Palestinian National Authority
Ministry of Health

Postpartum Care Protocols

November 2004

Developed with technical and financial support from MARAM

MARAM is funded by USAID
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2004 Version

The pages that follow represent the hard work and dedication of the USAID funded MARAM Project staff in full collaboration with a group of National experts representing all medical specialties, and with the support of and technical back-up from IntraHealth International, Inc., an affiliate of the of University of North Carolina at Chapel Hill in the USA.

The aim of these protocols is to provide the best appropriate postpartum care based on each setting needs.

Effective management including implementation of and adherence to these protocols is contingent on the service providers having completed successfully appropriate competency based training.

Although these protocols have been developed for postpartum care in a primary health care setting, the same principles and procedures apply to general health settings where postpartum care is provided including hospitals. However certain specialized units will require more specific procedures not included in this document.

Referral in these protocols means referring to an appropriate service provider who can provide the necessary care or to a service delivery point where the services are available. All referrals need to follow the appropriate referral procedures.

Disclaimer: This publication was made possible through support provided by the USAID Mission to the West Bank and Gaza, under the terms of contract No: 294-C-01-00110-00. The opinions expressed herein are those of the Ministry of Health and MARAM and do not necessarily reflect the views of USAID.

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Foreword

Over the last decade the Palestinian people have received technical assistance in the health sector from various donors in order to achieve the designed goals.

From our point of view and from our experience, the important issue is that for any assistance to be fruitful for and beneficial to the Palestinian people it must be related to how much this assistance is linked to and based on actual needs.

The USAID funded MARAM Project has not only responded to the actual needs, during one of the very difficult stages in the life of the Palestinian people, but it was one of the main leaders realizing early on the importance of enhancing the partnership approach at all stages of the project interventions that are unique and innovative and aim to improve the quality of health care to the Palestinian families, including postpartum care.

MARAM has done this, both at the individual and institutional levels, with the conviction that it is the basis to sustain the activities relying on our own scarce resources. We believe this philosophy is the only acceptable one to insure sustainable development.

These protocols are one of the very successful examples of MARAM interventions. They will fill one of the big existing gaps in the delivery of health care services.

Moreover it is worth to mention and to value as well the process adopted in making these protocols a reality. It included the involvement of many Palestinian professionals and experts working together in teams under very difficult circumstances to update these protocols and ensure that they are adapted to the local Palestinian context.

We would like to seize this opportunity to extend our gratitude and thanks to MARAM and to their other Palestinian partners who can take pride in the development of this valuable document, the Palestinian Postpartum Care Protocols.

We would also like to express our gratitude and that of the Palestinian people to the USAID Mission, West Bank and Gaza, for their support, and to IntraHealth International, an affiliate of the University of North Carolina at Chapel Hill in the USA, for their moral and technical support, and for providing the international review of the updated protocols.

These protocols will only serve the intended purpose after training various service providers on how to implement them on the ground to achieve the expected results in improving the quality of health care in Palestine.

Dr. Jawad Tibi
Minister of Health
Preface

The Ministry of Health has supported the idea of developing such protocols as essential to strengthening the health care system in Palestine.

Accordingly MARAM included the update/development of Postpartum Care Protocols in its work plan.

The following approach was adopted:

- The existing relevant documents were reviewed within MARAM project.
- Senior national consultants representing all relevant specialties in the protocols were contracted to review, adapt and consolidate these protocols based on the review outputs in collaboration with MARAM staff;
- The updated draft protocols were disseminated to major stakeholders including the MOH, UNRWA, NGOs and private sector for review;
- The consolidated updated draft was submitted to IntraHealth International for review;
- The comments from the national and international reviews were shared and discussed with the national consultants and integrated as appropriate in the protocols;
- The finalized draft was submitted to and approved by the Ministry of Health.

This intervention is unique and innovative and needs commitment and support from the health authorities to ensure the approval and implementation of and adherence to these protocols to improve the quality of health care in general and of postpartum care practices and systems in particular.

These protocols could not have been developed without valuable contributions from a large number of Palestinian health professionals and experts who gave of their precious time and expertise.

Bringing such a large number of professionals with varied interests and aspirations to work together in small groups is an achievement by itself and is a credit to MARAM in general and to the Performance Improvement and Training Team in particular.

Dr. Umaiyah Khammash

Chief of Party
Maram Project
Introduction

The past two decades have witnessed major changes in the Palestinian health care system including both how health care is paid for and how it is delivered. Although improvements in the available hospitals and health care centers occurred, the prevailing conditions have affected the performance of the health care system in general as well as the performance of the service providers, and did not allow meeting completely the projected vision as stipulated in the Palestinian health plan especially since the beginning of the second Intifada in September 2000.

Access to quality health care is a basic human right. The performance of service providers is a key element in ensuring the quality of these services. However this performance is affected by several factors such as clear job expectations and immediate feedback, adequate physical environment and tools, motivation, support from the organization and appropriate skills, knowledge and attitudes. Having the appropriate systems in place, to ensure that these factors have a positive impact and enhance staff performance, is essential since providers can only perform as well as the systems within which they operate allow them. These systems include management ones such as job/task description, technical such as guidelines and protocols and support such as training and supervision.

Therefore conducting needs assessment activities to identify issues with provider performance, their impact on quality of care and the appropriate solutions has been a priority for MARAM.

The assessment of the performance of different categories of service providers has been conducted on an on-going basis since the beginning of the project. Various approaches and methods have been used to review performance of providers and systems in place to support them at various points of service delivery in the public sector at the primary health care level and the hospital level, in the NGO sector, in the private sector and other sectors such as UNRWA:

- Field visits to service delivery points,
- Orientation and planning days/workshops for staff from the maternity homes, the satellite clinics, the back up hospitals and stakeholders from the community,
- Focus groups activities for staff and decision makers,
- Meetings with partners such as the Ministry of Health, UNFPA, UNRWA, Save the Children
- Review of existing material such as National Unified RH guidelines and Protocols (MoH/UNFPA), National Unified Training Manual in RH Services in Palestine (MoH/UNFPA), Family Planning: A Manual for Training of FP in the Context of RH (CDPHC/College of Health Professions, Al Quds University)…
The needs assessment allowed for the identification of the following key issues:

- Weak and even lack of comprehensive systems for on-going performance improvement,
- Lack of adequate protocols/guidelines and standards of practice for some services/types of care such as Infection Prevention and Control, Risk Factor Assessment in Pregnancy etc.,
- Some existing guidelines and protocols not up to date and not evidence based,
- Many service delivery points did not have existing guidelines and protocols available,
- No systematic and systemic adherence to guidelines and protocols even when available,
- Lack/insufficient linkages between guidelines and protocols and job/tasks specifications,
- Lack/insufficient linkages between guidelines and protocols and preparation including training for performance of job/tasks,
- Lack of adequate training curricula based on protocols/guidelines and standards of practice for some services/types of care,
- Some existing protocols not up to date.

Based on the selected issues, MARAM, in cooperation and coordination, with key partners in the public sector such as the Ministry of Health and other partners such as UNFPA, set the following objective:

- Improve the quality of care in Community Based Pre-Hospital EMS, Infection Prevention and Control, Normal Childbirth, Postpartum Care, Newborn Care and Resuscitation, Maternal and Child Nutrition, Advanced Life Support in Obstetrics (ALSO) and Neonatal Resuscitation (NR) through:
  - strengthening the system for the improvement of the performance of various service providers,
  - Increased adherence to standards of practices by developing/updating service delivery protocols.

In order to achieve this objective MARAM focused on:

- the development/update of protocols and curricula in Infection Prevention and Control, Normal Delivery, Early Postnatal Care, Newborn Care and Resuscitation, Maternal and Child Nutrition,
- the training of trainers in these technical areas and in ALSO,
- the training of service providers in all the technical areas including Neonatal Resuscitation and excluding Nutrition.

Protocols in all technical areas except in ALSO and NR were drafted/updated by local consultants, reviewed by MARAM technical teams and additional local consultants, and reviewed/validated by US based international consultants/organizations. The comments and recommendations were reviewed and integrated when appropriate by local consultants and MARAM technical teams before the protocols were edited and formatted.
MARAM, under a licensing agreement, has adopted the ALSO methodology/protocols developed by the American Academy of Family Physicians.

MARAM has also adopted the NR protocols of the American Academy of Pediatrics and American Heart Association.

The draft of the Postpartum Protocols approved by the Ministry of Health was discussed and tested during the training of trainers in the West Bank. The results of the testing were discussed with the national consultants from the West Bank and Gaza before being integrated in the final version. The final version has been approved and adopted by the Ministry of Health and disseminated to other partners such as UNFPA, UNRWA etc.

Hammouda Bellamine
Director
Performance Improvement and Training
MARAM

Dr. Salwa Najjab AlKhatib
Director, Reproductive Health
MARAM
Acknowledgments

The Ministry of Health has the pleasure and wishes to extend deep and warm gratitude and thanks for the following organizations and individuals for their contribution to and efforts in making this document, the Palestinian Postpartum Care Protocols a reality.

The Ministry wishes to acknowledge the efforts of:

- Dr. May Kaileh, MARAM Consultant for developing the draft of the protocols,
- Drs. Mohammed Joudeh, Najla Abu Hassira, Dina Abu Shaban, Bassam Al Akhdar, Shukri Odeh and Nihad Abu Assab for reviewing the draft,
- Dr. Marcel Vekemans, Medical Advisor, IntraHealth International Inc., and Dr. Martha C. Carlough, IntraHealth and UNC/CH Department of Family Medicine Clinical Technical Advisor, for providing the international review and validation,
- Ms Cornelia Kip Lee, Technical Editor, IntraHealth International Inc., for editing and formatting the protocols,
- Ms Doris Youngs, Project Manager, IntraHealth International Inc., for her support in mobilizing the necessary resources in the USA,
- Ms Sherry Carlin, Director, Health and Humanitarian Assistance Office, and Dr. Suzi Srouji, Senior Health Advisor, USAID, West Bank and Gaza, for their support throughout the process.

The following Maram staff members have provided moral and other support in the process of developing the protocols:

- Dr. Umaiayah Khamash, Chief of Party,
- Dr. Yahia Abed, Deputy Chief of Party,
- Dr. Herve Razafimbahiny, Public Health Director,
- Dr. Faisal Abdullatif, Deputy Director, Performance Improvement and Training,
- Mr. Hamza Abdiljawad, Senior Performance Improvement and training Advisor, Gaza,
- Dr. Nisreen Abu Middain, Performance Improvement Advisor, Gaza,
- Ms. Manal Abul Huda, Maternity Homes Coordinator, the West Bank.

Also the Ministry of Health wishes to extend special thanks to:

- Ms. Rawan Harb, Training and Technical Assistance Coordinator, Ms. Mona Dodin, Training Assistant, and Mr. Samad Hachby, Program Associate for providing the necessary administrative support for the development of the protocols,
- Mr. Hammouda Bellamine, Director, Performance Improvement and Training,
- Dr. Salwa Najjab Al Khatib, Director, Reproductive Health, for their commitment, tireless efforts and continuous technical and methodological guidance during the development of the protocols.

Also our thanks are extended to all others who have contributed to the development of these protocols including support the staff. We apologize for not mentioning all of them by name.
Illustrations and Credits

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Credits


Figure 6 is used with permission of JHPIEGO. From Kinzie, B. and Gomez, P. (authors), Chase R (ed). 2004. Basic Maternal and Newborn Care: A Guide for Skilled Providers. Baltimore, MD. Copyright© by JHPIEGO Corp. All rights reserved.


Figure 17 The Learning Resource Package for Managing Complications in Pregnancy and Childbirth, MNH/JHPIEGO and AMDD/Columbia University, 2003; PRIME’s Sourcebook for Curriculum Development, INTRAH, 1997

### Abbreviations

<table>
<thead>
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<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>ALSO</td>
<td>Advanced Life Support in Obstetrics</td>
</tr>
<tr>
<td>BP</td>
<td>Blood Pressure</td>
</tr>
<tr>
<td>C</td>
<td>Celsius</td>
</tr>
<tr>
<td>cc</td>
<td>Cubic centimeters</td>
</tr>
<tr>
<td>CDPHC</td>
<td>Center for Development in Primary Health Care</td>
</tr>
<tr>
<td>cm</td>
<td>Centimeter</td>
</tr>
<tr>
<td>DIC</td>
<td>Disseminated Intravascular Coagulopathy</td>
</tr>
<tr>
<td>DVT</td>
<td>Deep Venous Thrombosis</td>
</tr>
<tr>
<td>EMS</td>
<td>Emergency Medical Services</td>
</tr>
<tr>
<td>FP</td>
<td>Family Planning</td>
</tr>
<tr>
<td>g</td>
<td>Gram</td>
</tr>
<tr>
<td>Hg</td>
<td>Mercury</td>
</tr>
<tr>
<td>Hgb</td>
<td>Hemoglobin</td>
</tr>
<tr>
<td>HIV</td>
<td>Human Immunodeficiency Virus</td>
</tr>
<tr>
<td>IM</td>
<td>Intramuscular</td>
</tr>
<tr>
<td>IMPAC</td>
<td>Integrated Management of Pregnancy and Childbirth</td>
</tr>
<tr>
<td>INTRAH</td>
<td>International Training Program in Health (IntraHealth International, Inc.)</td>
</tr>
<tr>
<td>ITP</td>
<td>Idiopathic Thrombocytopenic Purpura</td>
</tr>
<tr>
<td>IV</td>
<td>Intravenous</td>
</tr>
<tr>
<td>IU</td>
<td>International Unit</td>
</tr>
<tr>
<td>JHPIEGO</td>
<td>Johns Hopkins Program for International Training in Gynaecology and Obstetrics</td>
</tr>
<tr>
<td>L</td>
<td>Liter</td>
</tr>
<tr>
<td>LAM</td>
<td>Lactational Amenorrhea Method</td>
</tr>
<tr>
<td>mg</td>
<td>Milligram</td>
</tr>
<tr>
<td>ml</td>
<td>Milliliter</td>
</tr>
<tr>
<td>MMR</td>
<td>Measles, Mumps and Rubella</td>
</tr>
<tr>
<td>MoH</td>
<td>Ministry of Health</td>
</tr>
<tr>
<td>MTCT</td>
<td>Mother-To-Child Transmission (of HIV)</td>
</tr>
<tr>
<td>NGO</td>
<td>Non Governmental Organization</td>
</tr>
<tr>
<td>NR</td>
<td>Neonatal Resuscitation</td>
</tr>
<tr>
<td>NS</td>
<td>Normal Saline</td>
</tr>
<tr>
<td>PPH</td>
<td>Postpartum Hemorrhage</td>
</tr>
<tr>
<td>Rh</td>
<td>Rhesus (Rh blood group)</td>
</tr>
<tr>
<td>RH</td>
<td>Reproductive Health</td>
</tr>
<tr>
<td>ROM</td>
<td>Rupture Of Membranes</td>
</tr>
<tr>
<td>RTIs</td>
<td>Reproductive Tract Infections</td>
</tr>
<tr>
<td>SC</td>
<td>Subcutaneous</td>
</tr>
<tr>
<td>s/s</td>
<td>Signs/symptoms</td>
</tr>
<tr>
<td>SSRI</td>
<td>Selective serotonin reuptake inhibitors (ref: antidepressants)</td>
</tr>
<tr>
<td>TT</td>
<td>Tetanus Toxoid</td>
</tr>
<tr>
<td>U</td>
<td>Unit</td>
</tr>
<tr>
<td>UNC</td>
<td>University of North Carolina</td>
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<tr>
<td>Abbreviation</td>
<td>Full Form</td>
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<td>--------------</td>
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<tr>
<td>UNDP</td>
<td>United Nations Development Program</td>
</tr>
<tr>
<td>UNFPA</td>
<td>United Nations Fund for Population Activities</td>
</tr>
<tr>
<td>UNRWA</td>
<td>United Nations Relief and Work Agency</td>
</tr>
<tr>
<td>UNICEF</td>
<td>United Nations Children’s Fund</td>
</tr>
<tr>
<td>US</td>
<td>United States</td>
</tr>
<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
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<tr>
<td>µg</td>
<td>Microgram</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
<tr>
<td>&lt;</td>
<td>Less than</td>
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<tr>
<td>&gt;</td>
<td>Greater than</td>
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</table>
Section 1

Protocols
Chapter 1: Overview of Postpartum Care

“The initial days of the [postpartum period] can be a time of wonder, relief, joy, astonishment, tenderness, happiness, anxiety, exhaustion, discomfort, sadness, depression, isolation, and bewilderment.” – Wheeler, 2002

The postpartum period starts immediately after delivery to six weeks after delivery. It is a critical transitional time for a woman, her newborn and her family. It is a social as well as a personal event and has meaning well beyond the simple physiological events that mark it. For new mothers, this period probably marks the most significant life-event they have ever experienced. It is characterized by strong emotions, dramatic physical changes, and new and altered relationships. A cascade of hormonal changes in the woman’s body accompanies her transition from pregnancy to lactation. The woman is attending to her new infants needs and adjusting to a new family constellation, while recovering from the exertion of childbirth and healing from tears, episiotomy or complications. Family routines are forever changed by the arrival of a newborn requiring around-the-clock attention and care. (WHO, 1998)

The goal of postpartum care is to maintain the physical and psychological well-being of the woman and child. Providers must be particularly sensitive to the needs of the woman during this transitional time, and provide support for a smooth transition back to her family and community. Postpartum care must be a collaboration between parents, families, caregivers, health professionals, community groups and policy makers. The essential components of postpartum care are health education and counseling, and the rapid detection, treatment and referral of any problems for further management. To fulfill the goal of postpartum care, providers should do the following:

**Support the physical, mental and social health of the woman and baby by supporting the woman and her family in the transition to a new family constellation.**

**Promote the active participation of the woman, her partner and/or other family members in postpartum care.**

**Provide early detection and management of problems or complications that may affect the health of the woman and newborn.**

**Refer the woman and infant to the back-up hospital when necessary.**

**Assist the woman to breastfeed successfully.**

**Provide health education and counseling about:**

- danger signs for the woman and baby and appropriate responses, including developing a complication readiness plan for the postpartum period
- nutrition
- self-care and hygiene
- physical changes in the woman’s body
- breastfeeding
- birth spacing/contraception and sexual life
- immunizations

In these protocols, the elements of postpartum care are covered in the following chapters:

   Rapid assessment and referral.
   Care of the woman after delivery.
   Breastfeeding.
   Health education and counseling for postpartum women.
   Care of the woman during the one-week home visit.
   Postpartum hemorrhage.
   Management of breastfeeding problems.

Note: While the recommendation is that postpartum women and their newborns receive care at the same time, this protocol primarily focuses on the postpartum care of the woman. For information on care of the child, refer to the Newborn Care and Resuscitation protocols.
Chapter 2: Rapid initial Assessment (RIA) and Referral

“Increased awareness of warning signals and appropriate intervention is needed at all levels [of postpartum and newborn care.] Skilled care and early identification of problems could reduce the incidence of death and disability, together with the access to functional referral services with effective blood transfusion and surgical capacity.” – WHO, 1998

Rapid Initial Assessment and stabilization procedures

In the hours and days following a normal delivery, some women may develop danger signs that indicate a life-threatening condition. While the diagnosis and management of most complications lie beyond the scope of this manual, it is crucial to rapidly identify and respond to problems if they arise while the woman is in the maternity home. Apply the process outlined in the steps below and described in table 1:

1) Perform postpartum rapid initial assessment:

Throughout the immediate postpartum period (from birth to discharge from the maternity home) and at the first postpartum visit, be alert for the presence of any of the postpartum danger signs. (See Figure 1.)

Follow the assessment guidelines described in table 1. As you make your observations and perform examinations, look for and ask pertinent questions about danger signs (e.g., “Have you had any headaches?”).

2) Interpret findings:

If any of the signs or symptoms are present or become apparent, determine the woman’s need for emergency care and stabilization, and the immediate course of action that must be taken.

3) Stabilize, if necessary:

If the woman is in need of stabilization, perform the designated life-saving measures to stabilize her before proceeding with care or referral/transfer. Refer to WHO, Managing Complications in Pregnancy and Childbirth, or MARAM Emergency Protocols, for detailed emergency stabilization steps.

4) Refer to service delivery point (with comprehensive obstetric care services after stabilization).
Table 1: Rapid Initial Assessment*
When a woman experiences problems following delivery, rapidly assess her condition to determine her degree of illness.

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<th>Danger Signs</th>
<th>Consider</th>
</tr>
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<tbody>
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<td><strong>Airway and breathing</strong></td>
<td><strong>LOOK FOR:</strong></td>
<td>• severe anemia</td>
</tr>
<tr>
<td></td>
<td>• cyanosis (blueness)</td>
<td>• heart failure</td>
</tr>
<tr>
<td></td>
<td>• respiratory distress</td>
<td>• pneumonia</td>
</tr>
<tr>
<td></td>
<td><strong>EXAMINE:</strong></td>
<td>• asthma</td>
</tr>
<tr>
<td></td>
<td>• skin: pallor</td>
<td>• pulmonary embolism</td>
</tr>
<tr>
<td></td>
<td>• lungs: wheezing or rales</td>
<td></td>
</tr>
<tr>
<td><strong>Circulation</strong></td>
<td><strong>EXAMINE:</strong></td>
<td>• shock</td>
</tr>
<tr>
<td>(signs of shock)</td>
<td>• skin: cool and clammy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• pulse: fast (110 or more) and weak</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• blood pressure: low (systolic less than 90 mm Hg)</td>
<td></td>
</tr>
<tr>
<td><strong>Vaginal bleeding</strong></td>
<td><strong>EXAMINE:</strong></td>
<td>• atonic uterus</td>
</tr>
<tr>
<td></td>
<td>• vulva: amount of bleeding, placenta retained, obvious tears, haematoma</td>
<td>• tears of cervix and vagina</td>
</tr>
<tr>
<td></td>
<td>• uterus: atony</td>
<td>• retained placenta</td>
</tr>
<tr>
<td></td>
<td>• bladder: full</td>
<td>• Disseminated Intravascular Coagulopathy (DIC)</td>
</tr>
<tr>
<td><strong>Unconscious or convulsing</strong></td>
<td><strong>EXAMINE:</strong></td>
<td>• eclampsia</td>
</tr>
<tr>
<td></td>
<td>• blood pressure: high (diastolic 90 mm Hg or more)</td>
<td>• epilepsy</td>
</tr>
<tr>
<td></td>
<td>• temperature: 38°C or more</td>
<td>• tetanus</td>
</tr>
<tr>
<td></td>
<td>• reflexes</td>
<td></td>
</tr>
<tr>
<td><strong>Dangerous fever</strong></td>
<td><strong>ASK IF:</strong></td>
<td>• urinary tract infection</td>
</tr>
<tr>
<td></td>
<td>• weak, lethargic</td>
<td>• metritis</td>
</tr>
<tr>
<td></td>
<td>• frequent, painful urination</td>
<td>• pelvic abscess</td>
</tr>
<tr>
<td></td>
<td><strong>EXAMINE:</strong></td>
<td>• peritonitis</td>
</tr>
<tr>
<td></td>
<td>• temperature: 38°C or more</td>
<td>• breast infection</td>
</tr>
<tr>
<td></td>
<td>• unconscious</td>
<td>• pneumonia</td>
</tr>
<tr>
<td></td>
<td>• neck: stiffness</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• lungs: shallow breathing, consolidation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• abdomen: severe tenderness</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• vulva: purulent discharge</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• breasts: tender</td>
<td></td>
</tr>
<tr>
<td><strong>Abdominal pain</strong></td>
<td><strong>EXAMINE:</strong></td>
<td>• ovarian cyst</td>
</tr>
<tr>
<td></td>
<td>• blood pressure: low (systolic less than 90 mm Hg)</td>
<td>• appendicitis</td>
</tr>
<tr>
<td></td>
<td>• pulse: fast (110 or more)</td>
<td>• endometritis</td>
</tr>
<tr>
<td></td>
<td>• temperature: 38°C or more</td>
<td>• ruptured uterus</td>
</tr>
<tr>
<td></td>
<td>• uterus</td>
<td></td>
</tr>
</tbody>
</table>

* This table does not include all the possible problems that a woman may face during the postpartum period. It is meant to identify those problems that put the woman at greater risk of maternal morbidity and mortality.

Figure 1: Conditions and danger signs that require referral during postpartum care for the mother:

- any of the rapid initial assessment danger signs or symptoms:
  - difficulty breathing, cyanosis,
  - pallor, cool or clammy skin,
  - severe headaches, blurry vision,
  - vomiting, high fever (higher than 38°C),
  - abdominal pain other than labor,
  - vaginal bleeding, convulsions,
  - fainting, disorientation,
  - diastolic BP > 90 mm Hg, systolic BP < 90 mm Hg, pulse > 110 bpm;
- Retained placenta (> 30 minutes unless it is easy to extract manually);
- Uncontrolled postpartum hemorrhage. (if PPH is controlled, patient may stay in the unit where she delivered);
- Uterine inversion, (its better to do immediate reduction);
- If the provider has difficulty with repair of third or fourth degree lacerations or repair of an episiotomy (continued bleeding, defect in anal sphincter or mucosa);
- Signs of anemia (conjunctiva or palmer pallor, respiratory rate>30, poor work\exercises tolerance Hbg<9.5);
- Signs of breast abscess: redness, swelling, tenderness or fever;
- Vaginal bleeding heavier than a period, continuous slow bleeding, sudden bleeding or increased vaginal bleeding within the first 24 hours after childbirth;
- Any discharge that is foul-smelling;
- Fecal incontinence, fecal matter in the vagina, severe constipation, or pain when defecating;
- Urinary incontinence, hematuria, and signs\ symptoms of UTI;
- Urinary retention, if repeated.
- Signs of thrombophlebitis: elevated temperature, tachycardia, calf tenderness and heat, leg pain;
- Unusually tender perineum with bloody, purulent or serous discharge and vaginal hematoma;
- Feels especially sad or unable to care for herself or the baby.
Chapter 3: Care of the Woman after Delivery

“It is usually a joyful event when a woman gives birth to a baby she wants. Despite the pain and discomfort, birth is the long-awaited culmination of pregnancy and the start of a new life. However, birth is also a critical time for the health of the mother and her baby.” – WHO, 1998

Introduction and Overview

There are three periods of care of the woman and baby after delivery:

- care during the first two hours,
- care from 3 – 6 hours, and
- care before discharge.

The first hours postpartum are extremely important. During this time, the provider should closely monitor the woman and baby and assess them regularly for any signs of complications. This is the period when postpartum hemorrhage most often occurs. It is also important to keep the mother and infant together as much as possible, to facilitate mother-baby bonding, and to initiate breastfeeding within the first 30 – 60 minutes of birth. Support of mother-infant bonding through skin-to-skin contact and rooming-in during the woman’s stay in the maternity home is important for establishing a good relationship between mother and baby and helps ensure successful breastfeeding. Thorough and respectful counseling before discharge is equally important to prepare the woman to care for herself and her new baby at home and to support their transition back to the family. Involve the woman’s partner or family members as much as possible in the counseling. (WHO, 1998)

Elements of Care

1) Provide intensive monitoring and care during the first 2 hours after birth:

   Keep the woman in the delivery room.

   Be alert for the presence of any of the emergency signs, (see figure 1).

   Monitor’s the woman’s vital signs.
   - Check BP and pulse every 15 minutes.
   - Check temperature every hour.

   Assess uterine contractedness and fundal height contractedness of the uterine fundus and massage the uterus using the palm of your hand every 15 minutes.

   Assess bleeding and lochia every 15 minutes. If bleeding and lochia are abnormal, follow the clinical procedures for treating postpartum hemorrhage.

   Offer the woman food and drink.

   Facilitate mother-baby bonding through skin-to-skin contact. (See Figure 2.)
Initiate breastfeeding within the first hour if the woman has chosen to breastfeed and the woman and baby are ready. (See Chapter 4.)

Help the woman void at least every 2 hours.

Explain danger signs to the woman and her family, and tell them to call for help immediately if they appear.

Document all activities on the client record.

---

**Figure 2: Mother-Infant Bonding**

Benefits of immediate skin-to-skin contact:

- Prevents hypothermia,
- Enhances breastfeeding initiation,
- Helps mother to maintain breastfeeding,
- Encourages bonding.

---

**Guidelines for Facilitating Mother Infant Bonding**

- During the first stage of labor or before birth, counsel the mother about the benefits of placing the baby on her abdomen immediately after birth (skin-to-skin contact).
- After the baby is born, verify that the infant is stable, alert and breathing normally.
- Dry the infant well and then encourage the mother to hold the baby on her abdomen, or on her chest, between her breasts.
- Cover the infant with a warmed flannel sheet and apply a cloth hat to ensure that the infant is kept warm.
- Perform on-going neonatal assessment while the infant is in skin-to-skin contact with the mother.
2) Provide ongoing maternal and infant care during 3 – 6 hours after birth.

   Keep the woman and baby in the same room together (“rooming-in”).
      - Transfer the woman and infant to the postpartum room in a wheelchair;
      - Assist the woman the first time she gets up.

   Assess contractedness of the uterine fundus and massage the uterus using the palm of your hand every 30 minutes during the 1st hour, then every hour for the next 3 hours. If the uterus does not remain contracted and the woman is bleeding, follow the clinical procedures for treating postpartum hemorrhage caused by uterine atony. (See chapter 7)

   Assess bleeding and lochia every 30 minutes during the 1st hour, then once every hour for the next 3 hours. If bleeding and lochia are abnormal, follow the clinical procedures for treating postpartum hemorrhage.

   Monitor vital signs:
      - Check blood pressure and pulse every 30 minutes during the 1st hour, then every hour for 3 hours;
      - Check temperature before discharge.

   Encourage the woman to void:
      Record the first void on the client record.

      If she has not voided within 6 hours and she cannot void on her own and her bladder is full, consider catheterizing her bladder to prevent distension.

   Assess breasts and nipples.

   Support and encourage breastfeeding:
      - Encourage breastfeeding on demand;
      - Demonstrate correct position and attachment, (see chapter 4);
      - Observe breastfeeding.

   Encourage the woman to move about as soon as she feels able.

   Offer the woman a shower whenever she feels able and assist her to dress in her own clothes.

   Offer her regular diet.

   Provide medication:
      - Give Anti D, IM to the woman if her blood group is negative, the indirect Coomb’s test is negative and the baby’s blood type is positive.
      - Give analgesic tablets as needed for after-pains.

3) Perform final assessment before discharge:

   Check vital signs.

   Check for signs/symptoms of anemia.

   Assess breasts and breastfeeding.

   Assess bleeding, lochia and fundal height

   Check repair of lacerations or episiotomy, if any, for swelling and tenderness.

   Assess bowel and bladder function.

   Assess mother-infant bonding and woman’s coping ability.

   Assess woman’s support system.
Examine lower limbs for signs of DVT.

4) Provide routine care before discharge:

- **Iron and folate**
  - Supplementation for treatment and prevention of anemia;
  - Prescribe 1 tablet of iron/folate to be taken by mouth once per day for women who are not anemic. If the woman’s Hgb is <9.5, then prescribe two tablets of iron and 1 tablet of folate.

- **Vitamin A** deficiency is the most common cause of preventable childhood blindness, but its effects on the parturient woman are less well known. Do not give this high dose of Vitamin A to women of childbearing age in general, or to lactating women more than one month after birth, because high doses may be teratogenic in early pregnancy.
  - Ask about night-blindness;
  - In areas where Vitamin A deficiency is high, give 200,000 iu of Vitamin A once in the first month after birth to improve iron absorption and build maternal and infant immunity;
  - Advise woman on Vitamin A-rich foods (milk products, fish and meat) and provitamin A-rich foods (dark green leafy vegetables and mangoes).

- **Tetanus Toxoid Vaccination** can prevent tetanus, a disease which continues to kill many newborns and mothers in countries all over the world. All women need to be informed about the series of 5 tetanus shots and should have a permanent card.
  - Check Tetanus Toxoid (TT) immunization status:
    - Ask or check when the last TT given;
    - Verify which dose of TT this was;
  - If TT is due:
    - Give 0.5 ml as IM injection in deltoid;
    - Advise the woman when the next dose is due;
  - If TT is not due:
    - Advise the woman when the next dose is due.

- **Rubella vaccine**: give MMR if the woman is not immunized.

5) Provide health education and counseling about the following topics:

- Self-care and hygiene,
- Proper diet and sufficient rest,
- Normal changes to expect following childbirth,
- Postpartum blues and depression,
- Postpartum exercises, including Kegel exercises,
- Management of domestic violence situations,
- Birth spacing/contraception and sexual life and prevention of RTIs,
- Danger signs,
- Complication readiness plan,
- Follow-up care; schedule and location of visits,
- Infant care,
- Breastfeeding and potential breastfeeding problems.

**Note:** Information about the care of infants is included in the Newborn Care and Resuscitation Protocols.

6) **Document all medications, observations, first voiding and breastfeeding practices on the client record.**
Chapter 4: Breastfeeding

"Nutrition and nurturing during the first three years are both crucial for lifelong health and well-being. In infancy, no gift is more precious than breastfeeding; yet barely one in three infants is exclusively breastfed during the first four months of life." — WHO, 2003

1) Introduction and Overview

Providing support for breastfeeding is one of the most important things that you can do to help a new mother and her infant. In addition to providing vital nutrients, breastfeeding positively affects the physical and psychological health of the mother and infant. The maternity home endorses and promotes a comprehensive baby-friendly breastfeeding policy, which is outlined in the guidelines below. All providers at the maternity home should follow these guidelines and practices carefully:

- Educate the mother about the benefits and management of breastfeeding during antenatal, delivery and postpartum visits.
- Provide instruction and coaching for the mother in proper breastfeeding technique and how to maintain lactation if she is separated from her baby.
- Encourage breastfeeding immediately after delivery (within 30-60 minutes) if the mother and newborn are stable. (Note: If the mother or the baby are ill and cannot nurse, the mother may be able to express milk and feed with a syringe or a cup and spoon).
- Encourage the mother to initiate breastfeeding as early as possible because of the importance of giving colostrums.
- Allow all newborns to stay in the room with their mother at all times (a.k.a. rooming-in) and provide a supportive environment for breastfeeding (e.g privacy, dimmed light, pillows, comfortable chair and foot stool, limited number of personnel entering the room).
- Encourage on-demand, exclusive breastfeeding (no supplementary formula or water unless medically recommended) until the baby is six months old. Continue breastfeeding after the introduction of appropriate and complimentary solid food until the baby is at least two years old.
- Avoid use of bottles, artificial teats and pacifiers as it might cause nipple confusion for the infant. (Note: If medically necessary, other fluids should be given by syringe or by spoon).
- Evaluate the mother’s breastfeeding technique prior to discharge, review breastfeeding information and assess breastfeeding at the one-week home visit and at subsequent visits.
- Encourage mothers to participate in breastfeeding support groups.
- Encourage the mother to have an appropriate diet that includes animal products such as meat, liver, egg, etc. as a source of vitamin A.
- Document pertinent information regarding breastfeeding in the client’s records.

*Adapted from WHO/UNICEF’s Criteria for Baby-friendly Hospitals.*
Elements of Care

1) Share important breastfeeding information and concepts:
   • Explain to the woman and her companion(s) the benefits of exclusive and immediate breastfeeding.
   • Determine their understanding of breastfeeding concepts and techniques so that you can provide targeted instruction. (Note: This is an on-going process that should start during antenatal visits and continue as long as the mother elects to breastfeed).

2) Assess the woman’s breasts and advise on proper care:
   • Assess the woman’s breasts before the initial feeding. Examine: overall appearance, normal contours and smooth skin, soft and non-tender, flat or inverted nipples and sores that might interfere with breastfeeding.
   • Instruct her on proper nipple care to prevent cracking and soreness. (See Chapter 5 for detailed information on breast care).

3) Provide assistance with preparations and positioning:
   • Suggest the woman wear clothes that allow easy access to her breasts.
   • Position the woman and newborn comfortably. The newborn should be positioned so that his/her arms do not interfere with mouth-to-breast contact. The whole body must face the breast with the mouth of the baby directly opposite the nipple.
   • Ensure that the baby’s body is supported so that it stays high at the breast to prevent hanging on the nipple. (See Figures 3 – 5)

   Figure 3: The “opposite arm” position.  Figure 4: The “underarm” position.

   Figure 5: Breastfeeding while lying down allows the mother to rest. (WHO/UNICEF, 1993)
4) **Provide coaching on proper technique.**

- Have the mother hold her breast with four fingers below the nipple and the thumb above. (See Figure 6)

- Ask the mother to touch the infant’s lower lip with her nipple until the baby opens its mouth wide. (See Figure 7)

- Instruct the mother to bring the baby close to her body as soon as the baby opens its mouth. The entire areola, not just the nipple, should be inside the infant’s mouth. (See Figures 8 – 9)

- Encourage the mother to support the baby’s head and body using her arm and/or pillows to ensure proper nipple contact. The mother can remove her hand from her breast after the baby’s mouth is attached.

- Allow the infant to suckle at the breast, 5 –15 minutes on each breast, depending on how well the baby is sucking.

- To remove the baby from the breast, tell the mother to insert one finger into the corner of the baby’s mouth and withdraw the infant slowly. Allow the nipple to air dry while burping the baby. (See Figures 10 – 11)

- Have the mother repeat the attachment, suckling and detachment process with the second breast. Remind her that the infant should suckle at both breasts at each feeding.
• Encourage the mother to be attentive to signs the infant may be hungry (looking around with open mouth and sucking) and feed the infant on demand (whenever and for however long the infant desires without interruption; 10 – 12 times per 24 hours, day and night; or every 2 – 4 hours).

• Continue to breastfeed even when the infant is sick but seek medical advice.

• Discourage the use of bottles and pacifiers as it might cause nipple confusion for the infant. If deemed medically necessary, additional fluid can be given by syringe or by spoon.

• Encourage the mother and her companion to ask any questions they may have.

5) **Document pertinent information on charts.**

• Write the findings from the breastfeeding assessment in the client record.

• Note the time of the initial feeding and subsequent feedings on the client record to facilitate monitoring of mother and baby during their stay.

6) **Before discharge from the maternity home:**

• Assess mother’s breasts for any cracking or sores on the nipples, inverted nipples or any swelling or redness that might indicate early mastitis or other problems that would interfere with breastfeeding.

• Observe breastfeeding for at least 5 minutes and offer feedback as appropriate. (See observation form, Figure 12)

• Give the mother and her companion(s) information on how to tell if the baby is being satisfied by breastfeeding and receiving adequate nutrition through breastfeeding. (See information in the Newborn Care and Resuscitation Protocols)

• Mention potential breastfeeding problems that might occur including: engorgement, tender or sore breasts, refusal to breastfeed, ineffective attachment, inadequate intake, not producing enough milk, maternal or infant illness, blocked duct and mastitis. Encourage the mother to seek help and treatment from the health care center if these occur. (For additional information, see Management of Breastfeeding Problems, Chapter 8).

• Review notes in the client record to ensure that all issues/concerns have been adequately resolved.

• Encourage the mother and her companion(s) to ask any questions they may have.
**Figure 12: Breastfeeding Observation Form**

Mother’s Name: ______________________________  Date: ________________________

Baby’s Name: _______________________________  Age of Baby: __________________

**Instructions:** Use this form to facilitate breastfeeding observations. Put a check in the box to indicate whether the item was observed. 
*Note: Indicators in [brackets] refer only to observations of newborns.*

<table>
<thead>
<tr>
<th>Signs that Breastfeeding is Going Well</th>
<th>Signs of Possible Difficulty</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Body Position</strong></td>
<td></td>
</tr>
<tr>
<td>Mother relaxed and comfortable</td>
<td>Shoulders tense, leans over baby</td>
</tr>
<tr>
<td>Baby’s body close, facing breast</td>
<td>Baby’s body away from mother’s</td>
</tr>
<tr>
<td>Baby’s head and body straight</td>
<td>Baby’s neck twisted</td>
</tr>
<tr>
<td>Baby’s chin touching breast</td>
<td>Baby’s chin not touching breast</td>
</tr>
<tr>
<td>[Baby’s bottom supported]</td>
<td>[Only shoulder or head supported]</td>
</tr>
<tr>
<td><strong>Responses</strong></td>
<td></td>
</tr>
<tr>
<td>Baby reaches for breast if hungry</td>
<td>No response to breast</td>
</tr>
<tr>
<td>[Baby roots for breast]</td>
<td>[No rooting observed]</td>
</tr>
<tr>
<td>Baby explores breast with tongue</td>
<td>Baby not interested in breast</td>
</tr>
<tr>
<td>Baby calm and alert at breast</td>
<td>Baby restless or crying</td>
</tr>
<tr>
<td>Baby stays attached to breast</td>
<td>Baby slips off breast</td>
</tr>
<tr>
<td>Signs of milk ejection [leaking, after pains]</td>
<td>No signs of milk ejection</td>
</tr>
<tr>
<td><strong>Emotional Bonding</strong></td>
<td></td>
</tr>
<tr>
<td>Secure, confident hold</td>
<td>Nervous or limp hold</td>
</tr>
<tr>
<td>Face-to-face attention from mother</td>
<td>No mother/baby eye contact</td>
</tr>
<tr>
<td>Much touching by mother</td>
<td>Little touching</td>
</tr>
<tr>
<td>Mother interacting with the baby</td>
<td>Shaking or poking baby</td>
</tr>
<tr>
<td><strong>Anatomy</strong></td>
<td></td>
</tr>
<tr>
<td>Breasts soft after feed</td>
<td>Breasts engorged</td>
</tr>
<tr>
<td>Nipples stand out, protractile</td>
<td>Nipples flat or inverted</td>
</tr>
<tr>
<td>Skin appears healthy</td>
<td>Fissures or redness of skin</td>
</tr>
<tr>
<td>Breasts look round during feed</td>
<td>Breast looks stretched or pulled</td>
</tr>
<tr>
<td><strong>Suckling</strong></td>
<td></td>
</tr>
<tr>
<td>Mouth wide open</td>
<td>Mouth not wide open, points forward</td>
</tr>
<tr>
<td>Lower lip turned outwards</td>
<td>Lower lip turned in</td>
</tr>
<tr>
<td>Tongue cupped around breast</td>
<td>Baby’s tongue not seen</td>
</tr>
<tr>
<td>Cheeks round</td>
<td>Cheeks tense or pulled in</td>
</tr>
<tr>
<td>More areola above baby’s mouth</td>
<td>More areola below the baby’s mouth</td>
</tr>
<tr>
<td>Slow deep sucks, bursts with pauses</td>
<td>Rapid sucks only</td>
</tr>
<tr>
<td>Can see or hear swallowing</td>
<td>Can hear smacking or clicking</td>
</tr>
<tr>
<td>Baby releases breast</td>
<td>Mother takes baby off breast without releasing suction</td>
</tr>
<tr>
<td>Suckles at both breasts</td>
<td></td>
</tr>
<tr>
<td><strong>Time spent suckling</strong></td>
<td></td>
</tr>
<tr>
<td>Baby suckled for ~ _____ total minutes</td>
<td>Baby feeds ~ ______ times per day/night</td>
</tr>
</tbody>
</table>

Notes:

*Adapted from: WHO/UNICEF, 19*
Chapter 5: Health Education and Counseling for Postpartum Women

“Health promotion supports personal and social development through providing information, education for health and enhancing life skills.”


Introduction and Overview

New mothers, especially first time mothers, need information, hands-on coaching and support to ensure the best outcomes for themselves and their new infants. This chapter describes the health education and counseling that women, their partners and/or companion(s) who accompany them should receive prior to discharge from the maternity home. Information specific to the newborn can be found in the Newborn Care and Resuscitation protocols. Although the information about care of postpartum woman and baby are separate, WHO encourages providers to care for the woman and the newborn at the same time. The information in this chapter should be reviewed with women when they are re-assessed at the 3rd day postpartum visit and, as appropriate, at subsequent visits with health-care providers.

Elements of Self-Care

1) Educate and counsel about general self-care and hygiene and advise the mother to:

- Bathe or shower daily.
- Establish/maintain good bowel and bladder habits. Empty bladder frequently so that the uterus is not prevented from descending into the pelvis and contracting. Eating right and drinking plenty of fluid can help prevent constipation.
- Keep the perineum clean and dry. Clean the perineum with mild soap and a cloth soaked in water from front to back.
- Change sanitary pads at least each time she uses the bathroom, and more often if needed. Use only clean pads/clothes and ensure that the pads/clothes do not rub/irritate the genital area.
- Follow the guidelines (see boxes, next page) for episiotomy care and breast care. (Note: Copies of the guidelines may be given to clients).
- Follow guidelines for expressing breast milk (see Figure 13) if she needs to be away from her baby or her breasts become engorged or infected. Provide instruction as needed. As appropriate, also provide guidance about other potential breastfeeding problems, (See Chapter 8).
- Participate in the follow-up home visit at the 3rd day after delivery. And, go to the primary health care facility for routine visits, at six weeks and six months postpartum and any other time there are questions or concerns.
- Return to the facility or go to the hospital immediately if any danger signs appear, (See Figure 16).
**Episiotomy Care Guidelines**

- Keep stitches clean and dry.
- Do not rub the stitches.
- Do not insert anything into the vagina.
- Take a warm bath to relieve pain.
- Do Kegel exercises to improve muscle tone.
- Visit a health provider in the event of any signs of swelling or infection.
- Only engage in sexual intercourse when the woman is ready and feels comfortable.

**Breast Care Guidelines**

- Wear a good, supportive bra.
- Ensure that infant is correctly attached to the nipple during feedings.
- Clean your breasts with warm water once per day. Do not apply soap on nipples.
- Spread a little colostrum/milk on the nipples to keep them soft and prevent cracking. Do not use ointments, powders, sprays or other “treatments”.
- Air dry nipples after each feeding.
- Seek medical care if fever develops or the breasts feel warm or very tender.
- If *engorgement* develops and the woman is breastfeeding:
  - If the baby is *not able to suckle*, encourage the woman to express milk by hand or with a pump.
  - If the baby is *able to suckle*:
    - encourage the woman to breastfeed more frequently, using both breasts at each feeding,
    - show the woman how to hold the baby and help it attach,
    - use some of the relief measures described below *before feeding*:
      - apply warm compresses to the breasts just before breast-feeding, or encourage the woman to take a warm shower’
      - massage the woman’s neck and back’
      - have the woman express some milk manually prior to breastfeeding and wet the nipple area to help the baby latch on properly and easily;
    - use some of the relief measures described below *after feeding*:
      - support breasts with a binder or tight brassiere,
      - apply cold compress to the breasts between feedings to reduce swelling and pain,
      - give Paracetamol 500 mg by mouth as needed.
    - Follow up 3 days after initiating management to ensure response.
Breast Care Guidelines  

If engorgement develops and the woman is not breastfeeding:

- support breasts with a binder or tight brassiere
- apply cold compress to the breasts to reduce swelling and pain
- avoid massaging or applying heat to the breasts
- avoid stimulating the breasts and nipples
- give Paracetamol 500 mg by mouth as needed

Follow up 3 days after initiating management to ensure response.

---

Figure 13: Instructions for Expressing Breast Milk

- Clean containers for collecting and storing milk.
- Wash hands thoroughly.
- Sit or stand comfortably and hold container under breast.
- Put first finger and thumb on either side of the areola, behind the nipple.
- Press slightly inwards toward the breast between the finger and the thumb.
- Express one breast until the milk flow slows. Then express the other breast.
- Continue alternating breasts for at least 20 – 30 minutes.
- If milk does not flow well:
  - apply warm compresses,
  - have someone massage her back and neck before expressing,
  - massage breast and nipple.
- Store expressed milk in a covered container in a cool place.
- To maintain lactation, express milk at least 8 times in 24 hours. Express at least as much or more than the baby would take every 3 hours.

Position thumb above and fingers below.

Press nipple and areola between finger and thumb.

Press from sides to empty all segments.

(WHO/UNICEF, 1993)
2) Educate and counsel the mother about proper diet and sufficient rest and advise the woman to:

- Drink 8–10 glasses of fluids, such as, water, milk, juice, soup etc., every day;
- Eat food that contains protein such as meat, fish, chicken, eggs, nuts, beans and rice, peas and corn etc.;
- Eat lots of fruits and vegetables, especially dark green leafy vegetables or orange and yellow fruit and vegetables, to replenish vitamin A and iron;
- Take supplemental iron and folate tablets until six weeks after delivery or as long as breastfeeding is maintained; the recommended dose is elemental iron, 60 mg and folic acid, 400 µg; and if hemoglobin <9.5, double the dose of iron to correct the anemia;
- Rest whenever possible and return to work activities gradually;
- Enlist the assistance of other family members for cleaning, cooking and washing;
- Concentrate her energy on taking care of herself and the infant.

3) Educate and counsel the mother and her companion(s) about normal changes to expect following childbirth:

Explain that the following changes happen naturally, usually by three to four weeks after delivery:

- The uterus, womb, gradually gets smaller and firmer and the fundus descends, uterine involution.
- The cervix, the opening of the uterus, closes.
- The vagina gradually decreases in size over the next 3 weeks but will remain somewhat larger than before delivery.
- The perineal tissues, between the anus and the urethral, opening that were stretched, torn, or cut to allow for childbirth return to their normal size and by 6 weeks lacerations will heal.
- Lochia, the blood and mucus discharged from the vagina, changes over time. Most of the blood is lost during the first hour after delivery; it then slows down over the next 9 hours becoming more like a normal period. For the first 2–4 days, the discharge will be dark red or brownish, will have sort of a fleshy odor and require a pad change every 2–4 hours. Eventually the discharge becomes pinkish-brown and has a musty, stale odor – this will last about 7 days to 3 weeks. In the final stage of healing, the discharge becomes whitish-yellow and may last up to 6 weeks after the birth. Lochia should never have an unpleasant odor – a foul odor may be a sign of infection.

**Note:** Breastfeeding causes the changes above to occur more quickly.

Some other normal occurrences seen during this time include:

- **Breastmilk Production** - Breastmilk is produced when the infant’s suckling triggers a response in the mother’s body. Eating a variety of foods and drinking plenty of water encourages continued production of good breast milk.
- **Hormonal changes** – hormonal changes that take place during pregnancy are usually reversed with 2 months after delivery. Regular breastfeeding, without the use of any supplements, slows this process, and reduces the chances of a pregnancy, (See LAM, Figure 15). The rapidly changing hormone levels can also contribute to cases of postpartum blues and depression. (See below)

4) **Educate and counsel about postpartum blues and depression:**

It is important to provide education to every woman about postpartum blues and postpartum depression before discharge. Postpartum depression can be life threatening for the mother and infant if not properly recognized and treated.

- Inform the woman that *postpartum blues*:
  - are very common and occur in the first 2-5 days after delivery. Most women feel sad, overwhelmed and exhausted;
  - occur during this time because a woman is going through rapid changes as she adjusts to being a new mother and as her body experiences hormonal changes after delivery;
  - can be alleviated by getting as much sleep and rest as possible and obtaining extra care and support from family members.

- Inform the woman that *postpartum depression*:
  - is much more serious than the “blues” and often begins a week or more after delivery. Women who have previously been depressed, or who had a difficult delivery or stillbirth, are at increased risk;
  - may cause the mother to cry continuously or be angry, be unable to sleep or eat well, and not be interested in caring for her infant;
  - requires treatment by a medical professional as soon as possible. Appropriate antidepressant medication is often necessary for at least six months. Certain antidepressants such as Sertraline and other SSRIs are safe for the mother to take while breastfeeding;

- Refer women showing signs or symptoms of postpartum persistent blues or depression for follow-up and treatment.

5) **Inform woman about the importance of postpartum exercises and teach her how to do them:**

- Encourage the mother to get out of bed and walk soon after delivery.

- Teach her postpartum exercises, including Kegel exercises, to strengthen abdominal and pelvic muscles, and advise her to repeat them as recommended on the instruction sheets, (See Figure 14). **Note:** When possible, give women copies of the instruction sheets.
Figure 14: Postpartum Exercises

Instruct women to begin this series of re-toning exercises before they leave the maternity home. As described below, women should gradually increase effort by adding one new exercise to their daily program each day until they are doing all 10 exercises. Instruct them to repeat the motions for each exercise four times and do the exercises twice each day, morning and evening, for one month or more.

**Day 1**: Breathe deeply, expanding your abdomen. Hiss as you slowly exhale, then forcibly draw in your abdominal muscles.

**Day 2**: Lying on your back with your legs slightly parted, place your arms at right angles to your body and slowly raise them, keeping your elbows stiff. When your hands touch, lower your arms gradually.

**Day 3**: Lying with your arms at your sides, draw your knees up slightly, arch your back. Relax and lower.

**Day 4**: Lying with your knees and hips flexed, tilt your pelvis inward and tightly contract your buttocks as you lift your head. Relax and lower.

**Day 5**: Lying with your legs straight, raise your head and left knee slightly, then reach for (but do not touch) your left knee with your right hand. Repeat, using your right knee and left hand.

**Day 6**: Lying on your back, slowly flex one knee and one thigh towards the abdomen; lower your foot towards your buttock, then straighten and lower your leg.
**Day 7:** Lying on your back, toes pointed and knees straight, raise one leg and then the other as high as possible, using your abdominal muscles but not your hands to lower your legs slowly.

**Day 8:** Leaning on your elbows and knees, keep forearms and lower legs together. Hump your back upwards, strongly contracting your buttocks and drawing in your abdomen. Then relax and breathe deeply.

**Day 9:** Same as Day 7, but lift both legs at once.

**Day 10:** Lying on your back with your arms clasped behind your head, sit up and lie back slowly. At first, you may have to hook your feet under furniture.

(Adapted from: Benson, 1974)
Kegel Exercises

Kegel exercises are designed to make the pelvic floor muscles stronger to improve bladder control and prevent leaking of urine and to discourage uterine prolapse. Instruct women to begin doing Kegel exercises before they leave the maternity home.

1. Find the correct muscles. Try to stop the flow of urine while you are sitting on the toilet. If you can do this, you are using the right muscles. **Note:** Do not perform these exercises routinely while urinating as it can cause bladder problems.

2. Don’t squeeze other muscles at the same time. Don’t tighten your legs or stomach and don’t hold your breath.

3. Practice pulling in the pelvic muscles and holding for a count of three. Then relax for a count of three.

4. Gradually increase the number of repetitions until you can do 10 – 15 in a row. Your goal is to do 10 – 15 repetitions at least three times per day. For best results, alternate your position between lying, sitting and standing. Most women notice an improvement in bladder control after 3 – 6 weeks.

6) **Advise and counsel the woman about how to manage potential domestic violence situations. Some specific things you can do:**

- Remind the woman that pregnancy and childbirth are major life events that can bring great joy to a household but sometimes bring additional stress to the domestic situation. Some couples and families are able to cope with the added burdens while others find that they cannot.
- Encourage the woman to share any concerns that she may have about her safety or that of her newborn.
- Talk in private and ensure the woman that anything that she tells you will be held in confidence.
- Validate her experience by letting her know that she is not alone and that other women have similar experiences.
- Acknowledge the injustice in a friendly, gentle, non-judgmental manner and assure her that the abuse is not her fault.
- Assure her that help is available in the community should she decide that she needs it.
- Provide a referral to a health care center (or provider) that can assist women to plan for the future safety of herself and her child(ren).
- As necessary/required, document your findings in the client’s record.

**Note:** Women who are victims of violence are more likely to present with vague medical complaints than acute trauma. During your contact with clients, be attentive
to: vague complaints that have no obvious physical cause (i.e., sleep disturbances, depression), physical signs of injury that do not match the explanations provided, partners who are overly attentive and unwilling to leave their partner’s side, a history of suicide or suicidal thoughts, urinary tract infection or chronic irritable bowel syndrome.

7) Educate and counsel about informed choice, birth spacing/ contraceptive options and resuming sexual intercourse.

Give all clients and their partners information so that they can make an informed choice about birth spacing/contraception. Ideally, this information-sharing and decision-making process would start during antenatal visits, so that women and their partners can make an informed decision prior to delivery.

During post-delivery health education, providers should:

- Ask the woman whether she has the information that she needs to make an informed decision and/or whether she has already made a decision.
- Counsel about the importance of birth spacing/contraception. Explain to the woman that if she has sex after birth and she is not exclusively breastfeeding, she can become pregnant as soon as 28 days after delivery, even before the first menses.
- Ask about plans for having more children. Advise that waiting at least 2 – 3 years between pregnancies is healthier for the mother and baby. Spacing births at least two years apart can significantly reduce infant and child deaths and maternal mortality and morbidity.
- If needed, counsel woman and her partner about the contraceptive options appropriate during the postpartum period and while the woman is breastfeeding. These methods include:
  - Lactation Amenorrhea Method (LAM);
    **Note:** Since many women in Palestine choose to breastfeed, LAM can be a very effective method provided that it is used correctly. Be sure the woman understands the requirements for successful use.
  - IUD including postpartum and interval insertion;
  - Condoms and spermicides;
  - Progestogen-only methods (minipill and DepoProvera) which may be initiated immediately postpartum for non-breastfeeding women and six weeks postpartum for women who are breastfeeding;
  - Fertility Awareness-Based Methods:
    - Women who are breastfeeding are unlikely to produce detectable fertility signs during the first six months postpartum. Additionally, changing fertility symptoms after the first postpartum menses may be difficult to identify, leading to an increased risk of pregnancy.
    - If a woman is not breastfeeding, she can begin to rely on symptom-based methods after 4 weeks postpartum. Postpartum women interested in using fertility awareness methods should be offered other appropriate methods until it is possible for them to reliably detect changes in their fertility.

(See Figure 15 for more information).
**Note:** Pills containing estrogen should NOT be given during the first three weeks after delivery because of the increased risk of clots due to hypercoaguability. For mothers who breastfeed, this method should not be used during the first six months or until the infant is weaned.

- Discuss with the woman how physical and hormonal changes in her body may affect her relationship with her partner. Many women will have less sexual desire after childbirth for a time period because of fatigue, healing perineal lacerations or episiotomy, and less natural lubrication of the vagina during breastfeeding.

- Ensure that the woman and her partner are aware that in addition to preventing pregnancy, some contraceptive methods (abstinence and condoms), are also effective at preventing the transmission of RTIs.
Figure 15: Postpartum Contraceptive Methods

The Lactation Amenorrhea Method (LAM) is more than 90% effective in preventing pregnancy for up to six months postpartum or until the first menses but the woman must fully breastfeed (every 2-3 hours all day and night) and not supplement (with milk, cereal or other liquids). The woman must start to use another contraceptive method six months after delivery, or sooner if menses starts or infant supplemental feeds are given.

Intrauterine device (IUD): The Copper-T is the most common type of IUD. It is a very effective long-term method. The IUD is placed in the womb using an inserter. It can stay inside the womb for ten years.

Male condom: Thin rubber or plastic tube placed over an erect penis before sexual intercourse to collect semen. Also helps prevent transmission of sexually transmitted diseases including HIV.

Progestin-only pills: Taken by mouth, once per day at the same time.

Depo-Provera (progestin-only): Administered every three months by injection (150 mg).
8) Review danger signs for the mother and advise the woman and her family to go to the hospital immediately if they observe any of the danger signs for the woman:

<table>
<thead>
<tr>
<th>Figure 16: Danger Signs for the Woman*</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Signs of sepsis or shock – pale or cool skin, sweating, dizziness, fainting, confusion</td>
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<tr>
<td>• Fever more than 38 degrees Celsius</td>
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<tr>
<td>• Feeling extremely light-headed when moving from sitting/lying to standing</td>
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<tr>
<td>• Edema in the hands or face, severe headaches or blurry vision</td>
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<tr>
<td>• Cough, or difficulty breathing (rapid breathing = &gt;30 breaths per minute)</td>
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<tr>
<td>• Heavy or sudden increase in vaginal bleeding</td>
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<tr>
<td>• Seizures or loss of consciousness</td>
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<tr>
<td>• Vomiting</td>
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<tr>
<td>• Severe abdominal pain</td>
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<tr>
<td>• Excessive tiredness and/or very pale conjunctiva and mucous membranes</td>
</tr>
<tr>
<td>• Calf pain, tenderness or swelling</td>
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<tr>
<td>• Sleeplessness, apathy, verbalization/behavior that indicates the woman may hurt the baby or herself, or other symptoms of depression</td>
</tr>
<tr>
<td>• Problems with urination – burning, frequency, blood in the urine, severe back pain</td>
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<tr>
<td>• Vaginal discharge with an unpleasant odor</td>
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<tr>
<td>• Swelling, pain or bleeding from episiotomy or laceration site on perineum</td>
</tr>
<tr>
<td>• Tenderness, redness and swelling in the breasts</td>
</tr>
<tr>
<td>• Continuous leakage of urine or stool</td>
</tr>
<tr>
<td>• Breastfeeding problems</td>
</tr>
</tbody>
</table>

* Adapted from Figure 1, Postpartum Danger Signs.

9) Discuss how to prepare for an emergency. Create a plan for how to respond if danger signs occur:

• How to contact a doctor, midwife, or nurse.
• Where to go if danger signs develop.
• What transportation is available for travel.
• How to organize family and community support (emotional, physical and financial).
Chapter 6: Care of the Woman during the Third Day Home Visit

“In order to effectively reach most women, postpartum care needs to be based on home visiting.” – Carlough, 1999

Introduction and Overview

In the first week after giving birth, it is important to assess the condition of the woman and baby and give appropriate advice and counseling. Most complications occur during the first week, so all postpartum women and newborns will benefit from this visit. This visit is especially important when this is the woman’s first child. The purpose of the third day postpartum visit to a postpartum woman is to:

- assess the physical and emotional health of the postpartum woman and monitor changes,
- identify any signs or symptoms of complications and decide how to appropriately manage them, and
- provide health education and support.

Conducting the visit in the home is important because women are more relaxed in the home environment and it is easier for the provider to observe how they care for themselves and their babies. The one-week visit also helps connect the family with local health-care services for ongoing maternal and child care, contraception/birth spacing and emergency care. It is assumed that the one-week visit for the postpartum woman and newborn will be conducted at the same time, by the same health worker. (Consult the Newborn Care and Resuscitation protocols for information on the newborn assessment during the third day visit). A guide/checklist to be used for the maternal assessment is included at the end of this chapter.

Elements of Care

Refer to the guide on page 35 for detailed steps/tasks related to providing care.

1. Prepare for the home visit:
   - Review client records.
   - Schedule appointment.
   - Prepare the necessary equipment.
   - Announce your arrival in a culturally acceptable manner.
   - Explain the purpose of the visit.
   - Listen to the concerns of the woman and her family.
   - Assure confidentiality and privacy.
2. Review woman’s history and client care record:
   - Verify accuracy of the personal information.
   - Ask the woman to describe how she is feeling and if she is experiencing any danger signs.
   - Ask the woman about her pregnancy and delivery.
   - Ask the woman about illness/treatments.
   - Ask the woman about supplements/medications.
   - Ask the woman about breastfeeding.
   - Ask the woman about birth spacing/contraception.
   - Ask the woman about her social support.

3. Conduct a physical examination:
   - Create a private space.
   - Tell the woman what to expect and encourage her to ask questions.
   - Prepare the space.
   - Ensure that the woman is comfortable.
   - Observe her general appearance.
   - Wash hands thoroughly.
   - Check the woman for pallor.
   - Take the woman’s temperature, pulse and blood pressure.
   - Examine her breasts/nipples.
   - Examine her abdomen.
   - Examine her legs.
   - Put on gloves.
   - Examine her perineum and genitalia, if necessary.
   - Observe lochia.
   - Remove gloves and dispose of them properly.
   - Wash hands thoroughly.
   - Help the woman to sit up.
   - Summarize your findings and recommendations.
   - Ask the woman if she has any additional questions.
   - Record all relevant findings.
4. Observe woman breastfeeding the newborn:
   - Ask woman to put baby to breast to assess breastfeeding technique.
   - Observe for at least five minutes.
   - Look for good body positioning.
   - Look for appropriate responses.
   - Look for signs of emotional bonding.
   - Look for signs of appropriate suckling.
   - Ask the mother if she has any questions or concerns about breastfeeding.
   - Provide breastfeeding counseling and/or coaching if necessary.
   - Encourage the woman to continue exclusive breastfeeding on demand.
   - Advise the woman to seek help from a breastfeeding specialist if she has any difficulty.
   - Record relevant breastfeeding-related information.

5. Analyze findings and provide care and treatment including referrals, counseling, and education:
   - Analyze the findings and decide on a plan of action.
   - Provide treatment and dispense medications.
   - Refer for emergency and non-emergency treatment.
   - Provide counseling about danger signs and review emergency plan.
   - Provide counseling and general information.
   - Provide education/instruction.

6. Conclude the home visit and make arrangements for subsequent follow-up:
   - Ask the mother if she has any questions or concerns and address them.
   - Provide copy(ies) of non-emergency referral forms including specific written instructions.
   - Encourage the woman to go to the health care center for follow-up visits at 6 weeks and 6 months or whenever she has questions or concerns.
   - Record all relevant information in the client’s record.
   - Write a summary of findings and recommendations on the client’s home copy of her medical records.
   - Return the client’s records, complete with your notes and recommendations to their permanent location.
The following is a list of **Danger signs** that might be detected during the third day postpartum visit. If any of these signs are detected, the provider should perform a rapid initial assessment, stabilize the woman, and refer her to the most appropriate health care facility immediately. *(Note: Same as Figure 1 page 6)*

- Any of the rapid initial assessment danger signs or symptoms:
  - difficulty breathing ,
  - cyanosis,
  - pallor, cool or clammy skin,
  - severe headaches,
  - blurry vision,
  - vomiting ,
  - high fever (higher than 38 C°),
  - abdominal pain,
  - vaginal bleeding,
  - convulsions,
  - fainting,
  - disorientation,
  - diastolic BP > 90 mm Hg , systolic BP < 90 mm Hg ,
  - pulse > 110 b pm;
- Signs of anemia (conjunctiva or palmer pallor, respiratory rate>30, poor work/exercises tolerance, Hgb<9.5);
- Signs of breast abscess such as redness, swelling, tenderness or fever;
- Vaginal bleeding heavier than a period, continuous slow bleeding, sudden bleeding or increased vaginal bleeding within the first 24 hours after childbirth;
- Any discharge that is foul-smelling;
- Fecal incontinence, fecal matter in the vagina , severe constipation, or pain when defecating;
- Urinary incontinence, hematuria, and signs/symptoms of UTI;
- Urinary retention, if repeated;
- Signs of thrombophlebitis: elevated temperature, tachycardia, calf tenderness and heat, leg pain;
- Unusually tender perineum with bloody, purulent or serous discharge and vaginal hematoma;
- Feels especially sad or unable to care for herself or the baby.
Guide for Conducting the Third Day Home Visit with Postpartum Women

**Instructions:** Use this guide to help organize and conduct the home visit. As you complete each step/task, note your findings/observations and the woman’s responses in the columns labeled Normal, Abnormal/Problems and Health Education Needed. Make notes that will facilitate the analysis of your findings and decisions about next steps. When possible, streamline the visit by combing questions and observations included in this guide with similar inquires/steps/tasks in the newborn guide.

<table>
<thead>
<tr>
<th>STEP/TASK</th>
<th>Normal</th>
<th>Abnormal/Problems</th>
<th>Health Education Needed</th>
</tr>
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<tbody>
<tr>
<td><strong>Preparations for Visit</strong></td>
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<tr>
<td>1. <strong>Review the client’s records</strong> from the maternity home files. Pay specific attention to:</td>
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<tr>
<td>• Antenatal care received during recent pregnancy.</td>
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<tr>
<td>• Date, time and type of childbirth (normal vaginal, instrument, or surgical).</td>
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<tr>
<td>• Any maternal complications (prolonged rupture of membranes, prolonged labor, pre-eclampsia/eclampsia, bleeding, retained placenta, fever and/or treatment with antibiotics). <strong>Note: Women who had complications during pregnancy, delivery or immediately after delivery are more likely to have problems during the postpartum period.</strong></td>
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<td>• Family situation: birth interval, number of children (living and/or dead), family support and finances.</td>
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<tr>
<td>• Immediate postpartum care and any provider concerns before discharge from maternity home.</td>
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<tr>
<td>2. <strong>Schedule appointment</strong> with the woman and verify location of residence.</td>
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</tbody>
</table>
### STEP/TASK

<table>
<thead>
<tr>
<th>Activity</th>
<th>Normal</th>
<th>Abnormal/Problems</th>
<th>Health Education Needed</th>
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</thead>
<tbody>
<tr>
<td>3. Prepare the necessary equipment.</td>
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<tr>
<td>copy of the client’s records</td>
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<td>stethoscope</td>
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<td>blood pressure cuff</td>
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<td>oral thermometer</td>
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<tr>
<td>flash light/torch (for examining the perineum)</td>
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<tr>
<td>clean or HLD examination gloves</td>
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<tr>
<td>sterile cotton and gauze (for examining/cleaning sutures)</td>
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<td>clean clothes and towels</td>
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<tr>
<td>vitamin A and iron/folate tablets</td>
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<tr>
<td>reporting forms and/or paper for recording findings/observations</td>
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<tr>
<td>health education materials</td>
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<tr>
<td>a plastic bag for waste</td>
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</table>

### Starting the visit

1. **Announce your arrival** in a culturally acceptable manner, **greet** the woman and her family respectfully and **introduce** yourself.

2. **Explain the purpose of the visit** to the woman and her family and encourage her/them to ask questions.

3. **Listen** to what the woman (and her family members) say.

4. Ensure the woman that your conversation and findings will be kept **confidential**.  
   *Note: Request permission for release of information when referring.*

5. Ask the woman if there is some place **private** where you can conduct the rest of the interview and physical examination.

### History (Ask/Listen)

1. Check the woman’s client record and as necessary, ask questions to verify that **personal information** in the record is correct:
   - name(s), address
   - age, parity, number of children
<table>
<thead>
<tr>
<th>STEP/TASK</th>
<th>Normal</th>
<th>Abnormal/Problems</th>
<th>Health Education Needed</th>
</tr>
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<tbody>
<tr>
<td>2. Ask the woman to describe how she is <strong>feeling</strong> and record her responses. Probe for specific responses regarding possible complications:</td>
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<tr>
<td>• pain, swelling or discharge from perineum</td>
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<tr>
<td>• problems with passing urine or stools (leaking, burning, constipation)</td>
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<td>• vaginal bleeding (excessive amount, clots, foul-smelling lochia)</td>
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<td>• abdominal pain</td>
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<tr>
<td>• fever</td>
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<tr>
<td>• breathless or coughing</td>
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<tr>
<td>• breasts (red, tender, swollen, sore/cracked nipples)</td>
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<tr>
<td>• problems eating; inadequate fluid intake; poor sleep patterns; inappropriate activity level</td>
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<td>• feeling blue/depressed; lack of confidence; ill feelings toward the baby</td>
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<tr>
<td>• other problems (See list of Emergency Signs, Figure 1.)</td>
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<tr>
<td>3. Check the woman’s client record and/or ask about her <strong>pregnancy and delivery</strong> and record her responses:</td>
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<tr>
<td>• place of birth and birth attendant</td>
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<tr>
<td>• pregnancy complications</td>
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<tr>
<td>• fever during or after delivery</td>
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<tr>
<td>• heavy bleeding during or after delivery</td>
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<tr>
<td>• convulsions during or after delivery</td>
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<tr>
<td>4. Check the woman’s client record or ask about <strong>illness/treatments</strong>:</td>
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<tr>
<td>• STI screening (RPR test)</td>
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<td>• HIV status</td>
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<tr>
<td>• TB treatment</td>
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<tr>
<td>• hookworm treatment</td>
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<td>5. Check the woman’s client record or ask about <strong>supplements/medications</strong>:</td>
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<tr>
<td>• iron-folate</td>
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<tr>
<td>• vitamin A</td>
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<tr>
<td>• tetanus immunization (fully immunized or dose needed)</td>
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<tr>
<td>• antibiotics, other medications she may be taking</td>
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<tr>
<td>6. Ask the woman about <strong>breastfeeding</strong> and record her responses:</td>
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<tr>
<td>• frequency of feeds (day and night)</td>
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<tr>
<td>• baby’s satisfaction with feedings</td>
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<tr>
<td>• attachment and sucking  <em>Note: Observe later in visit.</em></td>
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<tr>
<td>7. Ask the woman about <strong>birth spacing</strong> and record her responses:</td>
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<tr>
<td>• intentions regarding more children, getting pregnant in the future and contraception</td>
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<tr>
<td>• methods used previously</td>
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<tr>
<td>• method preference, accessibility and acceptability</td>
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<tr>
<td>STEP/TASK</td>
<td>Normal</td>
<td>Abnormal/Problems</td>
<td>Health Education Needed</td>
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</tbody>
</table>
| 8. Ask the woman to describe her **social support** and record her responses:  
- main support persons (e.g. husband, mother, mother-in-law sister, older children)  
- availability of money for food and baby supplies  
- return to work; assistance with child care and household chores  
- troubles with relationships; frightened or threatened by anyone; able to freely visit family and friends;  
*Note: observe for signs of possible abuse of her or her children.* |  |  |  |

**Physical Examination (Observe/Touch)**

1. Create a **private space** for conducting the physical examination (if necessary, move to another room, close door, curtains, etc).
2. Tell the woman what to **expect** during the examination and encourage her to **ask questions** and **describe what you are doing/finding** as you conduct the examination.
3. **Prepare the space** (arrange sheet/cloth, position equipment).
4. Ensure that the woman is **comfortable** prior to beginning the exam. (e.g., verify that she has emptied her bladder, arrange pillows/sheets as needed).
5. **Observe general appearance** (pale, tired, strange behavior, unusual gait or posture, worried/pained facial expression, unclean/unkempt, bruised skin).
6. **Wash hands** thoroughly with soap and water and dry with clean, dry cloth or air dry.
7. Check the woman’s conjunctiva, tongue, nailbeds, and palms for **pallor**.
8. Take the woman’s **temperature, pulse and blood pressure** and record findings.
9. Listen to the woman’s **heart and lungs** with a stethoscope.
10. **Examine breasts/nipples**:
- breasts (engorged, masses, tenderness, redness, enlarged lymph nodes)
- nipples (cracked/sore, inverted, abnormal discharge)
11. **Examine abdomen**:
- firmness and roundness of uterus
- fundal height (3 – 4 fingerbreadths below the umbilicus at one week postpartum)
- tenderness (lower abdomen)
- degree of separation of abdominal muscles
<table>
<thead>
<tr>
<th>STEP/TASK</th>
<th>Normal</th>
<th>Abnormal/Problems</th>
<th>Health Education Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>12. <strong>Examine legs:</strong></td>
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<tr>
<td>• localized pain, hot spots (warm to the touch)</td>
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<tr>
<td>• redness, tenderness or swelling</td>
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<tr>
<td>• varicose veins</td>
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<tr>
<td>13. Put high level-disinfected or new examination <strong>gloves</strong> on both hands.</td>
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<tr>
<td>14. Examine <strong>perineum and genitalia:</strong></td>
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<tr>
<td>• tears, bruising, swelling</td>
<td></td>
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<tr>
<td>• signs of healing around sutured incisions/lacerations</td>
<td></td>
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<td></td>
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<tr>
<td>• tenderness</td>
<td></td>
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</tr>
<tr>
<td>• pus or foul smelling discharge</td>
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<tr>
<td>15. Observe <strong>lochia:</strong></td>
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<tr>
<td>• color</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>• odor</td>
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<td></td>
</tr>
<tr>
<td>• amount</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• consistency</td>
<td></td>
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<tr>
<td>16. <strong>Remove gloves</strong> by turning them inside out and dispose** of them in the waste bag. Dispose of waste bag at health facility.</td>
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<tr>
<td>17. <strong>Wash hands</strong> thoroughly with soap and water and dry with clean, dry cloth or air dry.</td>
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<tr>
<td>18. <strong>Help the woman</strong> to sit up and adjust her clothes (as needed).</td>
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<tr>
<td>19. <strong>Summarize your findings and recommendations</strong> from the physical evaluation using language that is easy for the woman to understand.</td>
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<tr>
<td>20. Ask the woman if she has any <strong>additional questions</strong>.</td>
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<tr>
<td>21. <strong>Record all relevant findings</strong> from the physical examination in the client’s record.</td>
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</tbody>
</table>

**Observe Woman Breastfeeding the Newborn**

<table>
<thead>
<tr>
<th>STEP/TASK</th>
<th>Normal</th>
<th>Abnormal/Problems</th>
<th>Health Education Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Ask woman to <strong>put baby to breast</strong> to assess technique (if baby has not fed in the last hour).</td>
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<tr>
<td>2. Observe for at least <strong>five minutes</strong>.</td>
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<tr>
<td>3. Look for good <strong>body positioning:</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>• mother relaxed and comfortable</td>
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<tr>
<td>• baby’s body close, facing the breast with nose opposite nipple</td>
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<tr>
<td>• baby’s head and body straight</td>
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</tr>
<tr>
<td>• baby’s chin touching breast</td>
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<td></td>
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<tr>
<td>• baby’s bottom supported</td>
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<td></td>
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<tr>
<td>STEP/TASK</td>
<td>Normal</td>
<td>Abnormal/Problems</td>
<td>Health Education Needed</td>
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<tr>
<td>4. Look for appropriate responses:</td>
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<tr>
<td>• baby reaches for breast if hungry</td>
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<tr>
<td>• baby roots for breast</td>
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<tr>
<td>• baby explores breast with tongue</td>
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<tr>
<td>• baby calm and alert at breast</td>
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<tr>
<td>• baby stays attached to breast</td>
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<tr>
<td>• signs of milk ejection (leaking, after pains)</td>
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<tr>
<td>5. Look for signs of emotional bonding:</td>
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<tr>
<td>• secure, confident hold</td>
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<td></td>
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</tr>
<tr>
<td>• face-to-face attention from mother</td>
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<td></td>
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<tr>
<td>• much touching by mother</td>
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<td></td>
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<tr>
<td>• mother interacting with the baby</td>
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<tr>
<td>6. Look for signs of appropriate suckling:</td>
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<tr>
<td>• mouth wide open, lower lip turned outwards, cheeks round</td>
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<tr>
<td>• tongue cupped around breast, more areola above baby’s mouth</td>
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<tr>
<td>• slow deep sucks, bursts with pauses</td>
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<tr>
<td>• can see or hear swallowing</td>
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<tr>
<td>• baby releases breast; mother releases suction with finger</td>
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<tr>
<td>• baby feeds from both breasts</td>
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<tr>
<td>7. Ask the woman if she has any questions or concerns related to breastfeeding.</td>
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<tr>
<td>8. Provide breastfeeding counseling and/or coaching if necessary, (based on observations or questions from the woman) about good positioning, opportunities for emotional bonding, effective sucking, etc.</td>
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<tr>
<td>9. Encourage the woman to continue exclusive breastfeeding on demand.</td>
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<tr>
<td>10. Advise the woman to seek help from a breastfeeding specialist if she has any difficulty with breastfeeding.</td>
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<tr>
<td>11. Record relevant breastfeeding-related information in the client’s record.</td>
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</tbody>
</table>

Analyze Findings/Provide Care and Treatment (Take Action)

<table>
<thead>
<tr>
<th>STEP/TASK</th>
<th>Normal</th>
<th>Abnormal/Problems</th>
<th>Health Education Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Analyze the findings and observations gathered during history taking, the physical exam and the breastfeeding observation and decide on a plan of action for care and treatment.</td>
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<tr>
<td>STEP/TASK</td>
<td>Normal</td>
<td>Abnormal/Problems</td>
<td>Health Education Needed</td>
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<tr>
<td>2. Provide treatment and dispense medications (as indicated):</td>
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<tr>
<td>• follow standard protocols for treatment of minor ailments</td>
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<tr>
<td>• ensure supply of iron-folate tablets (three month supply)</td>
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<tr>
<td>• administer a single dose of vitamin A (if not given at maternity home)</td>
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<tr>
<td>• immunizations, if available (otherwise refer to health care center)</td>
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<tr>
<td>3. Refer for treatment (as indicated):</td>
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<tr>
<td>• non-emergency cases – refer to health care center</td>
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<tr>
<td>• emergency cases – stabilize according to emergency protocols and transport to back-up hospital (See MARAM Emergency Protocols.)</td>
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<tr>
<td>4. Provide counseling about danger signs in the postpartum period and what to do about them (See list of Danger Signs, Figure 16.) Note: Ensure that the woman has an up-to-date plan for dealing with emergencies.</td>
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<tr>
<td>5. Provide counseling and general information about:</td>
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<tr>
<td>• self-care and hygiene, especially episiotomy and breast care</td>
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<tr>
<td>• identifying and responding appropriately to breastfeeding problems</td>
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<tr>
<td>• proper nutrition and iron supplementation</td>
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<tr>
<td>• importance of adequate rest/sleep; avoiding over work</td>
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<tr>
<td>• normal changes to expect after pregnancy</td>
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<tr>
<td>• postpartum blues and depression</td>
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<tr>
<td>• postpartum exercises including Kegel exercises</td>
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<tr>
<td>• dealing with domestic violence/abuse situations</td>
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<tr>
<td>• birth spacing/contraception; safe sex to avoid sexually transmitted diseases</td>
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<tr>
<td>• developing (and revising as needed) an emergency plan</td>
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<tr>
<td>6. Provide education/instruction about:</td>
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<tr>
<td>• relief measures for breastfeeding problems (as indicated)</td>
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<tr>
<td>• preventive measures and treatments (if any)</td>
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<tr>
<td>• the importance of seeking prompt treatment at the referral facility</td>
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</table>
## Wrap-up Home Visit

1. **Ask the mother if she has any questions or concerns and address them.** *Note: If the woman has questions/concerns that you cannot adequately address, refer her to someone who can.*

2. **Provide copy(ies) of non-emergency referral forms including specific written instructions.** *Note: In the event that an emergency referral is required, stabilize the woman and assist her and her family to seek urgent care (carry out their emergency plan).*

3. **Encourage the woman to go to the health care center for follow-up visits at 6 weeks and 6 months or whenever she has questions/concerns about herself or the baby.**

4. **Record all relevant information** in the client’s record.

5. **Write a summary of findings and recommendations on the client’s home copy** of her medical records.

6. **Return the client’s records**, complete with your notes and recommendations, to the maternity home (or the primary health care center).

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Section 2

Clinical Procedures
1) Postpartum Hemorrhage

“Hemorrhage is the most common cause of maternal death [accounting for 25% of all maternal deaths.] If a mother’s life is to be saved, it generally requires treatment within two hours at a health facility able to provide blood transfusions and perform other clinical measures.” – WHO website, 2004

Introduction and Overview

Definition
Postpartum hemorrhage (PPH) is defined as more than 500 cc of bleeding in childbirth. PPH most commonly occurs in the first two hours after delivery (during the fourth stage of labor.) During this time, the woman should be monitored very closely for excessive bleeding. PPH can also occur later in the postpartum period. Regardless of when PPH occurs, it is a very serious complication that requires immediate treatment if the woman is to survive.

Prevention
Because PPH is the leading cause of maternal deaths worldwide, the prevention and rapid management of PPH is of utmost importance. Active management of the third stage of labor for all women at delivery must be practiced.

Active management of the third stage consists of:

- 10 units of oxytocin IM at antior shoulder and verifying that there is (are) no additional baby(ies),
- Early cut of umbilical cord,
- Controlled cord traction for placental delivery, and
- Uterine massage.

Management
The management of PPH includes a series of initial steps to be conducted immediately. If these initial steps do not control the hemorrhage, there are additional management steps to follow according to the four main causes of PPH. (See Table 2 and Figure 23):

1. Uterine atony, “Tone”;

2. Birth trauma to the genital tract, “Trauma”;

3. Retained products of conception, “Tissue”;

4. Coagulation problems, “Thrombin”.

All women in labour are at risk of experiencing a PPH. It is therefore imperative that you be attentive to the possibility of PPH with all women giving birth. Some factors may increase a woman’s risk of experiencing PPH, but their presence does not necessarily mean the woman must be referred.

### Antenatal factors that may be associated with PPH
- Pre-eclampsia
- Nulliparity
- Multiple gestation
- Large uterus:
  - Grand multipara (>6 previous births)
  - Polyhydramnios
  - Large baby
- Previous postpartum hemorrhage, retained placenta or placenta accreta
- Previous cesarean section
- Antepartum hemorrhage (ATH)

### Intrapartum factors that may be associated with PPH
- ROM >24 hours at the time of delivery
- Prolonged 2\textsuperscript{nd} stage
- Prolonged 3\textsuperscript{rd} stage or retained placenta (>30 minutes)
- Birth trauma – cervical, vaginal and perineal lacerations
- Third or fourth-degree episiotomy extension
- Instrumental delivery (vacuum delivery)
- Use of oxytocin in labor
- Severe anemia

### The most common causes of PPH (The Four “Ts”)

<table>
<thead>
<tr>
<th>Tone (70%) – atonic uterus</th>
<th>Thrombin (1%) – coagulation problems due to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trauma (20%)</td>
<td>severe anemia</td>
</tr>
<tr>
<td>– trauma to the birth canal during delivery</td>
<td>drug use (aspirin or ibuprofen in large doses) or alcohol use</td>
</tr>
<tr>
<td>– ruptured uterus</td>
<td>low platelets</td>
</tr>
<tr>
<td>– inverted uterus</td>
<td>pre-existing disease (e.g., ITP, hemophilia, Von Willebrand’s disease)</td>
</tr>
<tr>
<td>Tissue (10%)</td>
<td>disseminated intravascular coagulopathy (DIC), pre-eclampsia/ eclampsia, usually due to overwhelming sepsis, amniotic fluid embolism, or retention of a dead fetus for &gt;3 weeks</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Tissue (10%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>– retained placental tissue</td>
</tr>
<tr>
<td>– invasive placenta</td>
</tr>
</tbody>
</table>

Adapted from: ALSO, 2003.
PPH Management Steps

Provide initial management steps QUICKLY.

*Most women who die from postpartum hemorrhage die in the first four hours. Carry out these steps immediately upon recognizing PPH.*

**REMEMBER, DELAY MAY MEAN DEATH**

1. Shout for additional help when you identify PPH.
2. Make a rapid evaluation of the general condition of the woman including vital signs (pulse, blood pressure, respiration, temperature).
3. If shock is suspected, immediately begin treatment. Even if signs of shock are not present, keep 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.
4. Massage the uterus to expel blood and blood clots. Blood clots trapped in the uterus will inhibit effective uterine contractions.
5. Give oxytocin 10 units IM (if not given during active management).
6. Obtain blood tests, if possible. (Blood type and Rh factor, cross-match and coagulation profile if available).
7. Start an IV infusion and infuse IV fluid, insert 2 large bore canulas and start syntocinon infusion (20 units/liter at rate of 250 ml/hour).
8. Catheterize her bladder if she is not able to empty it.
9. Check to see if the placenta has been expelled and examine the placenta to be certain it is complete.
10. Examine the cervix, vagina and perineum for tears.
11. Diagnose the cause of PPH and manage according to the cause. (See Table 3, *Diagnosis of Vaginal Bleeding After Childbirth*).
12. Recheck BP and pulse every 15 minutes (or more often if indicated).
13. As soon as possible, contact the referral hospital and consider initiating referral. Do NOT postpone initial management for referral.
### Table 3: Diagnosis of Vaginal Bleeding After Childbirth

<table>
<thead>
<tr>
<th>Presenting Symptom and Other Symptoms and Signs Typically Present</th>
<th>Symptoms and Signs Sometimes Present</th>
<th>Probable Diagnosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Heavy bleeding</td>
<td>• Shock symptoms</td>
<td>Immediate PPH</td>
</tr>
<tr>
<td>• Uterus soft and not contracted</td>
<td></td>
<td>Atonic uterus</td>
</tr>
<tr>
<td>• Immediate PPH&lt;sup&gt;a&lt;/sup&gt;</td>
<td>• Complete placenta</td>
<td>Tears of cervix, vagina or perineum</td>
</tr>
<tr>
<td>• Placenta not delivered within 30 minutes after delivery</td>
<td>• Immediate PPH&lt;sup&gt;a&lt;/sup&gt;</td>
<td>Retained placenta</td>
</tr>
<tr>
<td>• Portion of maternal surface of placenta missing or torn membranes with vessels</td>
<td>• Immediate PPH&lt;sup&gt;a&lt;/sup&gt;</td>
<td>Retained placental fragments</td>
</tr>
<tr>
<td>• Uterine fundus not felt on abdominal palpation</td>
<td>• Inverted uterus protruding from vulva</td>
<td>Inverted uterus</td>
</tr>
<tr>
<td>• Slight or intense pain</td>
<td>• Inverted uterus</td>
<td></td>
</tr>
<tr>
<td>• Bleeding occurs more than 24 hours after delivery</td>
<td>• Immediate PPH&lt;sup&gt;b&lt;/sup&gt;</td>
<td>Delayed PPH (e.g. retained products, infections)</td>
</tr>
<tr>
<td>• Uterus softer and larger than expected for elapsed time since delivery</td>
<td>• Bleeding is variable (light or heavy, continuous or irregular) and/or foul-smelling</td>
<td></td>
</tr>
<tr>
<td>• Anemia</td>
<td>• Shock</td>
<td>Ruptured uterus</td>
</tr>
<tr>
<td>• Tender abdomen</td>
<td>• Tenderness</td>
<td></td>
</tr>
<tr>
<td>• Rapid maternal pulse</td>
<td>• Hypotension</td>
<td></td>
</tr>
<tr>
<td>• Hypotension</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Failure of a clot to form after 7 minutes or a soft clot that breaks down easily using the bedside clotting test (See box below.)</td>
<td>• Uterus may or may not be contracted</td>
<td>Coagulopathy</td>
</tr>
<tr>
<td></td>
<td>• Often accompanied by symptoms of infection (e.g., fever, high pulse)</td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup> Bleeding may be light if a clot blocks the cervix or if the woman is lying on her back.

<sup>b</sup> There may be no bleeding with complete inversion.

(IMPAC, 2000)
1) **If bleeding is due to atony, do the following:**
(See PPH management steps, Figure 23).
- Continue to **massage the uterus**.
- Use **oxytocic drugs** which can be given together or sequentially.
  (See Table 4)

### Table 4: Use of Oxytocic Drugs

<table>
<thead>
<tr>
<th></th>
<th>Oxytocin</th>
<th>Ergometrine/ Methyl-ergometrine*</th>
<th>15-methyl Prostaglandin** F2α (Hemabate)</th>
<th>Misoprostol (Cytotec)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dose and route</strong></td>
<td>IV: Infuse 20 units in 1 L IV fluids at 60 drops per minute IM: 10 units</td>
<td>IM or IV (slowly): 0.2 mg</td>
<td>IM: 0.25 mg DO NOT give Hemabate IV</td>
<td>Per Rectum: 800-1000 micrograms inserted 1-2 cm into the rectum with a small amount of lubricant</td>
</tr>
<tr>
<td><strong>Continuing dose</strong></td>
<td>IV: Infuse 20 units in 1 L IV fluids at 40 drops per minute</td>
<td>Repeat 0.2 mg IM after 15 minutes If required, give 0.2 mg IM or IV (slowly) every 4 hours</td>
<td>0.25 mg every 15 minutes</td>
<td>Single dose</td>
</tr>
<tr>
<td><strong>Maximum dose</strong></td>
<td>Not more than 3 L of IV fluids containing oxytocin</td>
<td>5 doses (Total 1.0 mg)</td>
<td>8 doses (Total 2 mg)</td>
<td>Single dose</td>
</tr>
<tr>
<td><strong>Precautions/ Contraindications</strong></td>
<td>Do not give as an IV bolus</td>
<td>Pre-eclampsia, hypertension, heart disease</td>
<td>Asthma</td>
<td>Asthma</td>
</tr>
</tbody>
</table>

(IMPAC, 2000) *Do not use Ergometrine in women who are hypertensive (BP>140/90).** Prostaglandins should not be given intravenously. **They may be fatal.**
- Anticipate the need for blood early, and **transfuse as necessary**.
• If bleeding continues:
  - Check placenta again for completeness, (See Figure 26).
  - If there are signs of retained placental fragments (absence of a portion of maternal surface or torn membranes with vessels), remove remaining placental tissue;
  - Assess clotting status using a bedside clotting test. Failure of a clot to form after 7 minutes or a soft clot that breaks down easily suggests coagulopathy.

• If bleeding continues in spite of management above:
  - Perform bimanual compression of the uterus, (See Figure 1):
    ✓ Wearing sterile gloves, insert a hand into the vagina and form a fist;
    ✓ Place the fist into the anterior fornix and apply pressure against the anterior wall of the uterus;
    ✓ With the other hand, press deeply into the abdomen behind the uterus, applying pressure against the posterior wall of the uterus;
    ✓ Maintain compression until bleeding is controlled and the uterus contracts.
  
  - Alternatively, compress the aorta. (See Figure 19.)
    ✓ Apply downward pressure with a closed fist over the abdominal aorta directly through the abdominal wall;
    ✓ The point of compression is just above the umbilicus and slightly to the left;
    ✓ Aortic pulsations can be felt easily through the anterior abdominal wall in the immediate postpartum period.
    ✓ With the other hand, palpate the femoral pulse to check the adequacy of compression;
    ✓ If the pulse is palpable during compression, the pressure exerted by the fist is inadequate;
    ✓ If the femoral pulse is not palpable, the pressure exerted is adequate;
    ✓ Maintain compression until bleeding is controlled.
• If **bleeding continues** in spite of compression: continue internal bimanual compression until the woman reaches the hospital.  

**Note:** *Packing the uterus is ineffective and wastes precious time.*

2) **If there is active vaginal bleeding and the uterus is firm (contracted), explore the vagina, cervix and perineal area for active bleeding/trauma:**

• If any trauma is found, follow trauma management steps, Figure 24.

• If **bleeding continues**, assess clotting status using a bedside clotting test. Failure of a clot to form after 7 minutes or a soft clot that breaks down easily suggests coagulopathy. Follow thrombin management steps, Figure 27.

3) **If there is active vaginal bleeding and the placenta is either not delivered or is not complete, consider retained placenta as the cause of bleeding.**

**Note:** *For retained placenta with no active bleeding, consider injection of oxytocin into umbilical vein (see Figure 26).*

If you can see the placenta, ask the woman to push it out. Have the woman squat to assist with delivery of the placenta. If you can feel the placenta in the vagina, remove it.

Ensure that the bladder is empty. Catheterise the bladder, if necessary.

If the placenta is not expelled, **give Oxytocin** 10 units IM if not already done for active management of the third stage.  

**Note:** *Do not use Ergometrine because it causes tonic uterine contraction, which may delay expulsion.*

If the placenta is undelivered after 30 minutes of Oxytocin stimulation and the uterus is contracted, attempt **controlled cord traction.**  

**Note:** *Avoid forceful cord traction and fundal pressure as it may cause uterine inversion.*

If controlled cord traction is unsuccessful, carefully **attempt manual removal of placenta.**  

**Note:** *Very adherent tissue may be placenta accreta. Efforts to extract a placenta that does not separate easily may result in heavy bleeding or uterine perforation which usually requires hysterectomy.*

**Manual removal of placenta:**

Review for indications.

Review general care principles and start an IV infusion.

Provide emotional support and encouragement. Give Pethidine and Diazepam IV slowly (do not mix in the same syringe) or use Ketamine.
Give a single dose of prophylactic antibiotics:
Ampicillin 2 g IV PLUS Metronidazole 500 mg IV, or Cefazolin 1 g IV PLUS Metronidazole 500 mg IV.

Hold the umbilical cord with a clamp. Pull the cord gently until it is parallel to the floor.

Wearing sterile gloves, insert a hand into the vagina and up into the uterus. (See Figure 20.)

Let go of the cord and move the hand up over the abdomen in order to support the fundus of the uterus and to provide counter-traction during removal to prevent inversion of the uterus (See Figure 21).

Move the fingers of the hand laterally until the edge of the placenta is located.

If the cord has been detached previously, insert a hand into the uterine cavity. Explore the entire cavity until a line of cleavage is identified between the placenta and the uterine wall.

Detach the placenta from the implantation site by keeping the fingers tightly together and using the edge of the hand to gradually make a space between the placenta and the uterine wall.

Proceed slowly all around the placental bed until the whole placenta is detached from the uterine wall.

Note: If the placenta does not separate from the uterine surface by gentle lateral movement of the fingertips at the line of cleavage, suspect placenta accreta and refer to back-up hospital for laparotomy and possible subtotal hysterectomy.

Hold the placenta and slowly withdraw the hand from the uterus, bringing the placenta with it, (see Figure 22).
With the other hand, continue to provide counter-traction to the fundus by pushing it in the opposite direction of the hand that is being withdrawn.

**Note:** If uterine inversion occurs, reposition the uterus. (See figure 25).

- Palpate the inside of the uterine cavity to ensure that all placental tissue has been removed.
- Give Oxytocin 20 units in 1 L IV fluids
- (normal saline or Ringer’s lactate) at 60 drops per minute.
- Have an assistant massage the fundus of the uterus to encourage a tonic uterine contraction.
- If there is **continued heavy bleeding**, give Ergometrine 0.2 mg IM (if the woman is not hypertensive) or prostaglandins. (See Table 4, *Use of Oxytocic Drugs*).
- Examine the uterine surface of the placenta to ensure that it is complete. If any **placental lobe or tissue is missing**, explore the uterine cavity to remove it.
- Examine the woman carefully and repair any tears to the cervix or vagina, or repair episiotomy.

**Post manual removal procedure care:**
- Observe the woman closely until the effect of IV sedation has worn off.
- Monitor the vital signs (pulse, blood pressure, respiration) every 30 minutes for the next 6 hours or until stable.
- Palpate the uterine fundus to ensure that the uterus remains contracted.
- Check for excessive lochia.
- Continue infusion of IV fluids.
- Transfuse as necessary.

4) If there is active vaginal bleeding, the uterus is firm and there is not active bleeding from birth trauma, consider clotting problems as possible cause of hemorrhage (“Thrombin.”)

- If bleeding continues, assess clotting status using a bedside clotting test. Failure of a clot to form after 7 minutes, or a soft clot that breaks down easily, suggests coagulopathy. Follow thrombin management steps, Figure 27
- If there are signs of infection (fever, foul-smelling vaginal discharge), give antibiotics as for metritis.

If possible, prepare for blood transfusion and refer as soon as possible. (See thrombin management steps, Figure 27).
5) If PPH is not controlled, refer immediately and transfer to the appropriate service provider and/or service delivery point. Follow PPH transfer protocols.

### PPH Transfer Protocols

1. Keep the woman supine with legs elevated.
2. Monitor BP, pulse, temp and assess for signs of shock.
3. Keep the woman warm.
4. Stimulate uterine contractions. Repeat oxytocin if needed.
6. Continue to closely observe her condition. Check blood loss and level of consciousness.
7. Transfer the newborn with the mother, if possible.
Figure 23: Vaginal Bleeding After Childbirth

1. Make a rapid evaluation of the general condition of the woman.
2. If shock is suspected begin treatment immediately.
   - Give Oxytocin 10 units IM
   - Start an IV infusion and infuse IV fluids (normal saline or Ringer's lactate)
3. Catheterize the bladder
4. Massage the uterus
5. Check to see if the placenta has been expelled and examine the placenta to be certain it is complete
6. Examine the vagina, perineum, and cervix for lacerations
7. Determine the cause of bleeding and manage according to cause.

- **Tone:**
  - Uterus soft and not contracted
  - Immediate PPH
  - Massage the uterus
  - Provide oxytocics
  - Anticipate the need for blood early, and transfuse as necessary
  - If bleeding continues: Reassess the placenta for completeness
  - If bleeding continues: Perform bimanual compression of the uterus
  - If bleeding continues: Perform aortic compression
  - If bleeding continues: Assess clotting status
  - Reassess the woman's condition for signs of improvement

- **Trauma:**
  - Complete placenta
  - Uterus contracted
  - Immediate PPH
  - Tears of cervix, vagina, or perineum
  - Examine the woman carefully and repair tears to the cervix or vagina and perineum
  - If bleeding continues, assess clotting status
  - Reassess the woman’s condition for signs of improvement

- **Tissue:**
  - Placenta not delivered within 30 minutes after birth
  - Uterus contracted
  - Portion of maternal surface of placenta missing or torn membranes with vessels
  - Retained placenta or retained placental fragments
  - If Active Management of 3rd stage attempted and birth assisted:
    - If Controlled Cord Traction (CCT) is unsuccessful, attempt manual removal
    - If bleeding continues, assess clotting status
    - If there are signs of infection, give antibiotics
    - Reassess the woman’s condition for signs of improvement

- **Thrombin:**
  - Blood coagulation defects
  - Disseminated Intravascular Coagulopathy (DIC)

- **Atonic Uterus**
  - Tears of cervix, vagina, or perineum
  - Retained placenta or retained placental fragments

- **Aggressive Replacement Therapy**
  - Fresh Frozen Plasma
  - Platelet
  - Blood

(Adapted from: IMPAC, 2000)
Figure 24: Management of PPH Due to Trauma

Examine the cervix, fornix, vagina and perineum.

**Birth trauma**
- Lacerations
  - Repair (See Protocols for repair of cervical tears, or REFER)
  - Hematomas
    - If >3 cm or expanding: Consider Draining
    - If <3 cm and not expanding: Ice pack, Observe

**Uterine rupture**
- Refer immediately. Start IV x 2

**Uterine Inversion**
1. Start IV immediately.
2. Replace uterus quickly.
3. Give Oxytocin or Misoprostol after replacement to stimulate contraction and prevent bleeding.
4. Give single dose of prophylactic antibiotics. (Amoxicillin 2 g IV.)

(Adapted from: ALSO, 2003)
Figure 26: Management of PPH Due to Tissue

**Treatment of Retained Placenta Without Active Bleeding***

**Inject oxytocin into umbilical vein:**
- Draw up 20 units of Oxytocin and 10 cc of NS into a syringe with a sterile needle attached.
- Place a clamp approximately 10 cm away from the woman’s perineum.
- Pierce the umbilical vein proximal to the clamp, and inject the oxytocin/saline.
- After withdrawing the syringe and needle from the umbilical vein, reclamp the umbilical cord closer to the perineum to avoid continued bleeding from the injection site.
- The placenta should deliver within 10 minutes. If it does not, manually remove the placenta.
Figure 27: Management of PPH Due to Clotting Problems

Clotting problems (Thrombin)

Start IV x2 with NS immediately

Refer Immediately

While preparing for referral
Consider vitamin K, 10 mg SC or IM.
Consider causes:
- pre-existing condition
- obstetric related infections

(Adapted from: ALSO, 2003)
2) Management of Breast-feeding Problems

“An extensive body of research has demonstrated that mothers and other caregivers require active support for establishing and sustaining appropriate breastfeeding practices.”
– WHO website, 2004

Introduction and Overview

It is of utmost importance to prevent breastfeeding problems by ensuring that women receive the information that they need to properly breastfeed their newborns and care for their breasts. It is inevitable that some problems occur. If these problems are not corrected, women sometimes stop breastfeeding. When problems occur, women require prompt treatment to ensure that they can maintain breastfeeding and not deprive them and their infants of the many important benefits gained by breastfeeding.

Management of Breastfeeding Problems

1) Not enough milk

Almost all mothers can produce enough breast milk for one or even two babies. Usually, even when a mother thinks that she does not have enough breast milk, her baby is getting enough. However, sometimes the baby is not getting enough breast milk. The signs are:

- poor weight gain (<500 g a month, or <125 g a week, or less than the birth weight after two weeks)
- passing a small amount of concentrated urine (less than 6 times a day, yellow and strong-smelling).

Common reasons why a baby may not be getting enough breast milk are:

- Poor breastfeeding practices – poor attachment, delayed start of breastfeeding, feeding at fixed times, no night feeds, short feeds, use of bottles, pacifiers, other foods and other fluids.
- Psychological factors in the mother – lack of confidence, worry, stress, dislike of breastfeeding, rejection of baby, tiredness.
- Mother’s physical condition – contraceptive pill, diuretics, pregnancy, severe malnutrition, alcohol, smoking, retained piece of placenta (rare), poor breast development (very rare).
- Baby’s condition – illness, or congenital anomaly which interferes with feeding.

A mother whose breast milk production is reduced needs to increase it, while a mother who has stopped breastfeeding may need to relactate. The same methods apply both for increasing a reduced supply and for relactation. However, relactation is
more difficult and takes longer; the mother must be well motivated and needs a lot of support to succeed.

Help a mother to breastfeed again by:

- keeping the baby close to her and not giving him/her to other caregivers
- having plenty of skin-to-skin contact at all times
- offering the baby her breast whenever the baby is willing to suckle
- helping the baby to take the breast by expressing breast milk into the baby's mouth, and positioning the baby so that the baby can easily attach to the breast
- avoiding use of bottles, teats and pacifiers. If artificial feeds are needed until an adequate milk production is established, feed the baby by cup.

**How to increase the milk production**

The main way to increase or restart the supply of breast milk is for the baby to suckle often in order to stimulate the breast. If particular herbs, drinks or foods are thought locally to be lactogenic, encourage the mother to take them, provided they are harmless, to increase her confidence.

- Allow the baby to suckle at least 10 times in 24 hours, or more if the baby is willing. The mother should offer her breast whenever the baby seems willing, and allow the baby to suck for as long as the baby desires. She should keep the baby with skin-to-skin contact and breastfeed at night.
- Give other feeds from a cup while waiting for breast milk to come. Do not use bottles or pacifiers. Reduce the other milk by 30-60 ml per day as her breast milk starts to increase. Monitor the baby's weight gain.
- If the baby refuses to suckle an “empty” breast, find a way to give the baby milk while suckling – for example, with a dropper or by a tube attached to her breast and to a cup of milk at the other end.

The time required for a woman’s breast milk production to increase varies greatly – from days to weeks. If the milk production does not increase within two weeks, she should be told to go to the health center for management.

**2) Refusal or reluctance to breastfeed**

Refusal or reluctance of a young infant to breastfeed adequately is a common reason for stopping breastfeeding. It can often be overcome. The main reasons why a baby might refuse to breastfeed are:

- The baby is ill, in pain or sedated:
  - Treat the baby’s illness.
  - If the baby is unable to suckle, the mother may need to express breast milk and feed by cup or tube until the baby is able to breastfeed again. (See Figure 13 for information on expressing milk.)
  - Help the mother to find a way to hold her baby without pressing on a painful place.
  - Explain to the mother how to clear a blocked nose. Suggest short feeds, more often than usual, for a few days.
- Look for symptoms of thrush (white curd-like patches in the mouth). Thrush may make the baby’s mouth so sore that it is too painful to suckle. 
  *Note: Thrush can be transmitted to the mother’s breast and requires treatment (see section on thrush below). Treatment is also required for the infant (see Newborn Care Protocols for details).*
- If the mother is on regular sedation, try to reduce the dose, or stop the medication, or find a less sedating alternative.

- There is some difficulty with the breastfeeding technique:
  - feeding from a bottle or sucking on a pacifier has interfered with the baby's suckling
  - not getting enough milk because of poor attachment or breast engorgement
  - pressure on the back of the baby’s head by poor positioning technique
  - the mother holding or shaking the breast, interfering with attachment
  - restriction of breastfeeds to certain times
  - overproduction of milk causing milk to come too fast and the baby to choke
  - early difficulty in learning to suckle effectively.

- Possible solutions include:
  - *Help the mother with her technique* – ensure that the baby is positioned and attached well without pressing on the baby's head, or shaking the breast.
  - *Advise her not to use a feeding bottle or pacifier* – if necessary, use a cup.
  - *Treat engorgement by removing milk from the breast* – If the baby is not able to suckle, help the mother to express her milk. A warm compress on the breast or gently massaging the breast can make breastfeeding or expressing the milk easier. After the feed or expressing of milk, put a cold compress on the breasts.
  - *Help reduce overproduction* – To reduce the milk supply, the mother can breastfeed on only one side at each feed. It may also be helpful for the mother to express some milk before a feed, or hold her breast with her fingers like a “scissor” to slow the flow.

3) *Sore nipples, very full breasts, and tender breasts*

Sore nipples, very full breasts, and tender breasts are some of the most common and frustrating problems for breastfeeding women. Moderate nipple tenderness is normal for many women in the first week of breastfeeding. However, it should not be severe or last more than a couple of days.

The most common cause of sore nipples is improper positioning or a poor attachment. If the woman is experiencing sore nipples and you have double-checked both positioning and attachment, she may have thrush. (See information on thrush below.)

4) *Blisters, cracking, bleeding and/or pain*

Blisters, cracking, bleeding and/or pain that is persistent during or in between feedings is not normal. A crack or split in the nipple can be excruciating and is often caused by improper positioning, attachment or removal from the breast.
Reassure the woman that her nipples will heal and encourage her to continue breastfeeding. She should also:

- Alternate positions at each feeding. Counsel the mother to rotate between various positions to find the most comfortable positions. Use pillows to bring the baby up to the height of the breast to reduce tugging and pulling on the nipple.
- Breastfeed more frequently. The baby won't be as hungry and may breastfeed less vigorously. Offer the less sensitive breast first.
- Be sure to release the suction before taking the baby off the breast.
- Try rubbing the nipples with ice before feeding to numb them slightly.
- Keep the nipples dry and expose them to air whenever possible.
- Apply a small amount of breast milk when done breastfeeding, then letting it air-dry before covering up.
- Avoid using soap on the breasts. It can be very drying.
- If the woman’s breasts are engorged, try expressing a little milk by hand before feeding. Engorged breasts make it difficult for the baby to attach.
- Soaking the nipples in a solution of salt and water (1/4 teaspoon of salt per cup of water) for 15 minutes or so between feedings may help heal them. If the woman has a crack in the nipple this may be too painful.

5) **Red and/or tender breast** (possible mastitis/breast abscess)

Red and/or tender breast or other unusual problems (i.e., a tender lump, hard swelling and severe pain in the breast, fever), may a sign of infection. Refer the woman to the health care center for immediate treatment. In the meantime, advise her to continue to breastfeed frequently, to get plenty of rest, and to put warm cloths on her breasts often.

6) **Thrush**

Thrush is a yeast infection (fungus) that can travel between the baby's mouth and the mother’s breast. Thrush can make breastfeeding very painful, but it is usually easily treatable.

Symptoms of thrush for the woman include, but are not limited to:

- a red rash on the nipple/red nipples and areola or unusual pinkness/redness of the nipple
- a taut, shiny appearance to the skin of the areola (which is normally slightly creased and dullish, like any other skin)
- increased and eventually hyper-sensitivity of the nipple to any and all touch
- excruciating pain during breastfeeding
- pain/burning of the nipples between feedings
- stabbing pains deep within the breast (if yeast gets up into the milk ductules), not to be confused with ordinary pain associated with let-down.

If the baby or the mother has thrush, they will need to be treated as soon as possible or referred to a health care center for treatment. The treatment regimen for the woman is described in the box below. (See the *Newborn Care Protocols* for the infant’s treatment regimen.)
Treatment for Thrush

Anti Fungal Cream
- Apply anti fungus drug twice daily to the nipples after breastfeeding: Clotrimazole cream 1% or Nystatin cream.
- No need to wash medicine off before breastfeeding.
- Keep nipples dry when not breastfeeding.
- Follow-up with provider in 2 days:
  - If improving, continue treatment for two weeks.
  - If not improving, refer to specialist.

OR

Gentian Violet
- Treat areola (dark area around nipple) and nipples with salt water and gentian violet 0.5% or 1%, three times per day:
  1. Boil 1 liter of water, add 1 small spoon of salt, then let the water cool.
  2. Wash hands and air dry or dry with clean towel.
  3. Dip a clean, soft cloth into salt solution.
  4. Wash areola and nipples with cloth soaked in salt solution.
  5. Pour gentian violet on a clean, soft cloth.
  6. Wipe the areola and nipples with cloth soaked in gentian violet.
  7. Wash hands when done.
- Keep nipples dry when not breastfeeding.
- Follow-up with provider in 2 days:
  - If improving, continue doing treatments until 3 days after symptoms are gone.
  - If not improving, refer to specialist.
Section 3

References
References


