains wet after birth, it leads to heat loss).</li> <li>Wipe both the eyes (separately) with sterile gauze.</li> </ul>					
7.	<ul style="list-style-type: none"> <li>If meconium is present and the baby is not crying, suck the mouth and then the nose with mucus sucker, and dry the baby.</li> <li>Assess the baby's breathing.</li> </ul>					
8.	<ul style="list-style-type: none"> <li>If the baby is breathing well and the chest is rising regularly between 30 and 60 times a minute, provide routine care.</li> </ul>					
9.	<ul style="list-style-type: none"> <li>If the baby is not breathing/is gasping, call for help immediately. The steps of resuscitation, described at the end of this chapter, need to be carried out. Anticipate the need for resuscitation, especially if the woman has a history of eclampsia, bleeding, and prolonged/obstructed labour or pre-term birth.</li> </ul>					
10.	<ul style="list-style-type: none"> <li>It normally takes about 1–3 minutes for the cord to stop pulsating. Put clean thread ties tightly around the cord at approximately 2 cm and 5 cm from the baby's abdomen and cut between the ties with a sterile/clean blade. If there is oozing, place a second tie between the baby's skin and the first tie.</li> </ul>					
11.	<p>Cut the cord when cord pulsation stops. It normally takes 1-3 minutes for cord to stop pulsating. Cutting the cord after an interval of 1–3 minutes results in the transfusion of an increased amount of blood into the foetal circulation. This helps to avoid neonatal anaemia.</p>					
12.	<p>Leave the baby between the mother's breasts to start skin-to-skin care and let the baby suckle. This helps in early establishment of lactation. <i>The sucking and rooting reflexes of the newborn, which are essential for the baby to successfully start breastfeeding, are the strongest immediately after delivery, making the process of <b>initiation much easier for the mother and the baby.</b></i></p>					
13.	<p>Cover the baby's head with a cloth. Cover the mother and the baby with a warm cloth.</p>					

**CHECKLIST 2.5: ACTIVE MANAGEMENT OF THE THIRD STAGE OF LABOUR**

STEP	TASK	CASES				
		1	2	3	4	5
	<b>Before starting to manage the third stage of labour, rule out the presence of another baby by palpating the abdomen and trying to feel for foetal parts.</b>					
<b>1.</b>	<b>UTEROTONIC DRUG</b>					
	Administer 10 IU of Oxytocin as an intramuscular injection to the mother if she is at a health facility (preferred) or give Misoprostol tablets (600 mcg, orally, i.e. 3 tablets of 200 mcg available in drug kit) if it is a home delivery.					
<b>2.</b>	<b>CONTROLLED CORD TRACTION (CCT) (Only to be attempted when the uterus is contracted).</b>					
	Assure the woman that delivering the placenta will not hurt, because it is much smaller and softer than the baby. <ul style="list-style-type: none"> <li>Clamp the maternal end of the umbilical cord close to the perineum with an artery clamp.</li> <li>Hold the clamped end with one hand and place the other hand just above the symphysis pubis, for counter traction.</li> <li>Maintain tension on the cord and wait for a contraction.</li> <li>During a contraction, gently pull the cord downwards to deliver the placenta.</li> <li>With the other hand, push the uterus upwards by applying counter-traction. (If the placenta does not descend within 30–40 seconds of CCT, do not continue to pull on the cord. Wait for about 5 more minutes for the uterus to contract strongly, then repeat CCT with counter-traction). <ul style="list-style-type: none"> <li>As the placenta delivers, hold it with both hands to prevent tearing of the membranes.</li> <li>Gently twist the membranes so that they are expelled intact.</li> </ul> </li> <li>Place the placenta in a tray.</li> </ul>					
<b>3.</b>	<b>UTERINE MASSAGE</b>					
	<ul style="list-style-type: none"> <li>Place your cupped palm on the uterine fundus and feel for the state of contraction.</li> <li>Massage the uterine fundus in a circular motion with the cupped palm until the uterus is well contracted. A well contracted uterus feels hard like a cricket ball.</li> <li>When the uterus is well contracted, place your fingers behind the fundus and push down in one swift action to expel clots.</li> <li>Collect the blood in a container or over a clean plastic sheet placed close to the vulva. Estimate and record the amount of blood lost.</li> <li>Help the woman to breastfeed. The oxytocin produced with breastfeeding will help keep the uterus contracted. If the woman cannot breastfeed, encourage manual nipple stimulation.</li> <li>Check the uterus and vaginal bleeding at least every 15 minutes for the first 2 hours, massaging as and when necessary to keep it hard. <i>Make sure the uterus does not become soft (relaxed) after massage.</i></li> </ul>					

STEP	TASK	CASES				
		1	2	3	4	5
4.	<b>EXAMINATION OF THE LOWER VAGINA AND PERINEUM</b>					
	<ul style="list-style-type: none"> <li>• Ensure that adequate light is falling onto the perineum.</li> <li>• With gloved hands, gently separate the labia and inspect the perineum and vagina for bleeding and lacerations/tears.</li> <li>• If lacerations/tears are present, refer to checklist 4.2 on the identification and management of immediate and delayed postpartum haemorrhage and the management of tears.</li> <li>• Clean the vulva and perineum gently with warm water or an antiseptic solution and dry with a clean, soft cloth.</li> <li>• Place a clean/sun-dried cloth or pad on the woman's perineum.</li> <li>• Remove soiled bedding to make the woman comfortable.</li> </ul>					
5.	<b>EXAMINATION OF THE PLACENTA, MEMBRANES AND UMBILICAL CORD</b>					
	<p><b>a. Maternal surface of the placenta</b></p> <ul style="list-style-type: none"> <li>• Hold the placenta in the palms of your hands, keeping the palms flat. Make sure that the maternal surface is facing you.</li> <li>• Check if all the lobules are present and fit together.</li> <li>• After the maternal side has been rinsed carefully with water, it should shine because of the decidual covering.</li> <li>• If any of the lobes is missing or the lobules do not fit together, suspect that some placental fragments may have been left behind in the uterus. Refer to checklist 4.2.</li> </ul>					
	<p><b>b. Foetal surface</b></p> <ul style="list-style-type: none"> <li>• Hold the umbilical cord in one hand and let the placenta and membranes hang down like an inverted umbrella.</li> <li>• Look for holes which may indicate that a part of a lobe has been left behind in the uterus.</li> <li>• Look for the point of insertion of the cord (the point where the cord is inserted into the membranes and from where it travels to the placenta).</li> </ul>					
	<p><b>c. Membranes</b></p> <ul style="list-style-type: none"> <li>• Place the membranes together and make sure that they are complete.</li> </ul>					
	<p><b>d. Umbilical cord</b></p> <ul style="list-style-type: none"> <li>• The umbilical cord should be inspected. It has two arteries and one vein. If only one artery is found, look for congenital malformations in the baby.</li> </ul>					
6.	<b>PLACE THE INSTRUMENTS USED IN 0.5% CHLORINE SOLUTION FOR 10 MINUTES FOR DECONTAMINATION.</b>					
7.	<b>DECONTAMINATE OR DISPOSE OF THE SYRINGE AND NEEDLE.</b>					

STEP	TASK	CASES				
		1	2	3	4	5
8.	<b>IMMERSE BOTH YOUR GLOVED HANDS IN 0.5% CHLORINE SOLUTION.</b>					
	<ul style="list-style-type: none"> <li>• Remove the gloves by turning them inside out.</li> <li>• For disposing of the gloves, place them in a leak-proof container or plastic bag.</li> <li>• If the surgical gloves are to be re-used, submerge them in 0.5% chlorine solution for 10 minutes to decontaminate them.</li> </ul>					
9.	<b>WASH YOUR HANDS THOROUGHLY WITH SOAP AND WATER, AND DRY WITH A CLEAN, DRY CLOTH OR AIR DRY.</b>					

CHECKLIST 2.6: MANAGEMENT DURING THE FOURTH STAGE OF LABOUR (IMMEDIATE POSTPARTUM CARE OF MOTHER AND NEWBORN)						
STEP	TASK	CASES				
		1	2	3	4	5
<b>I.</b>	<b>IMMEDIATE POST DELIVERY CARE OF THE MOTHER</b>					
a.	Put all soiled clothing in a leak-proof container, and keep the woman warm and comfortable.					
b.	<b>Check the uterus</b> Check if the uterus is well contracted, i.e. hard and round. Check every 15 minutes.					
c.	If the uterus is not well contracted, massage it and expel the clots.					
d.	If bleeding continues even after 15 minutes, manage as described in checklist 4.2 (Management of shock and postpartum haemorrhage [PPH]) and prepare to refer.					
e.	Examine the perineum, lower vagina and vulva for tears. If any are present, apply pressure using a pad and refer the woman to a FRU.					
f.	Clean the area beneath her and place a sanitary pad/cloth. Estimate the amount of blood loss (by counting the number of pads soaked).					
g.	Monitor the following every 15 minutes for first 2 hours. <ul style="list-style-type: none"> <li>General condition</li> <li>BP and pulse</li> <li>Vaginal bleeding</li> <li>Uterus, to make sure it is well contracted.</li> </ul>					
h.	Using gloves put the placenta into a leak-proof biodegradable bag containing bleach, and dispose it off in a safe and culturally appropriate manner.					
i.	Keep the mother and the newborn together. Encourage and facilitate breastfeeding, including colostrum-feeding, as early as possible/within an hour of birth. Also, ask the mother to take adequate fluids and rest, maintain good hygiene, and pass urine frequently.					
j.	Watch the mother and also ask the birth companion to call you if the woman develops any of the following. <ul style="list-style-type: none"> <li>Increase in P/V bleeding</li> <li>Severe headache</li> <li>Visual disturbance</li> <li>Epigastric pain</li> <li>Increased pain in the perineum</li> <li>Convulsions</li> <li>Inability to pass urine.</li> </ul>					

STEP	TASK	CASES				
		1	2	3	4	5
	k. If a decision is made to refer to a higher health facility, explain to the woman and the family members accompanying her why she needs to be referred, where she should be taken and how she should be transported.					
<b>2.</b>	<b>CARE OF THE NEWBORN</b>					
a.	Ensure that an identity label on the baby's wrist or ankle has been placed.					
b.	Give the baby vitamin K injection 1 mg, intramuscular, to prevent haemorrhagic disease of the newborn.					
c.	Examine baby quickly for any birth injury/malformation. If any is present, refer him/her to the newborn care unit in the FRU. Make sure that the baby is kept warm during examination and transportation.					
d.	Check the baby's colour and breathing every 5 minutes. Refer the baby to a FRU if: <ul style="list-style-type: none"> <li>The baby is cyanotic (bluish)</li> <li>And/OR</li> <li>The RR is &lt;30 or ≥60 breaths/minute.</li> </ul>					
e.	Check if the baby is warm by feeling the baby's feet every 15 minutes. <ul style="list-style-type: none"> <li>If the baby's feet feel cold, check the axillary temperature.</li> <li>If the temperature is below 36.5° C, place the baby under a radiant warmer.</li> </ul>					
f.	Encourage breastfeeding within an hour of birth. Emphasize the importance of colostrum-feeding.					
g.	Weigh the baby.					
h.	Delay the baby's first bath to 24 hours after birth.					
i.	Ensure that the baby is dressed warmly and is with the mother.					
j.	Watch for complications, such as convulsions, coma and feeding problems, and refer if there are complications.					

CHECKLIST 2.7: RESUSCITATION OF THE NEWBORN						
STEP	TASK	CASES				
		1	2	3	4	5
1.	<b>GETTING READY</b>					
	<p><b>Keep the following articles ready:</b></p> <ul style="list-style-type: none"> <li>• <b>Bag and Mask Equipments:</b> <ul style="list-style-type: none"> <li>▪ Self inflating Bag (Paediatric size volume 250-500 ml).</li> <li>▪ Face masks ( sizes 0 and 1, cushioned-rim masks preferred)</li> </ul> </li> <li>• <b>Suction Equipments:</b> <ul style="list-style-type: none"> <li>▪ Mucous extractor/Mechanical suction and tubing with clean tips.</li> </ul> </li> <li>• <b>Miscellaneous:</b> <ul style="list-style-type: none"> <li>▪ Radiant warmer or other heat source</li> <li>▪ Firm padded resuscitation surface.</li> <li>▪ Warm linen</li> <li>▪ Clock with seconds hand</li> <li>▪ Oxygen source with flow meter and clean tips</li> <li>▪ Gloves</li> <li>▪ Shoulder roll</li> <li>▪ Cord tie</li> <li>▪ Sterile blade/Scissors</li> </ul> </li> </ul>					
2.	<p><b>Soon after the baby is delivered, do follows:</b></p> <ul style="list-style-type: none"> <li>• <b>No meconium:</b> If there is no meconium, dry the baby.</li> <li>• <b>Meconium present:</b> If meconium is present, suction of the mouth and nose (if the baby is not crying), and dry the baby.</li> </ul>					
3.	<b>ASSESS BREATHING</b>					
	a. If the baby is breathing well/crying, provide routine/observational care: provide warmth; observe breathing and temperature; initiate breastfeeding; watch for complications such as convulsions; coma and feeding problems; and refer in case of complications.					
	b. If the baby is not breathing well, do as follows: Initial steps: <ul style="list-style-type: none"> <li>• Cut the cord immediately</li> <li>• Place the baby on a firm, flat surface</li> <li>• Provide warmth</li> <li>• Position the baby with the neck slightly extended</li> <li>• Suction of the mouth and then the nose</li> <li>• Stimulate and reposition</li> </ul>					
4.	<p>If the baby is not breathing well, provide bag and mask ventilation for 30 seconds. Make sure that the chest rises.</p> <p><b>Check the following before beginning ventilation.</b></p> <ul style="list-style-type: none"> <li>• Select a mask of the appropriate size: it should cover the mouth, nose and tip of the chin, but not the eyes.</li> <li>• Be sure there is a clear airway.</li> <li>• Place the baby's head in a slightly extended position.</li> </ul>					

STEP	TASK	CASES				
		1	2	3	4	5
	<ul style="list-style-type: none"> <li>• Position yourself at the bedside—at the baby's side or head, to use a resuscitation device effectively, leave the chest and abdomen unobstructed for visual monitoring of the baby.</li> </ul>					
	<p><b>a. Positioning the bag and mask on the face.</b></p> <ul style="list-style-type: none"> <li>• Hold the mask on the face with your thumb, index and/or middle fingers encircling much of the rim of the mask, while with your ring and fifth fingers; bring the chin forward to maintain a patent airway.</li> <li>• Ensure an airtight seal between the rim of the mask and the face to achieve the ventilation (positive pressure) required to inflate the lungs.</li> <li>• Check if the chest is rising with each ventilation.</li> <li>• Deliver ventilation at a rate of 40–60 breaths per minute. To help maintain this rate, try saying to yourself as you ventilate the newborn:</li> </ul> <p style="text-align: center;">Squeeze----- Two-----Three----- Squeeze</p> <ul style="list-style-type: none"> <li>• If the chest does not expand adequately, it may be due to one or more of the following reasons: <ul style="list-style-type: none"> <li>▪ The seal is inadequate.</li> <li>▪ The airway is blocked.</li> <li>▪ Not enough pressure is being given.</li> </ul> </li> </ul>					
5.	Assess the baby's breathing again. If he/she is breathing well, provide observational care.					
6.	If the baby is not breathing well, continue bag and mask ventilation and start oxygen, if available.					
7.	<p>Stop the ventilation for 6 seconds and assess the heart rate by feeling the umbilical cord pulse or listening to the heart beat with a stethoscope.</p> <ul style="list-style-type: none"> <li>• Feel the pulse in the umbilical cord where it is attached to the baby's abdomen.</li> <li>• If no pulse can be felt in the cord, you or your helper must listen over the left side of the chest with the stethoscope and count the heart beat.</li> </ul>					
8.	<p><b>How to count the heart rate:</b> Counting the number of beats for 6 seconds and multiplying it by 10 can provide a quick estimate of the beats per minute (e.g. if you count 8 beats in 6 seconds, the baby's heart rate is 80 beats per minute).</p> <ul style="list-style-type: none"> <li>• <b>A heart rate of above 100 beats per minute is normal in newborns.</b></li> <li>• <b>A heart rate of less than 100 beats per minute is slow.</b></li> </ul>					

STEP	TASK	CASES				
		1	2	3	4	5
9.	<ul style="list-style-type: none"> <li>If the heart rate is 100 or more, continue ventilation and assess breathing. If the baby is breathing well, provide observational care. If not, refer the baby to a higher facility.</li> <li>If the heart rate is less than 100, continue ventilation with oxygen and refer the baby to a higher facility.</li> </ul>					

## CARE AFTER DELIVERY – POSTPARTUM CARE



## 3.0: CARE AFTER DELIVERY—POSTPARTUM CARE

## CHECKLIST 3.1: CARE OF THE MOTHER AND BABY—FIRST POSTPARTUM VISIT, WITHIN 24 HOURS

STEP	TASK	CASES				
		1	2	3	4	5
<b>I.</b>	<b>CARE FOR THE MOTHER</b>					
	<ul style="list-style-type: none"> <li>The first postpartum visit can be at the hospital or home.</li> <li>If you were not present at the time of the delivery:               <ul style="list-style-type: none"> <li>Review the labour and birth events to identify any risk factors or events during the birth which may be important in the management of the mother and baby.</li> </ul> </li> <li>Ask the mother for the following history:</li> </ul>					
	<p><b>a. History-taking</b></p> <p>i. <ul style="list-style-type: none"> <li>How are you feeling?</li> <li>Did you take adequate rest and sleep?</li> <li>How is your diet; did you pass urine and stools; any perineal pain?</li> <li>Are you breastfeeding?</li> <li>Where did the delivery take place?</li> <li>Who conducted the delivery?</li> <li>Was there heavy vaginal bleeding? What is the number of pads or pieces of cloth getting soaked with blood? (If she soaks a pad or cloth in less than 5 minutes, it is a case of immediate PPH).</li> <li>Did you have convulsions or loss of consciousness?</li> <li>Do you have abdominal pain?</li> <li>Did you have fever?</li> <li>Do you have pain in the legs?</li> <li>Do you have any dribbling/burning sensation on micturition/retention of urine?</li> <li>Do you have tenderness of the breasts?</li> </ul> </p> <p>ii. <b>Examination</b></p> <p>(i) Ask the mother to sit/lie comfortably. <ul style="list-style-type: none"> <li>Check her pulse, BP, temperature and RR.</li> <li>Look for pallor.</li> </ul> </p> <p>(ii) Explain to her what is going to be done and ask her to lie down on the examination table. <ul style="list-style-type: none"> <li>Conduct an abdominal examination. Check if the uterus is well contracted, i.e. hard and round. If it is soft and there is tenderness, refer her to the MO (Refer checklist 4, for management and referral).</li> <li>Examine the vulva and perineum for the presence of any tear, swelling or pus discharge. If any of these is present, refer her to the MO (Refer checklist 4, for management and referral).</li> <li>Examine the pad for bleeding and assess if the bleeding is heavy. Also see if the lochia is healthy. If it is foul-smelling (as in puerperal sepsis), refer her to the MO (Refer checklist 4, for management and referral).</li> <li>Examine the breasts for lumps or tenderness, and check the condition of the nipples.</li> </ul> </p>					

STEP	TASK	CASES				
		1	2	3	4	5
	<ul style="list-style-type: none"> <li>Also observe breastfeeding technique and enquire if milk is adequate.</li> </ul> <p>iii. <b>Management/counseling</b></p> <p>(i) Give the mother the following advice.</p> <p><i>Postpartum care and hygiene</i></p> <ul style="list-style-type: none"> <li>She should have someone near her for the first 24 hours after the delivery to take care of her and her baby.</li> <li>She should wash the perineum daily and after passing stools.</li> <li>The perineal pads should be changed every 4–6 hours, or more frequently if there is heavy lochia.</li> <li>Cloth pads must be washed with soap and water and dried in the sun. It is preferable to use sanitary pads, which can be thrown away.</li> <li>She should bathe daily.</li> <li>She should get enough rest and sleep.</li> <li>Sexual intercourse should be avoided until the perineal wounds have healed.</li> <li>She should wash her hands before and after handling the baby, especially after cleaning the baby.</li> <li>Rooming in, i.e. the mother and baby staying together, is advisable.</li> </ul> <p>(ii) <i>Nutrition</i></p> <ul style="list-style-type: none"> <li>She should increase her intake of food and fluids.</li> <li>She should not follow taboos on nutritionally healthy foods.</li> <li>Encourage the family members, such as the husband and mother-in-law, to help ensure that the woman eats enough and avoids heavy physical work.</li> </ul> <p>(iii) <i>Contraception</i></p> <ul style="list-style-type: none"> <li>Advise the couple on birth spacing or limiting the family size.</li> </ul> <p>(iv) <i>Breastfeeding</i></p> <ul style="list-style-type: none"> <li>She should Breastfeed in a relaxed environment, free from any mental stress.</li> <li>Breastfeed frequently, at least 6–8 times during the day and 2–3 times during the night.</li> <li><b>The baby must not be given water or any other liquid.</b></li> <li>Pre-lacteal feeds should not be given (like honey etc.).</li> <li>The baby should be fed colostrum.</li> <li>She should breastfeed from both breasts during a feed. The baby should finish emptying one breast to get the rich hind milk before starting on the second breast. For the next feed, 2nd breast should be offered to the baby first. Spend 10 minutes on each breast to ensure baby gets full feed.</li> <li>Breastfeeding problems should be dealt with as follows. <ul style="list-style-type: none"> <li>If the nipples are cracked or sore, she should apply hind breast milk as it has a soothing effect, and should ensure correct positioning and attachment of the baby.</li> <li>If the discomfort continues, the baby should be fed expressed milk with a clean spoon from a clean bowl.</li> </ul> </li> </ul>					

STEP	TASK	CASES				
		1	2	3	4	5
	<ul style="list-style-type: none"> <li>If the breasts are engorged, she should let the baby continue to suck, if possible. Putting a warm compress on the breast may help relieve breast engorgement.</li> <li>If there is a breast abscess, she should feed from the other breast. <i>Refer her to the FRU.</i></li> </ul> <p>(v) Registration of birth</p> <ul style="list-style-type: none"> <li>Emphasize the importance of getting the birth of the baby registered with the local <i>panchayat</i>. This is a legal document. The birth certificate is required for many purposes, e.g. admission into a school.</li> </ul> <p>(vi) <i>IFA supplementation</i></p> <ul style="list-style-type: none"> <li>She should have an IFA tablet once a day for 3 months, as should all women postpartum.</li> <li>If she was anaemic prior to the delivery or still has a low Hb level, she should take IFA tablet twice a day for 3 months. Refer her to the FRU, if her Hb doesn't improve after 1 month of IFA consumption.</li> </ul> <p>(vii) <i>Danger signs</i></p> <p>The mother should go to an FRU without waiting if she develops the following danger signs:</p> <ul style="list-style-type: none"> <li>Excessive bleeding, i.e. soaking more than 2–3 pads in 20–30 minutes after the delivery.</li> <li>Convulsions.</li> <li>Fever.</li> <li>Severe abdominal pain.</li> <li>Difficult breathing.</li> <li>Foul-smelling lochia.</li> </ul>					
<b>2.</b>	<b>CARE FOR THE BABY</b>					
	<p>i. <b>History-taking</b></p> <p>Ask the mother the following questions.</p> <ol style="list-style-type: none"> <li>When did the baby pass urine and/stools (meconium)?</li> <li>Have you started breastfeeding the baby? Are there any difficulties in breastfeeding?</li> <li>Does the baby have any of the following problems? <ul style="list-style-type: none"> <li>Fever</li> <li>Not suckling well</li> <li>Difficulty in breathing</li> <li>Less than normal movement</li> <li>Umbilical cord red or swollen, or pus discharge from the cord</li> <li>Skin infection—pustules (red spots which contain pus) or a big boil</li> <li>Convulsions.</li> </ul> </li> </ol> <p>If any of these problems are present, <i>refer the baby to the FRU</i>. However, do not do so if there is an umbilical infection or less than 10 skin pustules. In such cases, provide treatment and refer to an FRU only if there is no improvement after two days.</p>					

STEP	TASK	CASES				
		1	2	3	4	5
	<p>ii. <b>Examination</b></p> <p>(i) Count the baby's RR for 1 minute.</p> <ul style="list-style-type: none"> <li>The infant must be quiet and calm when you watch and listen to the breathing.</li> <li>Look at the infant's chest/abdomen and count the number of breaths for 1 minute.</li> <li>If the RR is &lt;30 breaths/minute or <math>\geq</math> breaths/minute, refer the baby to the FRU.</li> </ul> <p>(ii) Check for indrawing of the chest.</p> <ul style="list-style-type: none"> <li>Look for chest indrawing when the infant breathes in.</li> <li>Look at the lower chest wall (lower ribs).</li> <li>If the lower chest wall goes in when the infant breathes in, the infant has chest indrawing. Refer the infant, with the mother, to the FRU.</li> </ul> <p><b>Note:</b> If only the soft tissues between the ribs go in when the infant breathes in, the infant does not have chest indrawing.</p> <p>(iii) Check the baby's colour, looking out for:</p> <ul style="list-style-type: none"> <li>Jaundice</li> <li>Central cyanosis (blue tongue and lips)</li> <li><i>How to check for jaundice:</i> Press the infant's skin over the forehead with your fingers to blanch, remove your fingers and look for yellow discoloration under natural light. If there is yellow discoloration, the infant has jaundice. Refer the baby to 24 hour PHC/FRU.</li> <li>To assess for severity, repeat the process over the palms and soles too.</li> </ul> <p>(iv) If body temperature: &lt; 36.5°C or &gt; 37.4°C, then refer the baby to 24 hour PHC/ FRU.</p> <ul style="list-style-type: none"> <li><i>How to check the temperature:</i> Hold the thermometer high in the axilla and hold the infant's arm against the body for 5 minutes before reading the temperature.</li> </ul> <p>(v) Examine the umbilicus for bleeding, redness or pus. If any of these is present, provide treatment and refer the baby to the FRU if there is no improvement in two days.</p> <p>(vi) Examine the baby for skin infection (pustules). If there are 10 or more pustules or a big boil, refer the baby to the FRU. If there are less than 10 pustules, provide treatment and refer only if there is no improvement after two days.</p> <p>(vii) Examine the baby for cry and activity. If the newborn is not alert and/or has a poor cry, or if its movements are less than normal, refer it to the FRU.</p> <p>(viii) Examine the eyes. Look for discharge from the eyes or red and swollen eyelids. If any of these is present, refer the baby to the FRU.</p> <p>(ix) Look for congenital malformations and birth injuries. If any is present, refer the baby to the FRU.</p>					

STEP	TASK	CASES				
		1	2	3	4	5
	<p>(x) Check if the baby has passed urine/meconium. If not, refer the baby to the FRU.</p> <p>iii. <b>Management/counseling</b></p> <p>(i) Give the mother the following advice.</p> <ul style="list-style-type: none"> <li>She should maintain hygiene while handling the baby.</li> <li>The baby's first bath should be delayed to beyond 24 hours after birth.</li> <li>In cool weather, she should cover the baby's head and feet and dress him/her in extra clothing. She should make sure the baby stays warm at all times.</li> <li>She should not apply anything on the cord, and should keep the umbilicus and cord dry.</li> <li>She should observe the baby while breastfeeding and guard against poor attachment.</li> <li>If the baby has the following problems, she should immediately take him/her to the MO at the FRU. <ul style="list-style-type: none"> <li>Is not breastfeeding</li> <li>Looks sick (lethargic or irritable)</li> <li>Has fever (feels cold or hot to the touch)</li> <li>Fast or difficult breathing</li> <li>Has blood in the stools</li> <li>Looks yellow, pale or bluish</li> <li>Body is arched forward</li> <li>Irregular movements of the body, limbs or face</li> <li>Has not passed meconium within 24 hours of birth</li> <li>Has diarrhoea</li> </ul> </li> <li>Counsel the mother on where and when to take the baby for immunization (<b>Annexure 1 'A' in Guidelines: Immunization Schedule</b>).</li> </ul>					

**CHECKLIST 3.2: CARE OF THE MOTHER AND THE BABY****SECOND POSTPARTUM VISIT (3rd day after delivery)  
THIRD POSTPARTUM VISIT (7th day after delivery)**

STEP	TASK	CASES				
		1	2	3	4	5
<b>I.</b>	<b>CARE FOR THE MOTHER</b>					
a.	<b>History-taking:</b> A history similar to that described in checklist 3.1 needs to be taken again. In addition, some more questions need to be asked.					
b.	<b>Ask the mother the following:</b> <ul style="list-style-type: none"> <li>Is there continuous heavy bleeding P/V. (If so, manage and refer, as described in checklist 4.2).</li> <li>Is there any foul-smelling vaginal discharge? (This could be indicative of puerperal sepsis. Manage as described in checklist 4.5).</li> <li>Is there swelling (engorgement) and/or pain in the breast?</li> <li>Do you have pain/burning or any other problem while passing urine (dribbling or leaking)?</li> <li>Are you easily fatigued or 'not feeling well'?</li> <li>Do you feel unhappy or feel like crying easily? (This indicates postpartum depression, which usually occurs between the 4th and 7th days after delivery).</li> </ul>					
c.	<b>Examination</b> <ol style="list-style-type: none"> <li>Ask the mother to sit/lie comfortably: <ul style="list-style-type: none"> <li>Check her pulse, BP, temperature and RR.</li> <li>Check for pallor.</li> </ul> </li> <li>Explain to her what is going to be done and ask her to lie down. <ul style="list-style-type: none"> <li>Conduct an abdominal examination to see if the uterus is well contracted (hard and round), and to rule out the presence of uterine tenderness.</li> <li>Examine the vulva and the perineum for the presence of swelling or pus discharge.</li> <li>Examine the pad to assess the bleeding and lochia. Assess if the bleeding is profuse and whether the lochia is foul-smelling.</li> <li>Examine the breasts for the presence of lumps, tenderness or engorgement.</li> <li>Check the condition of the nipples. If they are cracked or sore, manage as specified for the first visit.</li> </ul> </li> </ol>					
d.	<b>Management/counseling</b> <i>Diet and rest</i> <ul style="list-style-type: none"> <li>Inform the woman that during lactation, she needs to eat well to regain her strength and also because during the period of exclusive breastfeeding, the baby relies solely on her for his/her nutritional requirements.</li> <li>Tell her about the foods available that are rich in calories, proteins, iron, vitamins and other micronutrients.</li> </ul>					

STEP	TASK	CASES				
		1	2	3	4	5
	<ul style="list-style-type: none"> <li>Ask her to take adequate rest and return slowly to her normal household duties.</li> <li>Advise her husband and family members not to allow her to do any heavy work during the postpartum period. She should focus on looking after herself and the baby.</li> </ul> <p><i>Contraception</i></p> <ul style="list-style-type: none"> <li>Remind the woman that whenever her periods resume, and/or whenever she stops exclusive breastfeeding, she can conceive even after a single act of unprotected sex.</li> <li>Counsel the couple on various contraceptive choices, including the lactational amenorrhoea method (LAM). (<i>Refer to Annexure V in Guidelines—Counselling Guide: Postpartum Family Planning</i>).</li> </ul>					
<b>2.</b>	<b>CARE FOR THE BABY</b>					
a.	<b>History-taking</b> <ul style="list-style-type: none"> <li>Ask if the baby is having any of the problems mentioned in the section on the first postpartum visit.</li> <li>If any of those problems is present, refer the baby to the FRU.</li> </ul>					
b.	<b>Examination</b> Observe and record if any of the following problems is present. <ul style="list-style-type: none"> <li>The baby is not suckling well.</li> <li>The baby has breathing difficulty (fast or slow breathing or indrawing of the chest).</li> <li>The baby has fever or is cold to the touch.</li> <li>The cord is swollen or there is discharge.</li> <li>There is blood in the stool.</li> <li>There are convulsions or arching of the baby's body.</li> </ul> <p><i>Refer the baby to the PHC/FRU if any of the above, except for local umbilical infection, is present.</i></p>					
c.	<b>Management/counseling</b> <ul style="list-style-type: none"> <li>In addition to the counselling given in the first visit, give the mother the following advice on feeding the baby. <ul style="list-style-type: none"> <li>Exclusive breastfeeding should be carried out for 6 months.</li> <li>Demand feeding should be given.</li> <li>Rooming in should be encouraged.</li> <li>Weaning should start at 6 months of age.</li> </ul> </li> <li>Also talk to the mother about: <ul style="list-style-type: none"> <li>The baby's weight loss in the initial days—a little weight loss is normal in the first 3 days after birth.</li> <li>Maintaining the hygiene of the baby.</li> <li>Feeding the baby—emphasize exclusive breastfeeding.</li> <li>When and where to seek help in case of illness.</li> <li>Immunizing the baby as per the Universal Immunization Programme—explain when and where she should take the baby for immunization (<i>refer to Annexure I in Guidelines: MCH card, immunization section</i>).</li> </ul> </li> </ul>					

**MANAGEMENT OF  
COMPLICATIONS  
DURING  
PREGNANCY,  
LABOUR, DELIVERY  
AND THE  
POSTPARTUM PERIOD**

#### 4.0: MANAGEMENT OF COMPLICATIONS DURING PREGNANCY, LABOUR, DELIVERY AND THE POSTPARTUM PERIOD

##### CHECKLIST 4.1: MANAGEMENT OF SHOCK AND VAGINAL BLEEDING IN EARLY PREGNANCY

STEP	TASK	CASES				
		1	2	3	4	5
<b>I</b>	<b>MANAGEMENT OF SHOCK</b>					
	<b>a.</b> Greet the woman and the person accompanying her.					
	<b>b.</b> Ask the woman or the person accompanying her, what made her come to the health centre, or if you have been called to her house, ask them the reason for calling you.					
	<b>c.</b> If the woman is conscious and complains of bleeding P/V, ask her the date of the LMP to ascertain whether she is pregnant, and whether she is in early pregnancy (less than 20 weeks) or late pregnancy (more than 20 weeks).					
	<b>d.</b> Ask whether there is any abdominal pain.					
	<b>e.</b> <ul style="list-style-type: none"> <li>• In either condition, make a rapid assessment. Check:               <ul style="list-style-type: none"> <li>▪ General condition of the woman</li> <li>▪ Her pulse, BP, RR and temperature</li> <li>▪ Bleeding P/V.</li> </ul> </li> <li>• The woman is in shock, IF:               <ul style="list-style-type: none"> <li>▪ She appears anxious, confused or is unconscious</li> <li>▪ Her skin is cold and clammy</li> <li>▪ Her pulse is more than 110/minute</li> <li>▪ The BP is less than 90/60 mmHg</li> <li>▪ The RR is more than 30/minute</li> <li>▪ Bleeding is heavy (1 pad is soaked in less than 5 minutes).</li> </ul> </li> </ul>					
	<b>f.</b> Initiate Treatment Immediately. <ul style="list-style-type: none"> <li>• Start intravenous infusion rapidly, of 500 ml ringer lactate or normal saline at the rate of 60 drops /minute.</li> <li>• Raise the woman's foot end.</li> <li>• Keep the woman warm by covering her with blankets.</li> <li>• Turn her face to one side.</li> </ul> <i>Fill the referral slip and make arrangements for referral.</i>					
	<b>g.</b> Explain to the woman/her companion that her condition is serious and her life may be in danger. Therefore, she <i>has</i> to be referred to the FRU immediately for further care.					
	<b>h.</b> Take the help of the woman's relatives or a person from her village to arrange for transport as soon as possible, or call for the transport which you have already arranged for in case of emergencies.					
	<b>i.</b> Transport the woman to an FRU. During transport: <ul style="list-style-type: none"> <li>▪ Keep the woman warm.</li> </ul>					

STEP	TASK	CASES				
		1	2	3	4	5
	<ul style="list-style-type: none"> <li>Slow down the rate of infusion to 30 drops/minute. Carry another bottle of fluid.</li> <li>If possible, accompany the woman to the FRU and inform the MO about her condition in advance.</li> </ul>					
<b>2.</b>	<b>BLEEDING IN EARLY PREGNANCY (before 20 weeks)</b>					
a.	<ul style="list-style-type: none"> <li><b>Incomplete spontaneous abortion</b> is diagnosed if the woman complains of heavy bleeding and lower abdominal pain; if she has a history of expulsion of the products of conception (POC); if the abdominal examination shows the presence of uterine tenderness; and if the fundal height is less than the period of gestation.</li> <li>Manage by gently removing the POC lying in the vagina with a finger. Make sure the procedure is carried out in aseptic conditions.</li> <li>If the bleeding does not stop and/or she is in shock, follow step 1(f) above.</li> <li>Send her to the MO FRU with a referral slip.</li> </ul>					
b.	<ul style="list-style-type: none"> <li><b>Complete abortion</b> is indicated if the woman complains of if there is a history of expulsion of the POC followed by light bleeding or gives a history of heavy bleeding which has now stopped; if she has lower abdominal pain; if the abdominal examination shows a uterus that is softer than normal; and if the fundal height is less than the period of gestation.</li> <li>Manage by observing the woman for 4–6 hours. Advise her to take rest.</li> <li>If the bleeding decreases or stops, explain the facts to her, reassure her and advise her to go home after you have checked her vital signs.</li> <li>Advise her to return to you/the MO if the bleeding recurs.</li> </ul>					
c.	<ul style="list-style-type: none"> <li><b>Threatened abortion</b> is indicated if the woman complains of light bleeding; if she has lower abdominal pain; if the POC have not been expelled; if the abdominal examination shows a uterus that is softer than normal; if the fundal height corresponds to the period of gestation; and if the cervical os is found to be closed on P/V examination.</li> <li>Manage by reassuring her and advising her to go home after you have checked her vital signs.</li> <li>Advise her to avoid strenuous exercise/work and sexual intercourse, and to take bed rest. Tell her she should return to the MO for further advice.</li> </ul>					
<b>3.</b>	<b>BLEEDING IN LATE PREGNANCY (after 20 weeks) RULE: NO P/V TO BE DONE</b>					
a.	If the woman has bleeding P/V (light or heavy) and the period of pregnancy is more than 20 weeks, and even if she is not in shock, do the following:					

STEP	TASK	CASES				
		1	2	3	4	5
	<ul style="list-style-type: none"> <li>i. Establish an intravenous line and give intravenous fluids slowly, at the rate of 30 drops/minute. If she is in shock, give fluids rapidly, at the rate of 60 drops/minute and refer her to the FRU. Do not conduct a P/V examination.</li> <li>ii. Explain to the woman/her companion that her condition is serious and her life may be in danger. Therefore, she has to be referred to the FRU immediately for further care. Also fill in the referral slip.</li> <li>iii. Take the help of the woman's relatives or a person from her village to arrange for transport as soon as possible, or call for the transport which has been already arranged for emergencies. <ul style="list-style-type: none"> <li>Mobilize the (identified) blood donors to accompany the woman.</li> </ul> </li> <li>iv. <b>Transport the woman to an FRU, which has facilities for blood transfusion.</b> <ul style="list-style-type: none"> <li>During transportation: <ul style="list-style-type: none"> <li>Keep the woman warm.</li> <li>Keep the rate of infusion to 30 drops/minute. Carry another bottle of fluid.</li> <li>If possible, accompany the woman to the FRU and inform the MO about the woman's condition.</li> </ul> </li> </ul> </li> </ul>					
<b>4.</b>	<b>Care and advice after an abortion</b>					
a.	<p><i>Follow up:</i></p> <p>Advise the woman to return for follow-up and to go directly to the MO for treatment in the following conditions:</p> <ul style="list-style-type: none"> <li>Increased bleeding</li> <li>No decrease in the quantity of bleeding even after a week</li> <li>Foul-smelling vaginal discharge</li> <li>Abdominal pain</li> <li>Fever, feels unwell</li> <li>Weakness, dizziness or fainting.</li> </ul>					
b.	<p><i>Self care:</i> The woman must be given advice on self-care.</p> <ul style="list-style-type: none"> <li>Ask her to rest for a few days, especially if she is feeling tired.</li> <li>Advise her to use disposable sanitary napkins, if available. If not, then she should change the cloth/pad every 4–6 hours. The cloth should be washed with soap and water and dried in the sun.</li> <li>She should wash the perineum daily with soap and water.</li> <li>Ask her to avoid sexual intercourse until the bleeding stops.</li> </ul>					
c.	<p><i>Family planning:</i> Give the woman advice on family planning methods.</p> <ul style="list-style-type: none"> <li>Explain to her that she can conceive soon after the abortion if she resumes sexual intercourse, unless she uses a contraceptive.</li> <li>Any family planning method can be used after a first-trimester (up to 12 weeks' gestation) abortion.</li> <li>If the woman has an infection, the insertion of an intrauterine contraceptive device (IUCD) or female sterilization should be delayed till the infection is treated completely.</li> </ul>					

STEP	TASK	CASES				
		1	2	3	4	5
	<ul style="list-style-type: none"> <li>Advise her on the correct and consistent use of condoms if she or her partner is at risk of STI or HIV.</li> <li>Address her concerns regarding future pregnancy through counseling.</li> </ul>					
d.	Tell the woman that after the abortion, if her menstrual cycle does not resume for six weeks or more, she should go to the MO for an examination and advice.					

## CASE STUDY 4

## VAGINAL BLEEDING DURING EARLY PREGNANCY

Asha is 28 years old. She is 12 weeks pregnant when she presents at the health centre, complaining of light vaginal bleeding and abdominal pain. This is Asha's first pregnancy. It is a planned pregnancy, and she has been well until now. On vaginal examination, her cervical os is found to be closed.

1. What should your initial assessment of Asha consist of and what is the probable diagnosis?
2. How should you manage Asha?

## CASE STUDY 5

## VAGINAL BLEEDING IN LATER PREGNANCY

Deepa is a healthy 20-year-old primigravida. Her pregnancy has been uncomplicated. At 38 weeks of gestation, Deepa comes to the health centre, accompanied by her husband. She appears to be confused and is sweating profusely. She reports that since two hours, she has been having painless vaginal bleeding; the bleeding is bright red in color.

1. What should your initial assessment of Deepa consist of and what is the probable diagnosis?
2. How should you manage Deepa?
3. What advice would you give Deepa's husband?



CHECKLIST 4.2: MANAGEMENT OF SHOCK AND POSTPARTUM HAEMORRHAGE (Immediate and Delayed)						
STEP	TASK	CASES				
		1	2	3	4	5
1.	Greet the woman and the persons accompanying her.					
2.	Ask the woman and her companion why they have come to the facility.					
3.	<ul style="list-style-type: none"> <li>If the woman complains of heavy bleeding, ask her or her companion when the delivery took place and whether the placenta was delivered or not.</li> <li>Take it as a case of heavy bleeding if:               <ul style="list-style-type: none"> <li>The woman has bleeding continuously for more than 10 minutes after delivery.</li> <li>The woman is soaking 1 pad in less than 5 minutes or 3 pads in 10 minutes.</li> </ul> </li> </ul>					
4.	Make a rapid evaluation of the general condition of the woman. <ul style="list-style-type: none"> <li>Check her pulse, BP and RR.</li> <li>Check for bleeding.</li> <li>Check for trauma/retained placenta.</li> <li>Check for hardening of the uterus.</li> </ul>					
5.	<p><b>Shock is suspected if:</b></p> <p>The pulse is more than 110/minute.            The BP is less than 90/60 mmHg.            The RR is more than 30/minute.            The woman's skin is cold and clammy.            The woman is anxious, confused or unconscious.            The woman is bleeding heavily.</p> <p><b>Begin treatment immediately</b> (refer to checklist 4.1).</p> <p>Try to ascertain the cause of PPH.            [Even if signs of shock are not present, keep the possibility of shock in mind as you evaluate the woman further because her status may worsen rapidly. If shock develops, it is important to begin treatment immediately].</p>					
	<p><b>a. Immediate PPH (during and within 24 hours of delivery)</b></p> <p>i. Diagnose immediate PPH if heavy bleeding started within 24 hours of the delivery.</p> <p>ii.           <ul style="list-style-type: none"> <li>If the uterus is soft, start an intravenous line of Ringer lactate (500 ml) with oxytocin (20 IU) at the rate of 40–60 drops per minute.</li> <li>In case an intravenous line cannot be established, give an intramuscular injection of oxytocin (10 IU stat) and refer the woman to the FRU with a referral slip.</li> </ul> </p>					
	<p><b>Note:</b> The total dose of oxytocin infused in 24 hours should not exceed 100 units, including 10 IU of oxytocin administered in the active management of the third stage of labour (AMTSL).</p>					

STEP	TASK	CASES				
		1	2	3	4	5
	<p>iii. Massage the uterus to expel blood and blood clots.</p> <p>iv. Raise and support the woman's legs so that her head is lower than her body.</p> <p>v. Keep her warm by covering her with a blanket.</p> <p>vi. Monitor the pulse and BP every 15 minutes.</p> <p>vii. Prepare for referral. Utilize the intervening time for bimanual compression.</p> <p>viii. Encourage her to pass urine to empty her bladder, or catheterize, if necessary (this facilitates uterine contractions).            Record Urine Output.</p> <p>ix. Fill in the referral slip and quickly make arrangements to transport the woman to an FRU. Inform the FRU in advance, whenever possible.</p> <p>x. During transportation, continue the intravenous fluids at a slower rate (30 drops/minute).</p> <p>xi. Arrange for identified blood donors to accompany the woman to the FRU in case a blood transfusion is required.</p>					
	<p><b>b. Delayed PPH</b></p> <p>i. Delayed PPH refers to postpartum bleeding which occurs 24 hours after delivery up to 6 weeks postpartum.            It could be due to:            (i) retained clots or placental fragments, or            (ii) due to an infection in the uterus.</p> <p>ii. Give an intramuscular injection of oxytocin (10 IU).</p> <p>iii. Start an intravenous infusion. Inject 20 IU of oxytocin into 500 ml (1 bottle) of intravenous fluids and administer at the rate of 40–60 drops per minute.</p> <p>iv. In cases in which the bleeding does not stop after the administration of oxytocin, referral to an FRU is necessary.</p> <p>v. An infection is suspected if there is fever and/or foul-smelling vaginal discharge. Give the woman the first dose of antibiotics (i.e. ampicillin capsule (1 g, orally), metronidazole tablet (400 mg, orally) and intramuscular gentamycin injection (80 mg, stat), and refer the woman to the FRU.</p> <p>vi. Fill in a referral card and make arrangements to transport the woman to an FRU.</p>					

## CASE STUDY 6

## VAGINAL BLEEDING AFTER DELIVERY—PPH

Seema is 20 years old. She gave birth to a full-term baby one-and-a-half hours ago at home. Her birth attendant was her grandmother, who has brought Seema to the health centre because she has been bleeding heavily since delivery. The duration of labour was 12 hours, the birth was normal and the placenta was delivered 20 minutes after the birth of the baby.

1. What should your initial assessment of Seema consist of and what is the probable diagnosis?
2. How should you manage Seema?
3. What advice would you give Seema's grandmother?

## CHECKLIST 4.3: MANAGEMENT OF PREGNANCY INDUCED HYPERTENSION (PIH)

STEP	TASK	CASES				
		1	2	3	4	5
1.	<p><b>PIH includes:</b></p> <p><b>Hypertension</b>—If the systolic BP is 140 mmHg or more and/or the diastolic BP is 90 mmHg or more, on two consecutive readings taken 4 hours or more apart</p> <p><b>Pre-eclampsia</b>—Hypertension with proteinuria</p> <p><b>Eclampsia</b>—Hypertension with proteinuria and convulsions (refer to checklist 4.4)</p>					
2.	<p><b>Ask the woman if:</b></p> <ul style="list-style-type: none"> <li>• She has pain in the upper abdomen (heartburn) or on right side below diaphragm.</li> <li>• She gets severe headache.</li> <li>• She has visual problems (double vision, blurring or transient blindness).</li> <li>• She gets sudden or severe swelling of the face, lower back and hands.</li> <li>• She is passing a reduced amount of urine.</li> </ul>					
3.	Test her urine for the presence of albumin (indicative of proteinuria). (Ensure that the urine sample is a midstream clean catch).					
4.	<ul style="list-style-type: none"> <li>• Check the BP again after 4 hours and if the case is urgent, check after 1 hour.</li> <li>• If the BP is less than 160/110 mmHg and there is no proteinuria, refer the woman to the PHC/FRU, where she can be given anti-hypertensive medication.</li> </ul>					
5.	Maintain contact with the woman/her family, since such cases need to be followed up appropriately by health workers.					
6.	If the woman's BP is above 160/110 mmHg, with or without Proteinuria refer her to the FRU (along with the referral slip) for further management.					
7.	<p>Explain the danger signs listed below to her and her family, as they can be life-threatening to the woman and her baby.</p> <p>The danger signs are:</p> <ul style="list-style-type: none"> <li>• Very high BP (above 160/110 mmHg).</li> <li>• Severe headache, increasing in frequency and duration.</li> <li>• Visual disturbances (blurring, double vision, blindness).</li> <li>• Pain in the epigastrium (upper part of the abdomen).</li> <li>• Oliguria (passing a reduced quantity of urine, i.e. less than 400 ml in 24 hours).</li> <li>• Oedema (swelling), especially of the face, sacrum/lower back.</li> </ul>					
8.	A woman with pre-eclampsia must be advised to have her delivery at an FRU.					
9.	Give the woman her Mother and Child Protection card and a referral slip.					

**CHECKLIST 4.4: MANAGEMENT OF CONVULSIONS IN ECLAMPSIA**

STEP	TASK	CASES				
		1	2	3	4	5
	A woman with eclampsia has hypertension with proteinuria and convulsions.					
1.	<p>Offer supportive care immediately, as follows.</p> <ul style="list-style-type: none"> <li>• Ensure that the airway and breathing are clear. If the woman is unconscious, position her on her left lateral side.</li> <li>• Clean her mouth and nostrils and apply gentle suction to remove secretions.</li> <li>• Remove any visible obstruction or foreign body from her mouth.</li> <li>• Place the padded mouth gag between the upper and lower jaws to prevent tongue bite. Do not attempt this during a convulsion.</li> <li>• Protect her from a fall or injury.</li> <li>• Empty her bladder using a catheter (preferably Foley's catheter), measure and record the volume, and leave the catheter in and attach to a urine collection bag.</li> <li>• Do not leave the woman alone.</li> </ul>					
2.	Measure the BP, urine output and temperature of the woman.					
3.	<b>Magnesium sulphate injection</b> (refer to checklist 4.6 for details of intramuscular injection).					
a.	<p>Give the first dose (only one dose) of magnesium sulphate injection.</p> <ul style="list-style-type: none"> <li>• Take a sterile 10 cc syringe and 22 gauge needle.</li> </ul>					
b.	<ul style="list-style-type: none"> <li>• Break 5 ampoules and fill the syringe with the magnesium sulphate solution, ampoule by ampoule (10 ml in all). Take care not to suck in air bubbles while filling the syringe. (Each ampoule has 2 ml of magnesium sulphate 50% w/v, 1 g in 2 ml).</li> </ul>					
c.	Identify the upper outer quadrant of the hip. Clean it with a spirit swab and let the area dry.					
d.	Administer the 10 ml (5 g) injection (deep intramuscular) in the upper outer quadrant in one buttock, slowly.					
e.	Tell the woman she will feel warm while the injection is being given.					
f.	Repeat the procedure with the same dose (i.e. 5 ampoules—10 ml/ 5 g) in the other buttock.					
g.	Dispose of the syringe in a puncture-proof container (if disposable) or decontaminate (if reusable).					
4.	Start an intravenous infusion and give the intravenous fluids slowly, at the rate of 30 drops/minute.					

STEP	TASK	CASES				
		1	2	3	4	5
5.	Refer the woman immediately to an FRU, with a referral slip. Ensure that she reaches the referral centre within 2 hours of receiving the first dose of magnesium sulphate.					
6.	If the woman is in early labour, give her the first dose of magnesium sulphate and refer her to an FRU for delivery.					
7.	<p>If the woman is about to deliver, then:</p> <ul style="list-style-type: none"> <li>• Administer the first dose of magnesium sulphate injection.</li> <li>• Deliver the baby in a domiciliary setting/SC.</li> <li>• Refer her to an FRU after the delivery.</li> </ul>					

### CASE STUDY 7

#### PREGNANCY-INDUCED HYPERTENSION

Uma is 20 years old. She is 30 weeks pregnant and has attended the antenatal clinic three times. All findings were within normal limits until her last antenatal visit one week ago. At that visit, it was found that her blood pressure was 150/90 mmHg. Her urine was negative for protein. The foetal heart sounds were normal, the foetus was active and the uterine size was consistent with the date. She has come to the clinic today for follow-up, as requested, along with her mother and husband.

1. What should your initial assessment of Uma consist of and what is the diagnosis?
2. How should you manage Uma?
3. What advice would you give her mother and husband?

### CASE STUDY 8

#### CONVULSIONS

Smita is 23 years old. She is 36 weeks pregnant. For the last two months, she was being treated at the PHC for PIH. Smita has been counselled regarding the danger signs in PIH and what to do about them. Her mother and husband have brought her to the health centre because she developed a severe headache and blurred vision this morning and had convulsions on the way to the health centre.

1. What should your initial assessment of Smita consist of and what is the diagnosis?
2. How should you manage Smita?
3. What advice should you give Smita's husband/mother?

### CHECKLIST 4.5: MANAGEMENT OF PUERPERAL SEPSIS

STEP	TASK	CASES				
		1	2	3	4	5
	<p>Puerperal sepsis is infection of the genital tract any time between the onset of the rupture of the membranes or labour and the 42 days after delivery or abortion, with any two or more of the following signs and symptoms being present.</p> <ul style="list-style-type: none"> <li>• Fever (temperature &gt;38°C or 100.5°F)</li> <li>• Lower abdominal pain and tenderness</li> <li>• Abnormal and foul-smelling lochia, may be blood-stained</li> <li>• Burning on micturition</li> <li>• Uterus not well contracted</li> <li>• Feeling of weakness</li> <li>• Vaginal bleeding.</li> </ul>					
1.	Greet the woman and her support person respectfully and introduce yourself. Ask her what she has come for.					
2.	Listen to what the woman and her support person have to say.					
3.	Ask her if she has any two or more of the symptoms mentioned above.					
4.	Make a rapid assessment of the general condition of the woman.					
5.	<p>If her general condition is fair, give her the first dose of antibiotics and refer her to the FRU. The antibiotics are:</p> <ul style="list-style-type: none"> <li>• Gentamycin injection (80 mg, intramuscular, stat)</li> <li>• Ampicillin capsule (1 g, orally)</li> <li>• Metronidazole tablet (400 mg, orally)</li> </ul>					
6.	<p>If her general condition is poor Start intravenous fluids</p> <ul style="list-style-type: none"> <li>• Give the first dose of antibiotics (gentamycin injection [80 mg, intramuscular, stat]; ampicillin capsule [1 g, orally]; metronidazole [400 mg, orally]).</li> <li>• Refer the woman urgently to the FRU.</li> </ul>					

## CASE STUDY 9

## PUERPERAL SEPSIS

Sita is 20 years old. She had a full-term normal delivery a week ago. She complained of intermittent fever and chills during the past 24 hours and thought that she had the flu, which most people in her village have had recently. She also complained of pain in the lower abdomen and foul-smelling vaginal bleeding. Sita has come to the health centre complaining that the fever and chills continue and that she has developed abdominal pain.

1. What should your initial assessment of Sita consist of and what is the probable diagnosis?
2. How should you manage Sita?
3. What advice should you give Sita and her family?

## CHECKLIST 4.6: GIVING DEEP INTRAMUSCULAR INJECTION

STEP	TASK	CASES				
		1	2	3	4	5
1.	Keep the following items ready: <ul style="list-style-type: none"> <li>• Syringe and 22 gauge needle</li> <li>• Magnesium sulphate ampoules</li> <li>• Spirit and swabs</li> <li>• Puncture-proof box.</li> </ul>					
2.	Wash your hands with soap and water.					
3.	Tell the woman (if she is conscious) or her companion what is about to be done.					
4.	Make the woman lie down comfortably.					
5.	Check the expiry date on the Magnesium Sulphate ampoule.					
6.	Expose the area where the injection is to be given. <b>Magnesium sulphate injection is given in the upper and outer quadrant of the buttock.</b>					
7.	Clean the site with cotton and spirit.					
8.	Fill the syringe with the required dose, using a 22 gauge needle.					
9.	Pierce the skin with the needle at a right angle to the buttock. (It is important to ensure that the injection is given deep; otherwise an abscess can develop at the site of the injection). Aspirate to ensure that the needle has not entered a blood vessel.					
10.	Tell the woman that after receiving the magnesium sulphate injection, she may feel hot and thirsty, may have flushing or get a headache, or may vomit.					
11.	Dispose of the syringe in a puncture-proof box or decontaminate,					
12.	Wash your hands and record the treatment given in the Mother and Child Protection Card.					

**CHECKLIST 4.7: SETTING UP AN INTRAVENOUS LINE**

STEP	TASK	CASES				
		1	2	3	4	5
1.	Keep the following items ready: <ul style="list-style-type: none"> <li>Intravenous stand</li> <li>Intravenous drip set and intravenous fluid</li> <li>Syringe and needle of 16/18 gauge</li> <li>Clean gloves</li> <li>Spirit swab</li> <li>Tourniquet</li> <li>Leucoplast</li> <li>Splint with bandage, if woman is unconscious.</li> </ul>					
2.	Tell the woman and her companion what is about to be done.					
3.	Prepare the tubing by filling it with normal saline and making sure there are no large air bubbles.					
4.	Wash your hands with soap and water. Wear clean gloves on both hands.					
5.	Position the woman's arm. The arm should be extended and supported. Apply the tourniquet or ask her companion to hold the upper arm firmly. (Veins are easiest to see at the back of the hand or forearm).					
6.	Identify and clean the site with cotton and spirit.					
7.	Insert the needle along the direction of the vein until the vein is reached. (This is indicated when blood enters the syringe).					
8.	Immediately remove the syringe and insert the intravenous tubing. Fix the intravenous line firmly with leucoplast and adjust the drops per minute as required.					
9.	Dispose of the cotton swabs in the waste bin, needle in the needle destroyer and mutilated syringe in the puncture-proof box after decontamination.					
10.	Take off your gloves and put them in 0.5% chlorine for 10 minutes for decontamination.					
11.	Wash your hands with soap and water. Record the proceedings in the Mother and Child Protection Card					

**CHECKLIST 4.8: CATHETERIZATION**

STEP	TASK	CASES				
		1	2	3	4	5
	<b>GETTING READY</b>					
	Keep the following items ready: <ul style="list-style-type: none"> <li>Sterile/HLD gloves.</li> <li>Pre-sterile indwelling catheter (Foley) or disposable plain catheter.</li> <li>10 cc syringe and needle.</li> <li>Normal saline/ D/W for balloon inflation.</li> <li>Kidney tray.</li> <li>Antiseptic Solution : Savlon.</li> <li>Urine collection bag with tubing.</li> <li>Leucoplast.</li> <li>Torch light.</li> </ul> <p>Explain to the woman (and her support person) what is going to be done. Listen to her attentively and respond to her questions and concerns. Provide continual emotional support and reassurance.</p>					
	<b>INSERTING THE CATHETER</b>					
1.	Place a clean cloth under the woman's buttocks.					
2.	Wash your hands thoroughly with soap and water, and dry them with a clean, dry cloth or air dry.					
3.	Wear new, sterile or HLD gloves on both hands.					
4.	Use one hand to gently separate the woman's labia: <ul style="list-style-type: none"> <li>Use the other hand to cleanse the labia and urethral opening with clean or sterile cotton or gauze and antiseptic solution, wiping from front to back.</li> </ul>					
5.	Place a sterile kidney tray between the woman's legs, close to the perineum. Place the open end of the catheter in the kidney tray.					
6.	Use one gloved hand to gently separate the labia from above.					
7.	Use the other hand to gently insert the tip of the catheter into the urethral opening.					
8.	Gently remove the plain catheter when the bladder is empty (when urine stops draining into the kidney basin).					
9.	In the case of a self-retaining catheter, attach the open end to tubing on a sterile urine bag and tubing. <ul style="list-style-type: none"> <li>Use a sterile syringe to inflate the balloon with 5 cc of sterile water.</li> <li>Attach the catheter to the inside of the woman's thigh, using tape.</li> </ul>					

STEP	TASK	CASES				
		1	2	3	4	5
	<ul style="list-style-type: none"> <li>Secure the catheter bag to the side of the bed, below the level of the woman's bladder.</li> </ul>					
10.	Record urine output in all cases.					
<b>POST-PROCEDURE TASKS</b>						
1.	Before taking off your gloves, dispose of the waste materials in a leak-proof container or plastic bag.					
2.	Decontaminate the needle and syringe. <ul style="list-style-type: none"> <li>If disposing of the needle and syringe, hold the needle under the surface of a 0.5% chlorine solution, fill the syringe and push out (flush) three times; then place in a puncture-resistant sharps container.</li> </ul>					
3.	Take off your gloves. <ul style="list-style-type: none"> <li>If the gloves are soiled, immerse your gloved hands briefly in a plastic container filled with 0.5% chlorine solution; then remove the gloves by turning them inside out.</li> <li>If disposing of the gloves, place them in a plastic bag or leak-proof, covered waste container.</li> <li>If the gloves are to be re-used, submerge them in 0.5% chlorine solution for 10 minutes for decontamination.</li> </ul>					
4.	Wash your hands thoroughly with soap and water, and dry them with a clean, dry cloth (or air dry).					

## PREVENTION OF INFECTION

**CHECKLIST 5.0: PREVENTION OF INFECTION****CHECKLIST 5.1: HAND WASHING; DECONTAMINATION AND HIGH-LEVEL DISINFECTION**

STEP	TASK	CASES				
		1	2	3	4	5
<b>A.</b>	<b>PROCEDURE FOR HANDWASHING</b>					
1.	Roll up your sleeves to above the elbow. Take off your wrist watch, bangles, rings, etc.					
2.	Wash your hands for 2 minutes in the following sequence: <ol style="list-style-type: none"> <li>1. Palms, fingers and web spaces</li> <li>2. Back of hands</li> <li>3. Fingers and knuckles</li> <li>4. Thumbs</li> <li>5. Fingertips</li> <li>6. Wrists and forearm, up to elbow.</li> </ol>					
3.	Using plain water and soap, apply soap and lather thoroughly up to the elbow.					
4.	Keep the elbows always dependent, i.e. lower than your hands.					
5.	Rub for a minimum of 10–15 seconds.					
6.	Repeat the process if your hands are very soiled.					
7.	Clean under the fingernails, using a soft brush.					
8.	If running water is not available, use a bucket and pitcher. Do not dip your hands into a bowl to rinse, as this re-contaminates them.					
9.	Close the tap with your elbow.					
10.	Dry your hands thoroughly with a clean, dry towel, or air dry them.					
<b>B.</b>	<b>PUTTING ON CLEAN / STERILIZED / HLD GLOVES</b>					
1.	Find a clean and dry area for opening the package of gloves.					
2.	Open the outer package of the gloves and then wash your hands as described above.					
3.	Open the inner wrapper, exposing the cuffed gloves with the palms facing upwards.					
4.	Pick up the first glove by the cuff, touching only the inside portion of the cuff.					
5.	While holding the cuff in one hand, slip your other hand into the glove. (Pointing the fingers of the glove towards the floor will keep the fingers open). Be careful not to touch anything and hold the gloves above the level of your waist.					



STEP	TASK	CASES				
		1	2	3	4	5
6.	Pick up the second glove by sliding the fingers of the gloved hand under the cuff of the second glove.					
7.	Put the second glove on the ungloved hand by maintaining a steady pull through the cuff.					
8.	Adjust the glove fingers and cuffs until the gloves fit comfortably.					
<b>C.</b>	<b>PREPARATION OF 0.5% CHLORINE SOLUTION</b>					
1.	<b>Supplies needed:</b> Bleaching powder, teaspoon, one-litre measure, plastic mug, plastic bucket, utility gloves, plastic apron, 1 litre water, wooden stick					
2.	<b>Procedure:</b> Wear utility gloves and a plastic apron while making chlorine solution and during the processing of instruments. <ul style="list-style-type: none"> <li>Measure 1 litre of tap water and put it in a plastic bucket.</li> <li>Take 3 level teaspoons of bleaching powder in a plastic mug and make a thick paste, using a little water.</li> <li>Mix this paste to the 1 litre of water to make 0.5% chlorine solution.</li> </ul> <b>Note:</b> Change the chlorine solution after 24 hours and make fresh solution every day. Always prepare in a plastic container.					
<b>D.</b>	<b>DECONTAMINATION</b>					
1.	Immediately after using instruments and other items, decontaminate them by placing them in a plastic container of 0.5% chlorine solution.					
2.	Let them soak for 10 minutes.					
3.	After 10 minutes, remove the items from the chlorine solution and rinse them with water or clean immediately.					
4.	Wear utility gloves when removing instruments and other items from a chlorine solution.					
<b>E.</b>	<b>CLEANING</b>					
1.	Wear utility gloves and use a soft brush or old toothbrush, detergent and water.					
2.	Scrub the instruments and other items vigorously to completely remove all blood, other body fluids, tissue and other foreign matter.					
3.	Hold the items under the surface of the water while scrubbing and cleaning to avoid splashing.					
4.	Disassemble instruments and other items that have multiple parts. Make sure you brush in the grooves, teeth and joints of items, as these are areas where organic material can get collected and stick.					

STEP	TASK	CASES				
		1	2	3	4	5
5.	Rinse the items thoroughly with water to remove all detergent.					
6.	Allow the items to air dry or dry them with a clean cloth, and send them for autoclaving (steam sterilization).					
<b>F.</b>	<b>STEAM STERILIZATION (Autoclaving using pressure cooker)</b>					
1.	Fill the bottom of the autoclave with water (up to the ridge located on the inner wall).					
2.	Place the items in the autoclave and arrange them loosely, so that the steam can circulate around them.					
3.	Place the autoclave over the heat stove. Once steam is emitted from the pressure valve, begin timing the sterilization cycle. A cycle of 20 minutes is suggested, regardless of whether the items are wrapped or unwrapped.					
4.	Turn the heat down, but make sure that steam continues to come out of the pressure valve.					
5.	After 20 minutes, take the autoclave off the heat stove, open the pressure valve to release the steam, and allow the autoclave to cool for 15–30 minutes before opening it.					
<b>G.</b>	<b>HIGH-LEVEL DISINFECTION</b>					
<b>1.</b>	<b>By boiling</b>					
<b>a.</b>	Completely submerge decontaminated and cleaned items in water in a boiler or pot with a lid.					
<b>b.</b>	Keep all the instruments open. Cover the pot with the lid and bring the water to a gentle, rolling boil.					
<b>c.</b>	Start timing when the rolling boil begins. Boil for 20 minutes.					
<b>d.</b>	Remove the items with HLD Cheatele forceps (Cheatele forceps boiled for 20 minutes).					
<b>e.</b>	Use immediately or place in a covered, dry HLD container. Use before 24 hours. <i>Use the same procedure for preparing gloves.</i>					
<b>2.</b>	<b>By chemicals</b>					
<b>a.</b>	Immerse decontaminated clean, dried items in HLD—0.5% chlorine solution or glutaraldehyde 2% (chlorine solution is preferred as it is cheap and easily available).					

STEP	TASK	CASES				
		1	2	3	4	5
b.	Keep the instruments open.					
c.	Cover the container and soak for 20 minutes in 0.5% chlorine solution.					
d.	Remove the items from the chemical solution, using HLD gloves or HLD handle forceps.					
e.	Rinse the items thoroughly with HLD water (water boiled for 20 minutes) to remove all traces of chemical disinfectant.					
f.	Use the items after air drying, or place in a HLD covered container for storage. Use before 24 hours.					

**CHECKLIST 5.2: PROCESSING OF SHARPS (NEEDLES AND SYRINGES)**

STEP	TASK	CASES				
		1	2	3	4	5
1.	Use each disposable needle and syringe <i>only once</i> .					
2.	Always wear utility gloves while handling sharps.					
3.	To dispose off needles, use a hub cutter, which cuts the plastic hub of the syringe and not the metal part of the needle.					
4.	Dispose off needles and syringes in a puncture-proof container.					
5.	Do not disassemble the needle and syringe after use. Make needles unusable after single use by burning them in a needle destroyer.					
6.	Do not recap, bend or break needles before disposal.					
7.	Never burn syringes.					
8.	Dispose off the waste as follows: (i) Dispose off needles and broken vials in a pit/tank. (ii) Send the syringes and unbroken vials for recycling or to a landfill.					

## Annexures

Annexure I		
PROCEDURES AND DRUGS PERMITTED FOR USE BY SKILLED BIRTH ATTENDANTS		
S.No.	CONDITION	PROCEDURE / DRUGS
1.	Active Management of Third Stage of Labor (AMTSL)	SBA should be proficient in AMTSL: <ul style="list-style-type: none"> <li>• Administration of Uterotonics (Injection Oxytocin/Tablet Misoprostol)</li> <li>• Controlled Cord Traction.</li> <li>• Uterine massage.</li> </ul>
2.	Diagnosis of prolonged labor	Plotting a partograph for every woman in labour
3.	Prevention of PPH	Active management of the third stage of labour <ul style="list-style-type: none"> <li>• Administering oxytocin injection (10 IU, intramuscular) for deliveries at SC/PHC/FRU/health facility</li> </ul> OR <ul style="list-style-type: none"> <li>• Giving misoprostol tablet (3 tablets of 200 mcg each, orally; total of 600 mcg) for home deliveries</li> <li>• Providing controlled cord traction</li> <li>• Conducting uterine massage</li> </ul>
4.	Management of PPH	<ul style="list-style-type: none"> <li>• Administering oxytocin injection (10 IU, intramuscular). (If not given during AMTSL)</li> <li>• <b>Administering 20 IU oxytocin in 500 ml of Ringer lactate, intravenous, at the rate of 60 drops per minute.</b></li> <li>• Referring to FRU (if intravenous cannot be given, referring after administering oxytocin injection (10 IU, intramuscular).</li> </ul>
5.	Management of eclampsia	Giving one dose of Inj. magnesium sulphate (10 ml) of 5 g, deep intramuscular, in each buttock. <ul style="list-style-type: none"> <li>• Referring to an FRU.</li> </ul>
6.	Vaginal or perineal tears	<ul style="list-style-type: none"> <li>• Identifying different degrees of tears.</li> <li>• Managing first-degree tears by applying pad and pressure.</li> <li>• Referring for second- and third-degree tears.</li> </ul>
7.	Management of puerperal infections/PROM/Delayed (Secondary) PPH	Giving first dose of the following antibiotics and referring <ul style="list-style-type: none"> <li>• Gentamycin injection (80 mg, intramuscular).</li> <li>• Ampicilin capsule (1000 mg, orally).</li> <li>• Metranidazole tablet (400 mg, orally).</li> </ul>
8.	Incomplete abortion with bleeding P/V	Digital removal of retained products of conception.

Annexure 2					
TRAINING SCHEDULE					
DAY	SESSION	TOPIC	TIME REQUIRED	PREFERRED TRAINER	METHODOLOGY
1.	1.	Registration Welcome Introduction of trainers and trainees Trainees' expectations Pre-test questionnaire Goals and objectives Introduction to SBA training package	2 hours 15 min	Master Trainer of the Training Centre.	Introduction through games; flip charts for participants to indicate expectations; presentation 1a for goals and objectives and introduction to training package
	1a.	i) Overview of maternal health scenario in India ii) Procedures and drugs permitted by Gol for use by SBAs.	30 min 15 min	CMO/CDHO SN/Sister tutor	Presentation 1a
	1b.	Infection prevention	3 hours	SN/Sister tutor	Presentation 1b; checklists 5.1 and 5.2; refer to Guidelines Module 1: Introduction, and Module 3; demonstration of chlorine preparation; video on infection prevention; posters on biomedical waste disposal; demonstration of preparation of bleach solution and hand-washing
		Tour of facility: logistics and wrap-up	30 min	Master Trainer of the Training Centre	Visit facility with team leader
2.	2.	Recapitulation of Day 1	15 min	Trainee	
	2a.	ANC	30 min	SN/Sister tutor	Presentations 2a, b, c and d; checklists 1.1, 1.2 and 1.3; refer to Guidelines Module 1: Antenatal care; demonstration; exercises; use of dummies/models; CD; poster on abdominal palpation and fundal height measurement
	2b.	ANC—History-Taking	1 hour 30 min	SN/Sister tutor	
	2c.	ANC—General Examination	2 hours	OB/GYN	
	2d.	ANC—Abdominal Examination	2 hours	OB/GYN	
		Wrap-up and assigning of tasks	15 min	Master Trainer of the Training Centre	

DAY	SESSION	TOPIC	TIME REQUIRED	PREFERRED TRAINER	METHODOLOGY
3.	3.	Recapitulation of Day 2	15 min	Trainee	
	3a.	ANC—laboratory investigations; estimating haemoglobin; testing urine for sugar and proteins	1 h 15 min	SN/Sister tutor and laboratory in-charge	Presentations 3a, b, c and d; checklists 1.4, 1.5, 2.1 and 2.2; refer to Guidelines Module 1: Antenatal care; demonstration; exercises; role-plays; use of dummies/models; visit to the laboratory; poster on diet and nutrition
	3b.	ANC—interventions: IFA, TT, malaria	45 min	SN/Sister tutor	
	3c.	i) Counselling ii) Symptoms and signs during pregnancy, probable diagnosis and action to be taken at the SC	1 h 30 min 1 h	SN/Sister tutor OB/GYN	
	3d.	Care during labour—assessment, supportive care and vaginal examination of woman in labour	45 min	SN/Sister tutor	
		Wrap-up and assigning of tasks	15 min	Master Trainer of the Training Centre	
4.	4.	Recapitulation of Day 3	15 min	Trainee	
	4a.	Care during labour and delivery: i) True and false labour pains ii) Stages of labour—monitoring and management of first stage of labour, partograph iii) Monitoring and management of second stage of labour	15 min 3 h 45 min 2 h	SN/Sister tutor OB/GYN OB/GYN	Presentation 4a; checklists 2.3 and 2.4; refer to Guidelines Module 1: Care during labour and delivery; demonstration; case studies for plotting of partograph; use of dummies/models; CD; poster on partograph
		Clinic teaching and visits to the respective departments will be held simultaneously			Visit to labour room

DAY	SESSION	TOPIC	TIME REQUIRED	PREFERRED TRAINER	METHODOLOGY
		Wrap-up and assigning of tasks	15 min	Master Trainer of the Training Centre	
5.	5.	Recapitulation of Day 4	15 min	Trainee	
	5a.	i) Monitoring and management of third stage of labour	1 h	OB/GYN	Presentations 5a, b and c; checklists 2.5, 2.6, 2.7, 3.1 and 3.2; refer to Guidelines Module 1: Management of third and fourth stages of labour and Newborn resuscitation and care after delivery—postpartum care; demonstration; use of dummies/models; CD; poster on resuscitation flowchart  Visit to labour room, newborn unit and postnatal ward
		ii) Monitoring and management of fourth stage of labour	2 h	OB/GYN	
	5b.	i) Resuscitation of newborn	2 h	Paediatrician	
		ii) Preparation for discharge	30 min		
	5c.	Care after delivery—postpartum care	45 min	SN/Sister tutor	
		Clinic teaching and visits to the respective departments will be held simultaneously			
6.	6.	Recapitulation of Day 5	15 min	Trainee	
	6a.	Management of complications during pregnancy, labour and postpartum period	5 hours	OB/GYN	Presentation 6a; checklists 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7 and 4.8; refer to Guidelines Module 2: Management of complications; demonstration; use of dummies/models; CD; poster on immediate PPH—management
	6b.	Ensuring quality of care	1 hour	OB/GYN	Presentation 6b; refer to Guidelines Module 3: Ensuring quality of care
		Clinic teaching and visits to the respective departments will be held simultaneously			Visit to ANC outpatient department and ward, labour room, newborn unit and postnatal ward

DAY	SESSION	TOPIC	TIME REQUIRED	PREFERRED TRAINER	METHODOLOGY
		Wrap-up and discussion of schedule for Days 7–21	15 min		

**Note:**

1. There will be a lunch break of one hour and two tea breaks of 15 min each on all training days.
2. An assessment of the trainee will be carried out at the end of the training.

## Annexure 3

## Experience Record of Trainees Prior to SBA Training

1. Name: \_\_\_\_\_
2. Designation (ANM/LHV/SN): \_\_\_\_\_
3. Age: \_\_\_\_\_ years
4. Place and area of posting: \_\_\_\_\_
5. Educational qualification with year of passing out: \_\_\_\_\_
6. Duration of work experience after initial training: \_\_\_\_\_
7. Have you received refresher midwifery training? Yes/No If yes, then how many?
8. Have you received orientation training on basic SBA skills by your MO in charge? Yes/No
8. Current job responsibilities: Clinical/Training/Supervision/All
9. Approximate number of deliveries conducted independently: \_\_\_\_\_
10. Where did you conduct the delivery SC/PHC/CHC/DH. (Circle all that apply)
11. Approximate number of deliveries that were complicated: \_\_\_\_\_
12. Do you practise the following in your work? (Circle the one's that apply)

a. Starting intravenous fluids	Yes/No
b. Hb estimation of the pregnant women	Yes/No
c. Inj. TT administration to the pregnant women	Yes/No
d. Inj. Magsulph to pregnant woman who have an attack of Eclampsia	Yes/No
e. Manually removing the placenta.	Yes/No
f. Using Misoprostol to prevent PPH	Yes/No
g. Using a Partograph to monitor labour	Yes/No
h. Giving enema during labour	Yes/No
i. Shaving the perineum	Yes/No
j. Catheterization	Yes/No
k. Giving Inj. Oxytocin to prevent/treat PPH	Yes/No

## Annexure 4

## RECOMMENDED PRACTICE AND LOG SHEET FOR TRAINEES ON CLIENTS/DUMMY

NAME OF TRAINEE	TRAINING PERIOD																
	FROM	TO	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Case Number →																	
Antenatal care																	
History																	
Performance (Tick)	O	O	A	A	A	P	P	P	P	P	P	P	P	P	P	P	P
Date																	
Sign of the trainer																	
General Examination (Wt, BP, pallor, oedema)																	
Performance (Tick)	O	O	A	A	A	P	P	P	P	P	P	P	P	P	P	P	P
Date																	
Sign of the trainer																	
Abdominal Examination including FHS																	
Performance (Tick)	O	O	A	A	A	P	P	P	P	P	P	P	P	P	P	P	P
Date																	
Sign of the trainer																	
Lab Invest. ( Hb, urine for sugar and albumin)																	
Performance (Tick)	O	O	A	A	A	P	P	P	P	P	P	P	P	P	P	P	P
Date																	
Sign of the trainer																	
Labour and delivery																	
Monitor labour (using partograph and P/V to assess cervical dilatation)																	
Performance (Tick)	O	O	A	A	A	P	P	P	P	P	P	P	P	P	P	P	P
Date																	
Sign of the trainer																	
Conduct delivery with active management of labour																	
Performance (Tick)	O	O	A	A	A	P	P	P	P	P	P	P	P	P	P	P	P
Date																	
Sign of the trainer																	
Examination of placenta, membranes and umbilical cord																	
Performance (Tick)	O	O	A	A	A	P	P	P	P	P	P	P	P	P	P	P	P
Date																	
Sign of the trainer																	
Provide New Born Care, including assisting in breastfeeding																	
Performance (Tick)	O	O	A	A	A	P	P	P	P	P	P	P	P	P	P	P	P
Date																	
Sign of the trainer																	
Provide New Born resuscitation—perform suction, maintain airway and establish breathing																	
Performance (Tick)	O	O	A	A	A	P	P	P	P	P							

NAME OF TRAINEE	TRAINING PERIOD										FROM	TO
Date												
Sign of the trainer												
Complication												
Administer deep IM injection (Magsulph)												
Performance (Tick)	O	O	A	A	P	P	P	P	P	P		
Date												
Sign of the trainer												
Remove Products of Conception/clots												
Performance (Tick)	O	A	A	P	P							
Date												
Sign of the trainer												
Establish IV line												
Performance (Tick)	O	A	A	P	P							
Date												
Sign of the trainer												
Catheterization												
Performance (Tick)	O	A	A	P	P							
Date												
Sign of the trainer												

**Note:**

- The trainer will sign, with date, the category in which he/she has supervised the trainee, i.e. O/A/P.
- This log sheet contains tabulated information on requisite number of skills to be observed/assisted/performed by the trainee as per the standard "recommended client practice".
- Trainers should keep a separate log sheet for each candidate.
- While the training is ongoing, trainer should mark the skill of the trainee as "O", "A", "P", i.e. "Observed", "Assisted" and "Performed" respectively depending upon the activity done by the trainee.
- Trainer has to ensure that trainee observes/assists/performs the requisite number of skills, as mentioned in the log sheet.
- These filled in sheets duly signed will have to be submitted by the trainer to District CMO, at the end of the training.
- A copy of the same has to be maintained at the training institute also.

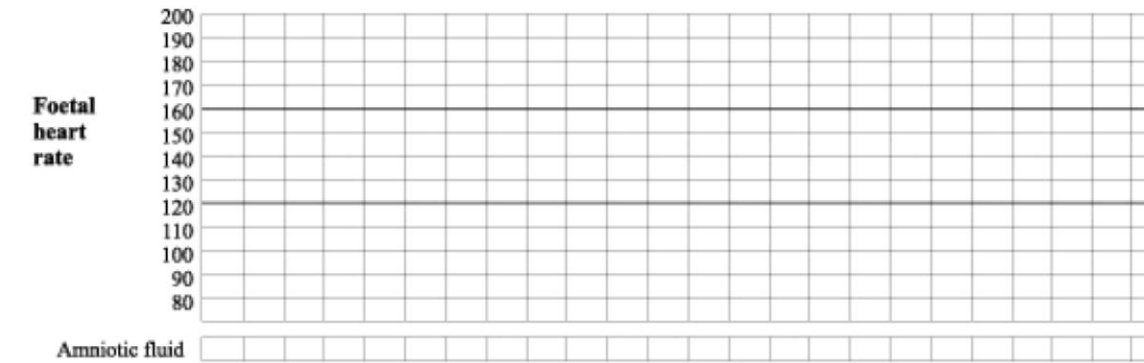
Annexure 5

**THE SIMPLIFIED PARTOGRAPH**

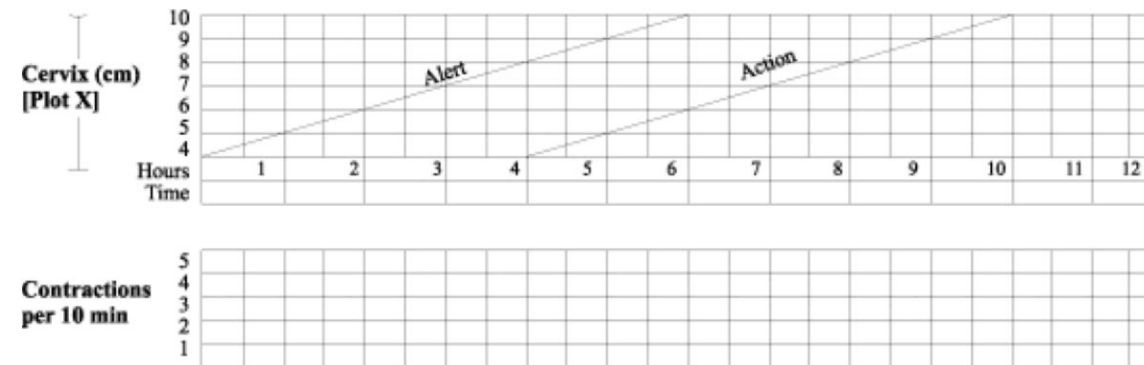
**IDENTIFICATION DATA**

Name: \_\_\_\_\_ W/o: \_\_\_\_\_ Age: \_\_\_\_\_ Parity: \_\_\_\_\_ Reg. No.: \_\_\_\_\_  
 Date & Time of Admission \_\_\_\_\_ Date & Time of ROM: \_\_\_\_\_

**A) Foetal Condition**



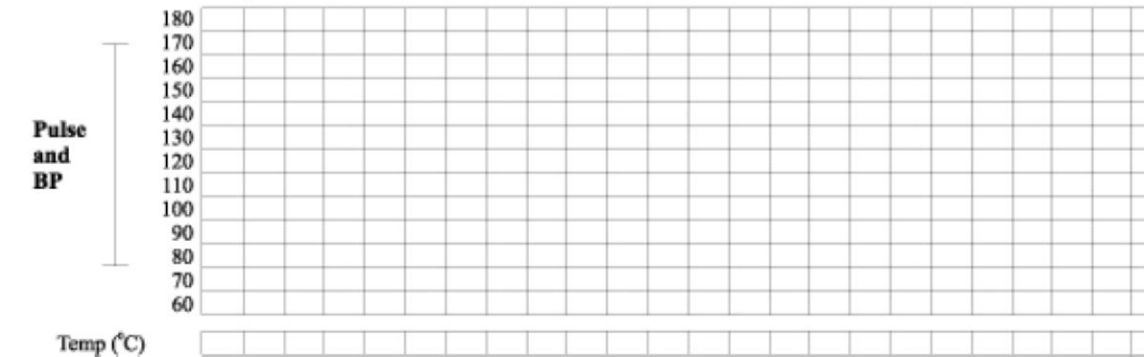
**B) Labour**



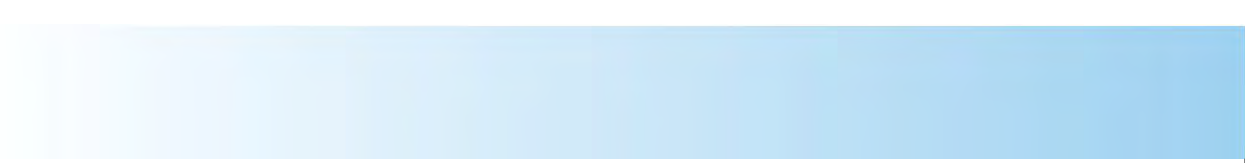
**C) Interventions**

Drugs and IV fluids given \_\_\_\_\_

**D) Maternal Condition**



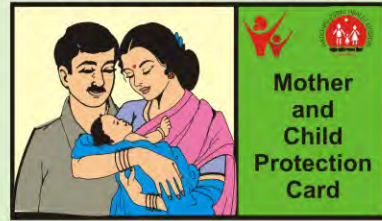




Annexure 7 (a)

PREGNANT WOMAN TRACKING			PREGNANT WOMAN TRACKING															PREGNANT WOMAN TRACKING															PREGNANT WOMAN TRACKING															PREGNANT WOMAN TRACKING														
Location Details			State		District		Sub-District		Identification Details											Health Provider Details				ANC Details Date to be specified (dd/mm/yyyy)											Pregnancy Outcome											PNC Details				PNC Details				Infant Details								
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52											
S.No	Gram Panchayat /Village	Address	ID No.	Name	Husband's name	Phone Number of Whom	Phone Number	Date of Birth	JSY Beneficiary	Caste (SC/ST/ Others)	Name of Sub-Centre	Name of ANM	Phone Number of ANM	Name of associated ASHA	Phone Number of ASHA (if available)	Linked facility for delivery (Sub-Centre/DH)	Name of Facility	LMP	1st ANC (including Registration)	2nd ANC	3rd ANC	4th ANC	TT1 (immediately at detection of pregnancy)	TT2 (after 1 month of TT1 administration)	TT Booster (is required only for those women who have been previously immunised and hence require only single dose)	IFA tablets given (Date on which 100 IFA Tabs completed)	Anemia (Moderate <11/Severe <7/Normal)	Complication (Hypertensive /Diabetics/ APH/Malaria/ None)	RTI/STI (Y/N)	Date of Delivery (dd/mm/yyyy)	Place of delivery (Home-Type/ Institutional-Type)	Delivery Type (Normal /CS /Instrumental)	Complications (Y/N)	Date of Discharge from Institution (if applicable) (dd/mm/yyyy)	JSY Benefits paid(Date)	Abortion (MTP<12/ MTP>12/ Spontaneous/ None) (If None, then other details to be filled)	PNC Home Visit (Within 48 hours/ 7 days)	PNC Complications (PPH/ Sepsis/ Death/ Others/ None)	Post Partum Contraception Method (Sterilisation/IU D/Injectibles)	PNC Checkup (Y/N)	Outcome Numbers (0/1/2/3/4/5) 0=Still Birth	Child 1 The following details to be captured for each child born-for child tracking				Child 2 The following details to be captured for each child born-for child tracking																
																			Date	Date	Date	Date	Date	Date	Date	Date												Home Type	Public	Private												Name	Sex (M/F)	Weight at Birth (Kg)	Initiated Breastfeeding within 1 Hr (Y/N)	Name	Sex (M/F)	Weight at Birth (Kg)	Initiated Breastfeeding within 1 Hr (Y/N)			
1						Self			No	Others						Sub-center											Normal	None	No	Non SBA	Sub Centre		Normal	No	None	Within 7 days	None	None	No	1		Male		No		Male		No														
2						Self			No	Others						Sub-center											Normal	None	No	Non SBA	Sub Centre		Normal	No	None	Within 7 days	None	None	No	1		Male		No		Male		No														
3						Self			No	Others						Sub-center											Normal	None	No	Non SBA	Sub Centre		Normal	No	None	Within 7 days	None	None	No	1		Male		No		Male		No														
4						Self			No	Others						Sub-center											Normal	None	No	Non SBA	Sub Centre		Normal	No	None	Within 7 days	None	None	No	1		Male		No		Male		No														
5						Self			No	Others						Sub-center											Normal	None	No	Non SBA	Sub Centre		Normal	No	None	Within 7 days	None	None	No	1		Male		No		Male		No														
6						Self			No	Others						Sub-center											Normal	None	No	Non SBA	Sub Centre		Normal	No	None	Within 7 days	None	None	No	1		Male		No		Male		No														
7						Self			No	Others						Sub-center											Normal	None	No	Non SBA	Sub Centre		Normal	No	None	Within 7 days	None	None	No	1		Male		No		Male		No														
8						Self			No	Others						Sub-center											Normal	None	No	Non SBA	Sub Centre		Normal	No	None	Within 7 days	None	None	No	1		Male		No		Male		No														
9						Self			No	Others						Sub-center											Normal	None	No	Non SBA	Sub Centre		Normal	No	None	Within 7 days	None	None	No	1		Male		No		Male		No														
10						Self			No	Others						Sub-center											Normal	None	No	Non SBA	Sub Centre		Normal	No	None	Within 7 days	None	None	No	1		Male		No		Male		No														
11						Self			No	Others						Sub-center											Normal	None	No	Non SBA	Sub Centre		Normal	No	None	Within 7 days	None	None	No	1		Male		No		Male		No														
12						Self			No	Others						Sub-center											Normal	None	No	Non SBA	Sub Centre		Normal	No	None	Within 7 days	None	None	No	1		Male		No		Male		No														
13						Self			No	Others						Sub-center											Normal	None	No	Non SBA	Sub Centre		Normal	No	None	Within 7 days	None	None	No	1		Male		No		Male		No														
14						Self			No	Others						Sub-center											Normal	None	No	Non SBA	Sub Centre		Normal	No	None	Within 7 days	None	None	No	1		Male		No		Male		No														
15						Self			No	Others						Sub-center											Normal	None	No	Non SBA	Sub Centre		Normal	No	None	Within 7 days	None	None	No	1		Male		No		Male		No														
16						Self			No	Others						Sub-center											Normal	None	No	Non SBA	Sub Centre		Normal	No	None	Within 7 days	None	None	No	1		Male		No		Male		No														
17						Self			No	Others						Sub-center											Normal	None	No	Non SBA	Sub Centre		Normal	No	None	Within 7 days	None	None	No	1		Male		No		Male		No														
18						Self			No	Others						Sub-center											Normal	None	No	Non SBA	Sub Centre		Normal	No	None	Within 7 days	None	None	No	1		Male		No		Male		No														
19						Self			No	Others						Sub-center											Normal	None	No	Non SBA	Sub Centre		Normal	No	None	Within 7 days	None	None	No	1		Male		No		Male		No														
20						Self			No	Others						Sub-center											Normal	None	No	Non SBA	Sub Centre		Normal	No	None	Within 7 days	None	List	No	1		Male		No		Male		No														





**Mother and Child Protection Card**

Photograph of Mother & Child

**Family Identification**  
 Mother's Name \_\_\_\_\_ Age \_\_\_\_\_  
 Father's Name \_\_\_\_\_  
 Address \_\_\_\_\_  
 Mother's Education: illiterate/primary/middle/high school/graduate

**Pregnancy Record**  
 Mother's ID No. \_\_\_\_\_  
 Date of the last menstrual period \_\_\_\_/\_\_\_\_/\_\_\_\_  
 Expected date of delivery \_\_\_\_/\_\_\_\_/\_\_\_\_  
 No. of pregnancies/ previous live births \_\_\_\_/\_\_\_\_  
 Last delivery conducted at: Institution  Home   
 Current delivery: Institution  Home   
 JSY Registration No. \_\_\_\_\_  
 JSY payment Amount \_\_\_\_\_ Date \_\_\_\_/\_\_\_\_/\_\_\_\_

**Birth Record**  
 Child's Name \_\_\_\_\_  
 Date of Birth \_\_\_\_/\_\_\_\_/\_\_\_\_ Birth Weight \_\_\_\_\_ kgs \_\_\_\_\_ gms  
 Girl  Boy  Birth Registration No: \_\_\_\_\_

**Institutional Identification**  
 AWW \_\_\_\_\_ AWC/Block \_\_\_\_\_  
 ASHA \_\_\_\_\_ ANM \_\_\_\_\_  
 SHC / Clinic \_\_\_\_\_  
 PHC / Town \_\_\_\_\_ Hospital / FRU \_\_\_\_\_  
 Contact Nos. ANM \_\_\_\_\_ Hospital \_\_\_\_\_  
 Transport Arrangement \_\_\_\_\_

AWC Reg. No. \_\_\_\_\_ Date \_\_\_\_/\_\_\_\_/\_\_\_\_ Sub-centre Reg. No. \_\_\_\_\_ Date \_\_\_\_/\_\_\_\_/\_\_\_\_  
 Referral \_\_\_\_\_

**Regular checkup is essential during pregnancy**

Months: 1st 2nd 3rd 4th 5th 6th 7th 8th 9th

**Registration**  
 Register with the health centre in the first trimester.

**ANC**  
 Have at least 3 antenatal checkups, after registration

**BP, Blood & Urine**  
 Have blood pressure (BP) checked and blood and urine examined at each visit.

**Weight**  
 Have weight checkup at each visit. Gain at least 10-12 kg. during pregnancy. Gain at least 1 kg every mth. during the last 6 mths. of pregnancy.

**T.T. Injection**  
 Take two T.T. injections, T.T.1 when pregnancy is confirmed and T.T.2 after 1 month. (Fill in the date)

**Iron Tablets**  
 Take one tablet of iron and folic acid a day for at least 3 months. Take at least 100 tablets. (Fill in quantity and date issued)

**Care During Pregnancy**

Consume a variety of foods  
 Consume more food – around 1/4th times extra than the normal diet  
 Consume SNP from the AWC regularly

Take at least two hours of rest during the day. In addition to 8 hours of rest at night.  
 Use only adequately iodised salt

Ensure nutrition counselling at every ANC

**ANTENATAL CARE**

**OBSTETRIC COMPLICATION IN PREVIOUS PREGNANCY**  
(Please tick (✓) the relevant history)

A. APH  B. Eclampsia  C. PIH   
 D. Anaemia  E. Obstructed labor  F. PPH   
 G. LSCS  H. Congenital anomaly in baby  I. Others

**PAST HISTORY**  
(Please tick (✓) the box of the appropriate response/s)

A. Tuberculosis  B. Hypertension  C. Heart Disease   
 D. Diabetes  E. Asthma  F. Others

**EXAMINATION**

General Condition	Heart	Lungs	Breasts

**ANTENATAL VISITS**

Date	1	2	3	4
Any complaints				
POG (Weeks)				
Weight (Kg)				
Pulse rate				
Blood pressure				
Pallor				
Oedema				
Jaundice				

**ABDOMINAL EXAMINATION**

Fundal height Weeks/cm				
Lie/Presentation				
Fetal movements	Normal/Absent	Normal/Absent	Normal/Absent	Normal/Absent
Fetal heart rate per minute				
P/V if done				

**ESSENTIAL INVESTIGATIONS**

Hemoglobin	
Urine albumin	
Urine sugar	

Signature of ANM \_\_\_\_\_ Date \_\_\_\_/\_\_\_\_/\_\_\_\_

Blood Group & Rh Typing: \_\_\_\_\_ Date \_\_\_\_/\_\_\_\_/\_\_\_\_

**OPTIONAL INVESTIGATIONS**

- Urine pregnancy test. \_\_\_\_\_ Date \_\_\_\_/\_\_\_\_/\_\_\_\_
- Hbs Ag. \_\_\_\_\_ Date \_\_\_\_/\_\_\_\_/\_\_\_\_
- Blood sugar. \_\_\_\_\_ Date \_\_\_\_/\_\_\_\_/\_\_\_\_

Participate in monthly fixed village Mother Child Health & Nutrition Day

**If you or anyone in your family sees any of these danger signs, take the pregnant woman to the hospital immediately**

Bleeding during pregnancy, excessive bleeding during delivery or after delivery

Severe Anaemia with or without breathlessness

High fever during pregnancy or within one month of delivery

Headache, blurring of vision, fits and swelling all over the body

Labour pain for more than 12 hours

Bursting of water bag without labour pains

**Ensure Institutional Delivery**

Contact ASHA/ANM/AWW

Register under Janani Suraksha Yojna (JSY)

Obtain Benefits under JSY

Identify Hospital in Advance

Arrange for Transport in Advance

Ensure 48 hours of stay after delivery

**Preparation in case of Home Delivery**

- Clean hands
- Clean surface & surroundings
- Clean blade
- Clean umbilical cord
- Clean thread to tie the cord
- Clean set of clothes for newborn

Ensure safe delivery by ANM

Ensure Family Care & Support

**Emergency**

Arrange Transport to Hospital

**After Delivery**

Initiated Breastfeeding within 1 Hour of Birth  
 Yes  No

Family Planning Counselling

Ensure early and exclusive breastfeeding 0-6 months

**POST NATAL CARE**

Date of delivery \_\_\_\_\_ Place of delivery \_\_\_\_\_ Type of Delivery \_\_\_\_\_  
 \_\_\_\_\_ N. \_\_\_\_\_ Instr. \_\_\_\_\_ CS \_\_\_\_\_

Term/Preterm \_\_\_\_\_ If at institution period of stay post delivery \_\_\_\_\_

Complications, if any (Specify) \_\_\_\_\_

Sex of baby  M  F \*Weight of baby \_\_\_\_\_ kg. \_\_\_\_\_ gms

Cried immediately after birth  Y  N

Initiated exclusive breast feeding within 1 hour of birth  Y  N

\*(Three extra visits if birth weight < 2.5kg)

**POST PARTUM CARE**

	1 <sup>st</sup> Day	3 <sup>rd</sup> Day	7 <sup>th</sup> Day	6 <sup>th</sup> Week
Any complaints				
Pallor				
Pulse rate				
Blood pressure				
Temperature				
Breasts				
Soft/engorged				
Nipples				
Cracked/normal				
Uterus Tenderness				
Present/absent				
Bleeding P/V				
Excessive/normal				
Lochia				
Healthy/foul smelling				
Episiotomy/Tear				
Healthy/infected				
Family planning				
Counselling				
Any other complications and referral				

**CARE OF BABY**

	1 <sup>st</sup> Day	3 <sup>rd</sup> Day	7 <sup>th</sup> Day	6 <sup>th</sup> Week
Urine passed				
Stool passed				
Diarrhea				
Vomiting				
Convulsions				
Activity (good /lethargic)				
Sucking (good/ poor)				
Breathing (fast/difficult)				
Chest indrawing				
Present/absent				
Temperature				
Jaundice				
Condition of umbilical stump				
Skin pustules				
Present/absent				
Any other complications				

Ensure early and exclusive breastfeeding 0-6 months

**NEWBORN CARE**

- Keep the child warm
- Start breastfeeding within 1 hour after birth.
- For the first 6 months, feed the baby only mother's milk
- Do not bathe the child for the first 48 hours
- Keep the cord dry
- Keep the child away from people who are sick
- Weigh your child at birth
- Give special care if child weighs less than 2.5 kg. at birth

**DANGER SIGNS – SEE HEALTH WORKER**

- Weak sucking or refuses to breastfeed
- Baby unable to cry/difficult breathing
- Yellow palms and soles
- Fever or cold to touch
- Blood in stools
- Convulsions
- Lethargic or unconscious

**Details of Immunisation**

Birth to 3 Years	Birth to 3 Years	Birth to 3 Years	
Birth: B.C.G.	Birth: OPV-0*	Birth: Hepatitis B-0*	* For Institutional Delivery
1½ months: OPV-1	2½ months: OPV-2	3½ months: OPV-3	
1½ months: DPT-1	2½ months: DPT-2	3½ months: DPT-3	
1½ months: Hepatitis B-1	2½ months: Hepatitis B-2	3½ months: Hepatitis B-3	9 months: Measles
			9 months: Vitamin A

**16 to 24 months**

16-24 months: DPT Booster	16 months: Polio Booster	16 months: Vitamin A	24 months: Vitamin A
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**24 to 36 months**

30 months: Vitamin A	36 months: Vitamin A
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**Remember**

- Give Iron & Folic Acid syrup to children over 6 months as prescribed.
- Deworm children over 1 year biannually as prescribed.

**Feeding, playing and communicating with children helps them grow and develop well**

**0 to 6 months**

**What you can do**  
 Smile at your child, look into child's eyes and talk to your child

**What children can do**  
 Around 3 months, most children can smile in response

**3 to 6 months**

**What you can do**  
 Have large colourful objects for your child to see and to reach for

**What children can do**  
 Around 6 months, most children can hold head steady when held upright

**6 to 12 months**

**What you can do**  
 Start breastfeeding immediately after birth – within 1 hour  
 Exclusively breastfeed for 6 months. Do not give any other food or drinks and not even water.  
 Breastfeed as many times as the child wants  
 Breastfeed day and night

**What children can do**  
 Around 8 months, most children can talk to & respond to your child. Get a conversation going with sounds or gestures

### 6 to 12 months

#### Feeding

- On completion of 6 months, start with small amounts of soft mashed cereals, dal, vegetables and fruits
- Increase the quantity, frequency and thickness of the food gradually
- Understand child's signals for hunger and respond accordingly
- Feed the child 4-5 times a day and continue breastfeeding

If the child seems slow, increase feeding, talking and playing. If the child is still slow, take the child to a doctor

### 1 to 2 years

#### Feeding

- Continue to offer a wide variety of foods including family foods, such as rice/chapati, dark green leafy vegetables, orange & yellow fruits, pulses and milk products
- Feed the child about 5 times a day
- Feed from a separate bowl and monitor how much the child eats
- Sit with the child and help her finish the serving
- Continue breastfeeding upto 2 years or beyond

Continue breastfeeding during illness

### 2 to 3 years

#### Feeding

- Continue to feed family foods 5 times a day
- Help the child feed herself / himself
- Supervise feeding
- Ensure hand washing with soap before feeding

If the child seems slow, increase feeding, talking and playing. If the child is still slow, take the child to a doctor

### What you can do

Give your child clean safe items to handle and things to make sounds with



Play games like peek-a-boo. Tell the child names of things & people.

### What children can do

Around 9 months most children can sit up from lying position



Sit without support

### What children can do

Around 2 years most children can stand well without support



Say papamama

## Feeding, playing and communicating with children helps them grow and develop well

### What children can do

Around 1½ years most children can express wants



Walk well

### What children can do

Around 3 years most children can stand on one foot with help



Say one other word

### What you can do

Help your child count and compare things; make simple toys for your child.



Encourage your child to talk & respond to your child's questions. Teach your child stories, songs, and games.

### What children can do

Around 2½ years most children can point to 4 body parts



Name one colour correctly

### What children can do

Around 3 years most children can copy & draw straight line



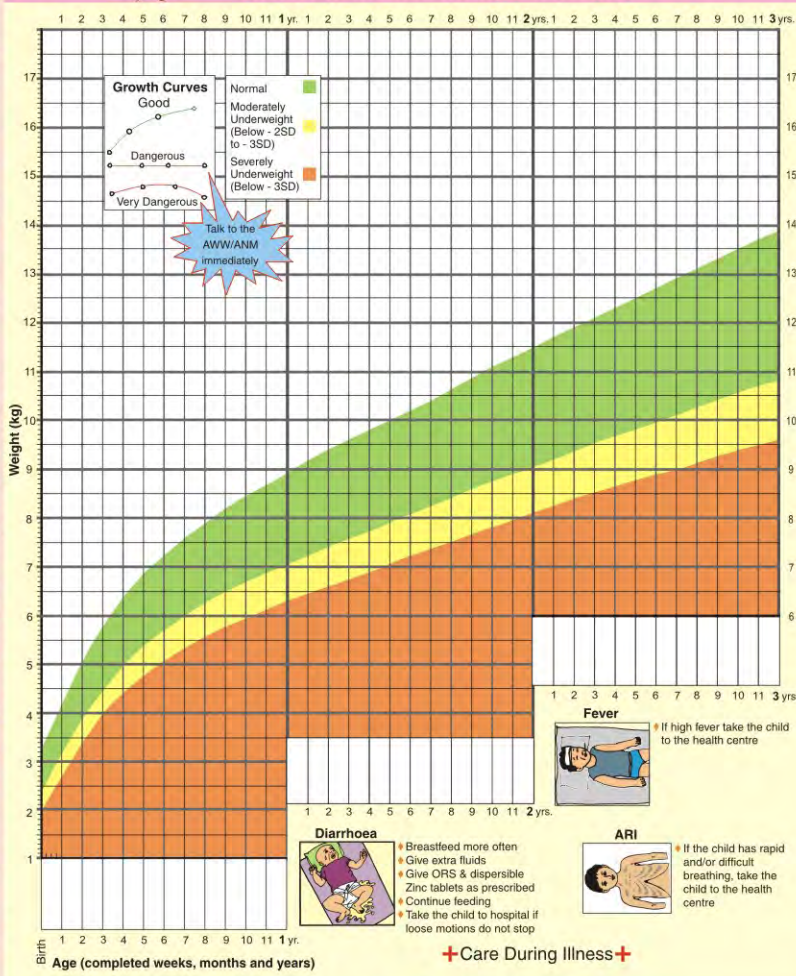
Name 3 out of 4 objects

If the child seems slow, increase feeding, talking and playing. If the child is still slow, take the child to a doctor

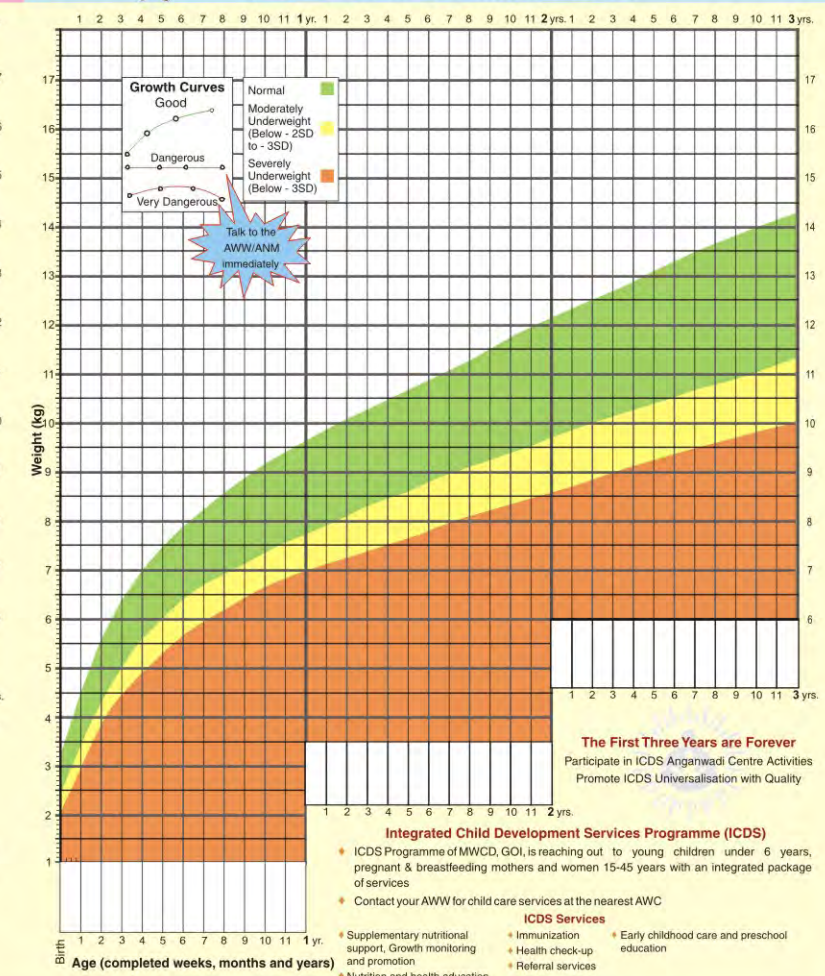
## Ensure equal care for the girl child



### GIRL: Weight-for-age – Birth to 3 years (As per WHO Child Growth Standards)



### BOY: Weight-for-age – Birth to 3 years (As per WHO Child Growth Standards)



Have your child weighed at the AWC every month