

National Standards for Reproductive Health Services in Afghanistan: Postpartum Care Services

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Transitional Islamic Government of Afghanistan:
Ministry of Health, Reproductive Health Task Force

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Rural Expansion of Afghanistan's Community-Based Healthcare (REACH)
Management Sciences for Health
784 Memorial Drive
Cambridge, MA 02139
Telephone: (617) 250-9500
www.msh.org



**NATIONAL STANDARDS
FOR
REPRODUCTIVE HEALTH SERVICES**

POSTPARTUM CARE SERVICES

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**Reproductive Health Task Force
Department of Women and Reproductive Health
General Directorate for Health Care and Promotion
Ministry of Health
TRANSITIONAL ISLAMIC GOVERNMENT OF AFGHANISTAN**

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Following individuals have participated in the process of developing of the National Standards of Postpartum Care Services:

Women and Reproductive Health Department of the Ministry of Health:

Dr. Mehrafzoon Mehrnessar, WRH and MCH Director
Dr. Razia Foroozi, SMI Officer

Columbia University, Averting Maternal Death and Disability (AMDD) Program:

Dr. Halima Mouniri, Senior Advisor for SMI to UNICEF and MOH- Afghanistan

Swedish Committee for Afghanistan (SCA):

Ms Kathy Carter-Lee, MCH Advisor
Kerstin Bjork, MCH Trainer
Dr. Fatana Nawabi, MCH officer

USAID/REACH:

Dr. Jeffery M Smith, Senior SMI Advisor
Dr. Friba H. Hayat, Safe Motherhood Program Officer

World Health Organization:

Dr. Anne Begum, Technical Officer, RH
Dr. Hassan Mohtashami Khojasteh, Short-Term Professional, RH

ABBREVIATIONS

AFGA	Afghan Family Guidance Association
AFSOG	Afghan Society of Obstetrics and Gynecology
AMDD	Averting Maternal Death and Disability Program
BCG	Bacille Calmette-Guerin (BCG vaccine)
BPHS	Basic Package of Health Services
CDC	Center for Disease Control and Prevention
EmOC	Emergency Obstetric Care
EPI	Expanded Program of Immunization
IDD	Iodine Deficiency Disorder
IMC	International Medical Corps
IMPAC	Integrated Management of Pregnancy And Childbirth
JICA	Japan International Cooperation Agency
MCH	Mother and Child Health
MICS	Multiple Indicators Cluster Survey
MOH	Ministry Of Health
MSH	Management Sciences for Health
Rh	Rhesus (A blood group system)
RH	Reproductive Health
RHTF	Reproductive Health Task Force
SCA	Swedish Committee for Afghanistan
SMI	Safe Motherhood Initiative
TBA	Traditional Birth Attendants
TT	Tetanus Toxoid
UNFPA	United Nations Population Fund
UNICEF	United Nations Children Fund
USAID/REACH	The United States Agency for International Development, Rapid Expansion of Afghanistan Community-based Health Care Project
WHO	World Health Organization
WRH	Women and Reproductive Health

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INTRODUCTION

The Transitional Islamic Government of Afghanistan attaches great importance to the health of women and children and this is reflected in the Ministry of Health (MOH) document on its mission statement, values, and principles, which states that the MOH will “lay the foundations for equitable quality health care for the people in Afghanistan, especially mothers and children. Priority emphasis will be on provision of good quality care to mothers and children”

Based on this mission, the MOH is committed “to ensure access to a full range of affordable reproductive health services” as stated in the National Health Policy document. A Basic Package of Health Services (BPHS) has been defined to translate these policies into practice, under which a Maternal and Newborn Health Package with five components (antenatal care, delivery care, postpartum care, family planning, and care of the newborn) has been introduced.

To that end, MOH has initiated several programs and activities. As part of these efforts, Women’s and Reproductive Health Department of Ministry of Health hosts a Reproductive Health Task Force (RHTF). This Task Force consists of the main institutions involved in the Afghanistan reproductive health scene, including Women and Reproductive Health (WRH) department of MOH, Kabul Medical Institute, Institute of Health Sciences, Afghan Society of Obstetrics and Gynecology (AFSOG), Afghan Family Guidance Association (AFGA), Malalai Maternity Hospital, Rabia Balkhi Hospital, 52 bed Khair Khana Hospital, UNFPA, UNICEF, WHO, JICA, USAID/REACH, IMC, and SCA.

Under RHTF, nine working groups have been established to develop national operational standards of specific topics, including family planning, antenatal care, postpartum care, birthing and emergency obstetric care, newborn care, monitoring and evaluation, and adolescent health. These standards will not only serve as guidelines for policymaking, program development, and management of health facilities under the BPHS, but will also help program managers in developing training curricula for health personnel, management tools and systems, clinical protocols and references, and public education material and other information-education-communication activities. This document is the output of the Postpartum Care Working Group, coordinated by WHO-Afghanistan.

In this document, chapter one presents some background information on postpartum definition, trends, and morbidity. Chapter two provides rationale and principles of the postpartum care and defines its goals, objectives, and scope of services. Chapter three describes major maternal health challenges in the postpartum period and their management in detail. Chapter four presents major maternal health needs during the postpartum period, including nutrition, breastfeeding, and birth spacing. A list of references appears at the end of the document.

CHAPTER 1. BACKGROUND INFORMATION

1- DEFINING THE POSTPARTUM PERIOD

The words "postpartum" and "postnatal" are sometimes used interchangeably. This document uses the word "postpartum", except in sections exclusively dealing with the infant. In those sections the word "postnatal" is used. The postpartum period (also called the puerperium) starts after the birth of the placenta. Usually an interval of about one hour after that moment is considered to be part of childbirth; during that time the immediate care of the mother (e.g. assessment of her condition, suturing, control of blood loss, etc.) and the infant (assessment of its condition, maintaining body temperature, initiating breastfeeding, etc.) take place. There is a smooth transition between childbirth and the postpartum period.

Traditionally the postpartum period is 42 days (6 weeks) in duration. The period of 6 weeks fits very well into cultural traditions in many countries, where often the first 40 days after birth are considered a time of convalescence for the mother and her newborn infant. In many countries at that time a routine postnatal visit and examination are planned. Six weeks after delivery the body of the woman has largely returned to the non-pregnant state. However, this does not mean that the pre-pregnant state has completely returned: lactation usually continues, often the menstrual cycle has not yet normalized, and sexual activity may not have been resumed yet. Contraception, though an important need, may require an special attention at this time.

The newborn period is defined as extending up to 28 days of life. Thereafter the period is known as the infant period. Continuation of breastfeeding is important through this period and is directly related to the social and economic activities of the mother and her choice of contraceptive method. Although in these Standards attention is mainly focused on the first six weeks postpartum, it is fully recognized that the lives of the woman and her baby are in a continuum, and the discussions, which follow, will be extended to the following weeks and months where appropriate.

2- OVERVIEW

The postpartum period covers a critical transitional time for a woman, her newborn, and her family, on a physiological, emotional, and social level. Nonetheless, in both developing and developed countries women's needs during this period and those of their newborns have been all too often eclipsed by the attention given to pregnancy and birth. Such an eclipse ignores the fact that the majority of maternal deaths and disabilities occur during the postpartum period and that early neonatal mortality remains high. Driven frequently by economic considerations the minimal, or even non-existent care offered to women and their newborns at home or in health facilities makes little contribution to their well-being and provides a frail basis for their future health. Poor quality care reduces opportunities for health promotion and for the early detection and adequate management of problems and diseases.

This lack of care in the postpartum period finds it reflected in the lack of research evidence on effective interventions, in the extremely uneven provision (where there is not total absence) of care, and in poor economic or social infrastructures to facilitate care provision.

The postpartum period is a very special phase in the life of a woman and her newborn. For women experiencing childbirth for the first time, it marks probably the most significant and life-changing event they have yet lived. It is marked by strong emotions, dramatic physical changes, new and altered relationships, and the assumption of and adjustment to new roles. It is a time of profound transition, making great demands on the woman's resilience and capacity to adapt. For a young girl, this period marks a sometimes-bewildering acceleration of the normal transition to a new identity as a woman and as a mother. The postpartum period is a social as well as a personal event and has meaning well beyond the simple physiological events which mark it. For the most part it holds no great dramas and is a reason for celebration and a sense of achievement, although for some the loss of a child or its birth with severe abnormality brings grief and pain.

The postpartum period, however frequently a woman experiences it, forms part of the normal continuum of the reproductive cycle. This fact should be mirrored by services which respect that continuum: quality antenatal and intrapartum care can prepare a smoother postpartum; links between all levels and types of Reproductive and Child Health services are vital, although it is important not to medicalize this time unnecessarily. Quality postpartum services are a long-term investment in the future health of women and their newborns.

Gender and power issues determine much of what happens to a woman and her newborn in the postpartum, particularly with regard to the resumption of sexual activity. Despite considerable local and regional differences, there is widespread acknowledgement by society, by the state, and by health systems of the special status of the postpartum woman and her newborn, their right to protection, and their right to attention to their physiological, psychosocial, and cultural-environmental needs. However, in some places, this "special status" may be withheld from the newborn until it is deemed to have a secure hold on life, or if it is of the "wrong" sex, or has an abnormality. The woman, equally, in some cultures may be considered "contaminated" by the "dirty" process of childbirth and suffer exclusion as a result. The rights of both the infant and the woman must be safeguarded, and all forms of discrimination eliminated. Many traditional practices are beneficial or harmless; a few can be harmful: their status needs clarifying; changing practices is a long term, sensitive process.

3- THE NEEDS OF WOMEN AND THEIR NEWBORNS

Based on the scarce data in the literature, the needs of women and infants can be formulated as follows:

In the postpartum period women need:

- information/counseling on
 - o changes that happened in their bodies – including signs of possible problems,
 - o nutrition,
 - o self care – hygiene and healing,
 - o care of the baby and breastfeeding,
 - o immunization for mother and baby,
 - o contraception, and
 - o sexual life.

- support from health care providers, and husband and family – emotional and psychological,
- health care for suspected or manifest complications,
- time to care for the baby,
- help with domestic tasks,
- maternity leave,
- social reintegration into her family and community, and
- protection from abuse/violence.

In this period, women may also fear inadequacy, loss of marital intimacy, isolation, and constant responsibility for care of the baby and others.

This document focuses on the needs of women and their newborn, the health challenges of the postpartum period and the response of the health care system to these needs and challenges. It attempts to bring together in a coherent manner the evidence and the arguments for good practice in this field and to lay the foundations for the provision of truly integrated services.

The needs of women and their newborn provide the starting point. These needs offer the rationale for the care and services described here. In the first instance these services are designed to meet the needs of healthy women and their newborn, but, inevitably, they must also address the provision of services for those whose postpartum period is not normal.

Care in the postpartum period varies greatly in regions in Afghanistan. In most areas most deliveries are at home, while some take place in a health center, hospital, or other institutions. Sometimes a mother and her baby can stay in the health facility for a few days, but often she goes home early, within a couple of days or even hours, with a long journey home ahead of her land with a new baby to care for. The care for these mothers and babies, apart from what the family traditionally provides in some settings, is sometimes exceedingly limited. This document reviews the care given in various settings, and focuses its recommendations mainly on care after delivery by primary care providers, often at home or health center level. Frequently these care providers have to cope with difficult circumstances. The recommendations of this document also extend to the care required in more ideal circumstances.

4- EPIDEMIOLOGICAL STUDIES ON MATERNAL MORBIDITY

The number of health problems reported in the first months after delivery is high. In India 23% indicated problems, and in Bangladesh nearly 50% reported symptoms 6 weeks after delivery, while in England 47% of the women reported at least one symptom in this time. Some symptoms are more typically present in the immediate postpartum period and usually resolve quickly, while others, once they occur, often become chronic. The most frequently reported postpartum problems are:

- 1- Infections
- 2- Bladder problems, including urinary incontinence postpartum caused by vesicovaginal fistulae and stress incontinence
- 3- Backache
- 4- Frequent headaches

- 5- Pelvic pain
- 6- Hemorrhoids
- 7- Constipation
- 8- Depression, anxiety, or extreme tiredness
- 9- Perineal pain
- 10- Breast problems, including engorgement; sore, cracked, bleeding or inverted nipples, and rarely mastitis.
- 11- Anemia
- 12- Dyspareunia

A limited overview of data from a number of large studies gives some indications of the extent of postpartum problems as women experience them. It does not, however, give a sense of the effect of these problems on the lives of women as they adapt to the demands of their families and a new baby.

5- SEXUAL RELATIONS IN THE POSTPARTUM PERIOD

Among the needs of women in the postpartum period is information and counseling on sexual life and contraception. To answer these needs we should be informed about sexual behavior related to postpartum period. It is known that in the course of pregnancy many women are less inclined to intercourse, but more to other kinds of intimacy. This inclination might differ from the desire of their husbands. Fatigue and disturbed sleep patterns are among the most commonly reported characteristics of this time and inevitably have an effect on the libido. In the majority of women there is only a slow return to pre-pregnancy behavior.

6- POSTPARTUM CARE IN AFGHANISTAN

Recent reviews and assessments of reproductive health situation in Afghanistan during 2002 have highlighted the unmet needs in this area, including newborn care. The national health resources assessment has shown that availability of basic reproductive health services is extremely limited – only 17% of the basic primary health facilities provide safe motherhood and family planning services.

Although 82% (643) of all existing health facilities in Afghanistan claim to provide some kind of postpartum care services, only half of them may provide the basic standard set of postpartum care as defined by BPHS. Only 20% of health facilities distribute vitamin supplements during postpartum period and 28% of them reports routinely checking the anemia status of mothers. There is also a significant difference between provinces with respect to postpartum care. For example in Zabul province, 14 out of 15 health facilities claim to conduct anemia check when only 2 out of 123 facilities in Logar province claim to conduct anemia check.

Table 1 provides the available reproductive health indicators for Afghanistan, which highlight the enormous challenges the MOH is facing in terms of maternal health in the country.

Table 1 Available reproductive health indicators for Afghanistan

Indicator		Source
Maternal Mortality ratio (per 100,000 live births)	1600	CDC / UNICEF study 2002
Anemia in pregnant women in Eastern and South eastern region	55%-91%	MICS 2000
Basic primary health services facilities providing basic RH services	17%	National Health Resources Assessment HANDS / MSH 2002
Health facilities providing cesarean section and blood transfusion	2%	National Health Resources Assessment HANDS / MSH 2002
BPHS facilities providing three methods of contraception	19%	National Health Resources Assessment HANDS / MSH 2002
Coverage of Antenatal Care (%)	12%	WHO Afghanistan 1999
Births attended by trained personnel	15%	WHO Afghanistan 1999
Proportion of deliveries at home	90%	WHO Afghanistan 1999
Coverage of tetanus vaccination (% of pregnant women)	16%	WHO / UNICEF Afghanistan 2000
Total fertility rate (per woman)	6.9%	WHO Afghanistan 1999
Contraceptive prevalence (% of women 15-49)	2%	UNFPA 1972-73

Source: Ministry of Public Health. National Reproductive Health Strategy for Afghanistan. Ministry of Public Health, Kabul, Afghanistan, July 2003.

CHAPTER 2. CARE AND SERVICE PROVISION IN THE POSTPARTUM PERIOD

1- THE CHALLENGE OF CARE PROVISION

Unlike prenatal and intrapartum care, where clear standards are usually available though not always complied with, in postpartum care explicit aims and objectives are often lacking. Sometimes this results in isolated actions, valuable as they may be, for immunization, contraception or other goals. Postpartum care all too often does not incorporate all the essential elements required for the health of a woman and her newborn in a comprehensive package. This chapter describes the aims and standards of postpartum care, based on needs, evidences, and challenges outlined earlier in this text. It offers guidance on the way postpartum care could be organized. With respect to clinical problems, attention is focused on primary care, directed at the prevention, early diagnosis and treatment of disease and complications, and at referral to hospital if necessary. Specialized care in hospital is not addressed in this chapter. The whole thrust of this document is to protect the normal, while exercising that vigilance which enables an early response to emerging problems. The promotion of breastfeeding, contraceptive and nutritional advice, and immunization are also essential components of postpartum health care.

The majority of maternal and neonatal deaths, as well as a significant burden of long-term morbidity occurs during the postpartum period. It is estimated that for each maternal death there will be 100 morbidity cases, either acute and life threatening or chronic (mid- and long-term disability). Access to emergency obstetric care could reduce the incidence of maternal death and disability. Emergency Obstetric Care (EmOC) means not only access to facility that provides essential EmOC functions¹ but also availability of functional referral system and skilled care providers who will ensure early identification of problems and timely intervention, The development of a complete functional chain of referral from community to the district hospital and back is one of the major tasks in the prevention of maternal and neonatal deaths.

Postpartum care must be collaboration between the mother herself, her husband, her parents, families, caregivers (trained or traditional), health professionals, health planners, health care administrators, other related sectors, community groups, policy makers, and politicians. They all need accurate information about what constitutes best care in the postpartum period.

2- GOALS AND PRINCIPLES

Goals

The aims of care in the postpartum period are:

- 1- Support of the mother and her family in the transition to a new family composition, and response to their needs.

¹ There are eight Essential Functions for EmOC: (1) Administration of Parenteral Antibiotics, (2) Administration of Parenteral Oxytocics (3) Administration of Parenteral Sedatives/anticonvulsants, (4) Manual Removal of Placenta, (5) Removal of Retained Products, (6) Assisted Vaginal Delivery, (7) Blood Transfusion, and (8) Caesarean Section

- 2- Prevention, early diagnosis, and treatment of complications of mother and newborn, including the prevention of vertical transmission of diseases from mother to infant.
- 3- Referral of mother and infant for specialist care when necessary.
- 4- Counseling on baby care and infant development
- 5- Support of breastfeeding.
- 6- Counseling on maternal nutrition, and supplementation, if necessary.
- 7- Counseling and service provision for contraception and the resumption of sexual activity.
- 8- Immunization of the infant.

Frequency of postpartum visits

There is no consensus about the optimal number and timing of visits by a care provider (midwife, nurse, maternity aid, etc.) during the first week postpartum. The general recommendation for Afghanistan is that, with limited resources, a contact with health care system at least during the first twenty-four hours and before the end of the first week would be most effective. Another visit around six weeks postpartum is also highly recommended.

Despite the absence of rigorous evidence there seem to be "crucial" moments when contact with the health system/informed care provider could be instrumental in identifying and responding to needs and complications. These have been summarized in the formula (which should not be interpreted rigidly) of "6 hours, 6 days, 6 weeks and 6 months". If some form of continuous attention to the woman and her newborn can be assumed for the first few hours after birth, whether at home or in a health facility, this leaves two points of contact – about 6 days and 6 weeks – as most desirable and likely to influence a healthy postpartum period. Some form of continuity of support and care of both mother and newborn during the first days of life is strongly desirable.

Traditionally, after 6 weeks, the postpartum period ends. However, the care should not end then: in many countries follow-up consultations for baby care are organized; at 10 and 14 weeks after birth, further immunizations of the baby are planned. If baby health care clinics are available, the immunizations are best integrated in the care of these clinics. LAM as a contraceptive method spans the first 6 months postpartum; this means that care of the mother should also be available during that period, and should be integrated with baby care. Theoretically, the best time to end postpartum care is 6 months after birth

Postpartum danger signs and symptoms

Immediately upon the mother's arrival at the postpartum care ward (pre-discharge) or the healthcare site, a skilled provider, who is trained to recognize and respond appropriately to the following danger signs, should check for them and take necessary actions according to the recommendations of this document and other relevant training manuals:

- Elevated blood pressure (diastolic BP more than 110 mmhg)
- Sever anemia (pale complexion, fingernails, conjunctiva, oral mucosa, tip of tongue, and shortness of breathe, with Hb less than 7 g/dl)
- Heavy vaginal bleeding (more than one pad soaked in 5 minutes)
- Fever (more than 38.5°C oral) or foul-smelling lochia

- Pus or perineal pain
- Suicidal thoughts or feeling deeply unhappy or crying easily
- Vaginal discharge 4 weeks after delivery
- Dribbling urine

Major concerns during postpartum period

Table 5 below suggests the broad lines of care that can be offered at each point of contact during the puerperium. More important is the possibility for all women to have access to a health care provider when she needs it, and to have the information necessary in order to make the decision to access that care.

Table 2 Major elements of postpartum care

6-12 hours	3- 6 days	6 weeks	6 months
Blood loss Pain BP Counseling Warning signs Breastfeeding	Breast care Temperature/infection Mood Counseling Warning signs Breastfeeding	Recovery Anemia Contraception Problems Breastfeeding	General health Contraception Continuing morbidity Breastfeeding/ Weaning

Facility care versus home care

The recommendations made in this document refer to postpartum care in a health facility. However, a skilled care provider could also provide most of these recommended care and services in the home setting. The vast majority of women and newborns that need care are in the community, whether urban or rural. Many will not access the formal health system for care, even if it is available.

Complex patterns of traditional support exist in many regions to provide protection and nurture for around seven to forty days. Formal care provision can build on this pattern and interventions should be congruent with culture as far as possible and should pay special attention to the following issues and circumstances:

- the role of men in determining both access and quality of postpartum care.
- the needs of women whose traditional networks are weakened or absent.
- the woman who has lost a baby, or who is ambivalent about her baby because she/he is not the gender that the mother hope for or has an abnormality.
- the needs and capacities of the women’s "first-line care provider", such as family members.

Integrated care

An integrated service provision that meets the needs of both mother (including counseling on family planning) and newborn is clearly in their best interests. As becomes clear from several examples, integrated care is much more effective. Of course it is often impossible for all parts of

the care to be provided by one caregiver, but the organization of the care can be such that the woman experiences it as a coherent system of care. Consultations in one clinic at the same time, increases the attendance and the effectiveness. It is important that different caregivers give similar advice, especially on infant feeding and contraception, because the effectiveness of lactation as a contraceptive method depends on the feeding pattern of the infant.

The care providers

Postpartum care starts right after the delivery. If the delivery occurs in a health facility, the initial caregivers are those attendants at the delivery: physician, midwife or nurse. In case of a difficult delivery, or of problems with the newborn, an obstetrician and/or pediatrician may have attended. If there are serious problems, these specialists may remain involved. It is impossible to predict potential problems in the near future; a careful observation in the first week by a midwife, nurse or nursing aide is much more rational. All postpartum women should be counseled in warning signs. If all is well, a healthy mother and baby need not stay in a health facility for more than 6 hours after the birth.

If the delivery occurs at home, the caregivers are traditional attendants or family members. Adaptation to the new situation and to the new tasks can be appropriate in the home environment, as long as the mother and newborn are not suffering any complication. At home family members are usually present as primary caregivers to take care of many small problems that may arise. It is important to involve them in the counseling and information given during pregnancy and in the first hours after delivery. However, skilled care and support by a professional is needed in the post partum period, and this seems very difficult to realize at home in many countries, particularly those with very limited resources.

The check-up consultation of the woman 6 weeks after delivery is best done by the midwife or physician who attended the delivery, because he or she can best answer questions on labour and delivery. Of course this will not always be feasible, but then the person who is giving the consultation should be very well informed about the events and complications during birth. During this consultation there should be enough time to listen to the woman and her husband, to answer questions and to counsel on breastfeeding and family planning. Throughout the world the attendance of women at these check-ups is low. One of the reasons for this poor compliance is the fact that the consultations are sometimes given by persons unknown to the woman, badly informed about the events during labour and without enough time and patience to listen to the couple. Apart from personal attention to the woman and her husband, integration of baby care with the consultation may improve the attendance. Integration and continuity of services can be achieved either by the same care provider, or by different providers but providing care according to national/local standards and guidelines, giving consistent messages and having compatible schedules. A Family Card that includes medical information on complications is an important link between services and provides the basis for the consultation.

Many countries offer care and advice to mothers during visits to baby clinics during the first months. The caregivers are often nurses or midwives, supervised by physicians. These clinics are the most appropriate places for the necessary immunizations to be given. If no clinics are available, the immunizations have to be organized separately. The care for the mother in the first

6 months after the birth of her infant, can be given by different persons: general practitioners, nurses or physicians at baby care clinics, midwives, but it should always be integrated into the services offered for the baby.

3- CARE DURING THE FIRST HOURS AFTER BIRTH

Content of Care

The content of care in the postpartum period is similar to that of the antenatal period, as it follows a structured approach to the patient including history, examination, and care provision. Also note that the newborn care should be integrated in postpartum care of mother. The following tasks refer only to the care of mother, but service providers should also perform newborn care as needed, according to the National Standards for Newborn Care.

Service providers (Physicians, midwives, and/or nurses) should perform the following tasks during the first hours after delivery.

1- History taking

A- Personal and Social History:

Ask about:

- Full name
- Age

B- Medical History:

Ask about history of specific diseases and conditions, including: tuberculosis, cardiovascular diseases, hypertension, chronic renal disease, epilepsy, diabetes mellitus, RTIs/STIs/HIV-AIDS, malaria, hepatitis and other liver diseases, any allergies, other chronic diseases, surgeries, blood transfusion, current use of medicines (specify).

C- Interim History:

Ask about:

- Time and place of delivery
- Mother's overall feeling, as well as her feeling about the baby and motherhood experience
- Pain or fever
- Bleeding since delivery
- Problem with passing urine
- Decision about contraception
- Problem with breasts and breastfeeding
- Complication during delivery
- Treatment/medications since delivery
- Other concerns

2- Physical exam

Perform routine physical examination and particularly pay attention to the followings:

- Blood pressure for detecting hypertension
- Uterus exam (hard and round or not)
- Vulva and perineum exam for tears, swelling, or pus, as well as bleeding and lochia.
- Signs of severe anemia (pale complexion, fingernails, conjunctiva, oral mucosa, tip of tongue, and shortness of breathe)
- Breast exam for any problem that may impact breastfeeding

3- Laboratory tests

Perform Hemoglobin (Hb) test, if signs of severe anemia present.

Check Blood group and Rh, in case of Rh incompatibility and if not performed earlier.

4- Assess for referral

The following are signs or symptoms of obstetrical complication and require immediate assessment and management or stabilization and referral:

- High blood pressure (more than 140/90 mm Hg)
- Convulsion, severe headache or unconsciousness,
- Excessive bleeding and/or severe anemia with Hb less than 7 g/dl
- Extreme weakness or shortness of breath
- Fever or pus-like discharge from the vagina
- Severe abdominal pain

If the following conditions are diagnosed, refer for specialist consultation and continue according to his/her treatment protocol:

- Diabetes
- Heart disease
- Renal disease
- Postpartum psychological problem
- Drug abuse
- HIV positive

If there are signs of severe anemia but Hb is more than 7 g/dl, prescribe iron and folate tablets.

5- Services

Implement the following interventions:

- Iron and Folate supplements: one tablet of Ferrous Sulfate + Folic Acid (400+60) once a day for four months. If Hb is more than 7 g/dl but less than 11 g/dl, double the dose. If Hb is less than 7 g/dl, refer to specialist.
- Vitamin A supplements: Recommended dose for lactating mothers is 200 000 IU once, only during the first month after delivery.
- In case of Rh incompatibility, arrange for Rh immune globulin (RhoGAM) injection within 72 hours after delivery, if feasible.
- Tetanus immunization, if she has not had full course (i.e. 5 doses of Tentanus Toxoid, as described in Chapter 3 - part 4 of this document.).
- If the woman does not have access to iodized salt, or if the pregnant woman has not received a dose of iodized oil during her last trimester of pregnancy, a dose of iodized oil

400-600 mg (2 or 3 capsules), should be given to the mother early after delivery, if it is feasible.

- Refer high-risk cases, according to diagnosis made in “assess for referral” above.
- In malaria endemic areas, only give advice on prompt treatment seeking and use of insecticide treated nets.
- Treat malaria cases according to the national standards.
- Treat tuberculosis cases according to the national standards.

6- Counseling

Generally, give advice to women on basic hygiene and nutrition. In particular:

- Make sure woman and family know what to watch for and when to seek care.
- Advise the importance of immediate and exclusive breastfeeding of the child.
- Counsel on the importance of birth spacing and family planning, and refer for family planning counseling and services.
- Advise the woman to bring her husband (or a family member or friend) to later postpartum visits so that they can be involved in the activities and can learn how to support the woman through her motherhood.
- Schedule appointment: second visit at (or close to) 6 weeks; state date and hour. Service provider should write these in the woman’s postpartum card and in the clinic’s appointment book.

7- Recording

Complete clinic record.

Complete postpartum card and give a copy of it to the client and advise her to bring it with her to all appointments she may have with any health services.

The importance of the first hours after delivery

The first hours postpartum are extremely important. During this time, if the birthing occurs in a facility, care providers should:

- assess maternal well-being and measure and record blood pressure and body temperature.
- assess for vaginal bleeding, uterine contraction, and fundal height regularly.
- identify signs of serious maternal complications, in particular hemorrhage, eclampsia, and infections, and instigate treatment, according to the National Standards for Reproductive Health Services for Child Birth Care.
- Initiate breastfeeding.

The concept of rooming in

If mother and newborn stay in a health facility for a certain period, it is of great importance that they remain together all the time. This is known as “rooming in.” The newborn should be in the immediate vicinity of the mother day and night in order to strengthen the relation “newborn-mother”. The “rooming out” system (all babies together in a separate nursery) promotes the spread of nosocomial infections, and has negative influences on the bonding of mother and newborn, and on breastfeeding.

Counseling and follow-up

The care provider should make sure her- (or him-) self that the mother and her newborn are both in good condition. In a health facility further observation of both mother and baby should be guaranteed. If birth took place outside a health facility, the mother and the family have to know where they can seek help in case of emergency. Arrangements for further care in the first week and later should be made. Since many births do take place outside the health system, caregivers at community level should be trained to recognize and seek help for early signs of serious complications arising in mother or newborn. Those caregivers need clear instructions regarding the actions to be taken in the face of complications.

Duration of stay in health facility

A healthy mother and newborn need not be in a hospital. If the birth took place in a health facility, she may stay there for a while, especially if her home is far away and care is difficult to obtain in the home environment. However, the quality of the care is not dependent on the duration of the stay in a health care facility. What is essential is that adequate care should be provided. It is important to realize that the mother is member of a family and of a community, and that the birth of her child took place in this community. If she went to a health facility, she returns with her baby to her own family and community. The members of this community, especially her husband and other family members, as well as traditional birth attendants (TBA), should be involved in the care. Therefore they should be informed about the aims of the care and the signs of danger for mother and baby that would prompt them to call for professional help.

It is recommended that, when no complications are present, the postpartum hospital stay should be at least 6 hours for vaginal delivery and at least 4 days for caesarean birth.

4- CARE DURING THE FIRST WEEK POSTPARTUM

In the first week postpartum assessment of the condition of mother is important. This should be accompanied with appropriate advice and counseling, particularly where this is the woman's first child. The postpartum visit of mother during the first week should include:

1- History taking

A- Personal and Social History:

Note any changes since first visit, particularly check-up on habits like smoking.

B- Medical History:

- Review relevant issues of medical history as recorded at first visit.
- Check danger signs and symptoms.
- Note inter-current diseases, injuries, or other conditions since first visit.
- Note intake of medicines, other than iron and folate.
- Check Iron intake compliance.

C- Interim History:

Check again:

- Mother's overall feeling, as well as her feeling about her baby and motherhood
- Pain or fever postpartum
- Bleeding since delivery
- Problem with passing urine
- Decision about contraception
- Problem with breasts and breastfeeding
- Leg pain or unilateral swelling
- Treatment/medications since delivery
- Any other concerns

2- Physical exam

Perform routine physical examination and particularly pay attention to the followings:

- Blood pressure for detecting hypertension
- Abdomen exam for fundal height and distended bladder
- Vulva and perineum exam for tears, swelling, or pus, as well as bleeding and lochia.
- Signs of severe anemia (pale complexion, fingernails, conjunctiva, oral mucosa, tip of tongue, and shortness of breathe)
- Breast exam for any problem that may impact breastfeeding
- Temperature: body temperature of 38.0°C is abnormal, especially during the first days after delivery and a postpartum sepsis should be suspected.

3- Laboratory tests

Perform Hemoglobin (Hb) test, if signs of severe anemia present.

4- Assess for referral

If the following conditions are diagnosed, refer for specialist consultation and continue according to his/her treatment protocol:

- High blood pressure (more than 140/90 mm Hg)
- Excessive bleeding and/or severe anemia with Hb less than 7 g/dl
- Problems with urination
- Postpartum psychological problem
- Drug abuse
- HIV positive

If there are signs of severe anemia but Hb is more than 7 g/dl but, prescribe iron and folate tablets, or refer to District Hospital if shortness of breathe.

5- Services

Implement the following interventions:

- Iron and Folate supplements: continue one tablet of Ferrous Sulfate + Folic Acid (60+400) once a day. If Hb is more than 7 g/dl but less than 11 g/dl, double the dose. If Hb is less than 7 g/dl, refer to specialist.

- In case the mother is known to be non-immune to rubella, immunization may be offered, if feasible, and there should be guaranteed that she should use contraceptive for 3 months after this immunization.
- Refer high-risk cases, according to diagnosis made in “assess for referral” above.

6- Counseling

- Repeat all the advice given at the first visit.
- Give advice on whom to call or where to go in case of bleeding, high fever, or any other emergency, or when in need of other advice. This should be confirmed in writing (e.g. on the postpartum card), as at first visit.
- Support the woman in the initiation and practice of breastfeeding
- Counsel on contraception
- Provide nutritional advice and supplementation of women
- Schedule appointment for third visit at (or close to) 32 weeks.

7- Recording

Complete clinic record.

Complete postpartum card and give a copy of it to the client and advise her to bring it with her to all appointments she may have with any health services.

5- CARE DURING THE FIRST MONTHS POSTPARTUM

If mother and baby are healthy, after the first week frequent support by a care provider is no longer necessary. However, it is recommended that the mother is asked to come back for a check-up 6 weeks after birth. In the meantime, she will need advice on the condition of the baby, and possibly on breastfeeding or other problems that may arise.

During the check-up consultation of the mother at 6 weeks after delivery, the care provider should ask the woman about her well-being and possible complaints or problems. There is more maternal morbidity in the postpartum period than most care providers are aware of. Traditionally a vaginal examination is performed, but it is not recommended, except to check the healing of a large tear, or if the woman complains about pain or other discomfort.

Hemoglobin may be measured, especially if anemia has occurred during pregnancy or in the postpartum period.

It is important, if possible, to involve the husband in the consultation. Often women and their husbands feel the need to discuss the course of labour, and events that occurred at that time. Questions should be answered, and information given. However, most important is the future: if future pregnancies are planned, are there special measures that should be taken, considering the course of the last pregnancy and labour? And what about family planning? How long will breastfeeding be continued, and is its protection against pregnancy adequate? Are additional contraceptive measures necessary?

Combined advice on breastfeeding and contraception is essential. Contraceptive counseling belongs to the most important aspects of postpartum care; further help or referral for further consultation should be offered. It is important that the husband is involved in this counseling.

CHAPTER 3. POSTPARTUM MATERNAL HEALTH NEEDS AND CHALLENGES

1. MATERNAL NUTRITION

Introduction

The nutritional status of the woman during adolescence, pregnancy, and lactation has a direct impact on maternal and child health in the puerperium. Selected interventions and dietary advice can affect a woman's nutritional status, whether or not she is breastfeeding.

In many developing countries the nutritional status of large segments of the population, especially of women, is inadequate. Under nutrition of women can be attributed to discrimination in terms of food allocation, to the heavy burden of physical labour, and to high fertility rate. Women start their reproductive function at an early age, and the sequence of pregnancy followed by about 2 years of lactation until a new pregnancy occurs, will be repeated many times if no effective family planning method is available. This pattern also applies to Afghanistan.

In Afghanistan, the "Public Nutrition Policy and Strategy: 2003-2006" has spelled out specific strategy to reduce nutritional risks for women throughout their life-cycle through implementation of integrated health, nutrition, and food security interventions. Suggested activities under this strategy include:

1. Facilitate and support increase in women's daily food intake during pregnancy, in terms of quality and quantity, through improved household food security and appropriate intra-household distribution.
2. Folic/iron supplements are provided throughout pregnancy and iron supplements are provided for three months beyond pregnancy through antenatal care.
3. Provision of Vitamin A supplements to women soon after birth (and before eight weeks post-partum) through postpartum care.
4. Facilitate and support improved access to micronutrients for women through food diversification (equitable intra-household distribution, market access, improved household food security), parasitic control, improvement in hygiene behaviors.
5. Facilitate and support access to iodized salt for women.
6. Support women to exclusively breastfeed for six months, to contribute to longer birth spacing.
7. In extremely food insecure areas, support and promote distribution of dry ration food supplement to women through pregnancy and until infant's reaches 6 months of age.
8. Contribute to further understanding effective interventions to improve women's nutritional status in Afghanistan.
9. Undertake research to document prevalence and etiology of low-birth weight (LBW) and formulate appropriate response to address the problem.

Diet during pregnancy

Studies concluded that balanced energy/protein food and food supplementation modestly improves fetal growth but is unlikely to be of long-term benefit to pregnant women or their infants. Positive effects of energy supplementation for pregnant women on birth weight in famine conditions have been shown. Supplementation with protein and energy during the third trimester of pregnancy may be worthwhile in cases of serious under nutrition. However, the diet

and dietary supplementation of undernourished women should not only be considered because it might produce more healthy children; promotion of maternal health has a value in its own.

General diet postpartum

Women's intake should be increased to cover the energy cost of lactation: by about 10% if the woman is not physically active, but 20% or more if she is moderately or very active. The need for this increase is generally not realized. Eating more of the staple food (cereal or tuber) or greater consumption of non-saturated fats (e.g. foods containing vegetable oil) is a simple, healthy, and low-cost way of doing this. Virtually all dietary restrictions should be avoided. Access to adequate foods is essential, if necessary (e.g. in emergency situations, or very poor populations) through food supplements providing about 500 kcal/day. This could come, for instance, from 100 g of cereal + 50 g of pulse, or 500 g of tuber, 55 g oil, or 100 g peanuts.

It is important to ensure that women's nutritional status is not undermined by failure to compensate for the demands of lactation. The effect of cultural norms, beliefs, and restrictions on the nutritional status of women should not be underestimated.

Prevention of micronutrient deficiencies

Micronutrient malnutrition is the term commonly used when referring to deficiency of micronutrients (vitamins or minerals). The three main vitamin or mineral nutritional deficiencies of public health significance in the postpartum period are:

1. iodine deficiency disorders (IDD)
2. vitamin A deficiency
3. iron deficiency anemia.

The main causes of micronutrient malnutrition are inadequate intake of foods providing these micronutrients and their impaired absorption and/or utilization.

Iodine deficiency:

Iodine deficiency is a major risk factor for both the physical and mental development of an estimated 1600 million people living in iodine deficient environments around the world. It is also common in Afghanistan. Iodine deficiency during pregnancy causes brain damage to the fetus; in childhood it can cause mental retardation and neurological disorders. The severest form is cretinism, a combination of these disorders with severe growth retardation.

Iodine deficiency is entirely preventable and should be corrected at the earliest possible moment in life, preferably before conception but if not, early in pregnancy. Failing that, the deficiency must be corrected early in infancy. Iodination of salt has been shown to be a low-cost, highly effective means of preventing the deficiency. In some countries of the industrialized world, and also in some developing countries the problem has been eliminated by this method. Iodized oil by mouth or by injection can also be used as an interim measure in endemic regions where provision of iodized salt may not be feasible. In Afghanistan MOH strategy is provision of iodized salt.

Among the target populations for iodized oil are women of childbearing age including pregnant and postpartum women, infants, and preschool children. The recommended oral dose for fertile

women is 400-600 mg (2 or 3 capsules). It is recommended that administration of iodized oil be effected before pregnancy or as early in pregnancy as possible, because otherwise it will miss the critical stage of fetal brain development. If the pregnant woman has not received a dose of iodized oil in the last trimester of pregnancy, a dose should be given to the mother early after delivery.

Vitamin A deficiency:

Vitamin A deficiency is the most common cause of preventable childhood blindness, but its effects on the parturient woman are less known. Insufficient dietary intake and absorption of vitamin A results in nearly 13 million pre-school age children suffering from severe forms of eye damage: night blindness and eventual blinding xerophthalmia. It is also associated with increased severity of illness, especially measles, diarrhea, and respiratory infections.

Prevention of vitamin A (and C) deficiency can be aimed for by ensuring regular intake of orange-colored fruits and vegetables, and dark green leafy vegetables. In many communities, it is also attained by fortification of foods such as dairy products, margarine, and other fat products. Use 200 000 IU of oil miscible vitamin A once is recommended for lactating mothers, only during the first month after delivery. It is important not to give this dose of vitamin A to women of childbearing age in general, or to lactating women more than two months after delivery, because high doses may be teratogenic in early pregnancy.

Iron and folate deficiency:

Iron and folate deficiency are responsible for anemia in approximately 2000 million people worldwide, due to diets with insufficient iron and folate content, to reduced bioavailability of dietary iron and losses due to parasitic infections and repeated attacks of malaria. Pregnant women and pre-school children are the most affected. In Afghanistan, anemia has been detected in nearly 70% of women at reproductive age. Parasitic infestations causing iron deficiency are hookworm (*Ancylostoma* and *Necator*), but bacterial and viral infections can also cause play a role, particularly in young children. Anemia in pregnant women aggravates the effects of maternal blood loss and infections at childbirth, and is thereby a major contributor to maternal mortality in the postpartum period.

Prevention and treatment of iron deficiency anemia is possible by encouraging foods rich in iron (e.g. liver, dark green leafy vegetables) and foods that enhance iron absorption (foods of animal origin, fruits, and vegetables rich in vitamin C). Substances that inhibit iron absorption such as tea or coffee, and calcium supplements, should be avoided or taken 2 hours after meals. Prevention at a population basis is possible by fortification with iron of salt and other food products (bread, curry powder or sugar, dependent on the consumption pattern). Another approach is supplementation with iron and folate of high-risk groups such as pregnant and lactating women, infants, and pre-school children.

One tablet of Ferrous Sulfate + Folic Acid (400+60) once a day for 4 months is recommended for lactating women. In areas of low prevalence 1 tablet of ferrous sulphate daily may be sufficient, but in these areas another approach is to give iron therapy only if anemia is diagnosed or suspected. Which of the two possibilities is chosen depends on the prevailing pattern of prenatal care. Maternal folate deficiency is also responsible for an increased incidence in neural

tube defects. In areas of high endemicity prophylactic anti-malarial and anti-helminth management is advised.

2. BREASTFEEDING

The establishment and maintenance of breastfeeding should be one of the major goals of quality postpartum care. Human breast milk is the optimal food for newborn infants. Through the ages the human species has been dependent on it for its young, animal milk being used only as an emergency measure if no human milk was available, usually with disastrous consequences. Only in the second half of the 20th century have modified cow's milk preparations or "formula" become readily available which are closer to human milk in nutrient quantity, but still very different in quality, and lacking in immune factors. For detailed information and operational recommendations on breast-feeding refer to other national standards of reproductive health services, particularly National Standards for Newborn Care Services.

Early suckling

It is recommended that the baby be given to the mother to hold immediately after delivery, to provide skin-to-skin contact and for the baby to start suckling as soon as s/he shows signs of readiness – normally within one hour after birth. Early skin-to-skin contact and early suckling is associated with more affectionate behavior of mothers towards their infants; mothers who start to breastfeed early have fewer problems with breastfeeding. Early suckling also influence uterine contractions and thus reduce postpartum blood loss.

Positioning and attaching the baby to the breast

Inaccurate and inconsistent guidance from health staff has been recognized as a major obstacle to breastfeeding. It is suggested. That the ability of a woman to attach her baby correctly to her breast seems likely to be predominantly a manual skill, which the mother must acquire from observation and practice. When a baby is properly attached, the nipple, together with some of the surrounding breast tissue, is drawn out into a teat by the suction within the baby's mouth. A peristaltic wave passing along the tongue of the baby applies pressure to the teat and removes the milk. If the baby is incorrectly attached milk is not effectively removed and the nipple may be damaged by friction as the teat is drawn in and out of the mouth. If the attachment is not corrected, sore nipples and engorgement are more common. In this case, the baby may get insufficient milk and the mother is more likely to stop breastfeeding

The need to avoid supplementary feeds

In some hospitals it is common practice to give breastfed babies supplements of formula or glucose water while lactation is becoming established. This practice is unnecessary because a healthy baby does not need extra fluids or feeds before breastfeeding is established. Supplementation is also harmful because bottle-feeding may interfere with the initiation and continuation of breastfeeding. Babies who have had their appetite satisfied with an artificial feed may lose interest in trying to breastfeed; so they take less breast milk and so the mother produce less breast milk (supply-demand principle).

Rooming in and unrestricted breast-feeding

It has been common practice in many hospitals to separate mothers and babies and to put the babies in a nursery, to allow the mothers to rest and the babies to be observed. No advantages have been proven in this and outbreaks of infection in nurseries are associated with this practice. Keeping babies with their mothers in the same room or the same bed from birth prevents infections and increases the success of breastfeeding, especially when it is combined with breastfeeding guidance.

In developed countries it is still common to advise women to limit suckling time and to feed at fixed intervals. One of the reasons given is to prevent sore nipples. However, studies have shown that mothers, who had fed their babies without restriction of feeding intervals or duration, were less likely to experience breast engorgement and sore nipples. Their babies were more likely to have regained their birth weight by the time they were discharged home from the maternity, and more likely to be fully breastfed one month after delivery.

Lactation suppression

If a baby dies or a woman chooses not to breastfeed her infant, there may be a need to suppress lactation. Pharmacological methods that are sometimes used include:

- Oestrogens (sometimes combined with testosterone), the effect of which is doubtful and in the postpartum period there is a risk of thromboembolic disease.
- Bromocriptine inhibits prolactin release, and is effective in the suppression of lactation. However, it is contradicted if woman has high blood pressure.

Although the reported serious side effects are rare, it seems inappropriate to prescribe a drug with potential harmful consequences for this indication. The preferred method is to let the milk dry up naturally by not breastfeeding. If necessary, small amounts of milk can be expressed to relieve engorgement. In the meantime a well-fitting bra and an analgesic will be useful.

3. BIRTH SPACING

General recommendations

It is often stated that in the postpartum period one of the major concerns of the woman (and her husband) is contraception. The fact that she has given birth to a child for whose care and upbringing they are now responsible, should prompt them to realize that another child will soon be there if they do not take steps to prevent or postpone the next birth.

In the case of the parturient woman and her husband a number of different factors affect the decision about contraceptive method. These include the physiological processes of the puerperium, when fertility returns and ovulation is re-established, whether or not the woman is exclusively breastfeeding, and what the couples wish with regard to the resumption of sexual activity. Couples are frequently unaware of the implications of these different factors and this is a major argument for providing the opportunity to discuss family planning options at the earliest opportunity after birth. Couples may be unaware of the range of family planning methods (short term, long-acting, hormonal, barrier, temporary or permanent) available to suit their

varying goals, choices, and needs. Such counseling, advice, and the provision of services that accompanies it, must form an integral part of any postpartum service.

The following section is simply a brief résumé of some of the salient points in postpartum family planning. These recommendations are meant for healthy women with a healthy baby. In case of maternal disease, obstetric complications, caesarean section, preterm or ill infants specific advice should be given dependent on the situation.

More detailed information on Postpartum Contraception is contained in the National Standards for Family Planning Services, approved and distributed by the Ministry of Health, Afghanistan, which offers comprehensive coverage of the issues related to the needs of couples during the postpartum, as well as throughout the reproductive life cycle. Table 3 is the summary of recommendations, as appeared in the National Standards for Family Planning Services for birth Spacing.

Table 3 Contraceptive methods for postpartum mothers in the first six months after delivery

Method	Timing	Remarks
Lactational Amenorrhoea Method	Immediately after delivery.	98% effective provided the eligibility criteria (1. the interval between breast feedings should not exceed 4 hours during the day and 6 hours during the night, 2. Feeding is on demand more than 6 times in 24 hours, and 3. not on supplementary feeding or extra fluids) are met.
Injectable (DMPA)	At six weeks after delivery	<ul style="list-style-type: none"> - If menstruation has started, rule out pregnancy. - Not recommended before six weeks, as the neonate may be at risk of exposure to hormones through breast milk. - Does not affect quantity or quality of breast milk.
Combined Oral Contraceptive Pills	Not recommended before six weeks postpartum, and should be avoided from six weeks to six months postpartum unless no other appropriate method is available.	<ul style="list-style-type: none"> - Before six weeks, the women may be at increased risk of thrombosis, particularly in the first 3 weeks, and neonates may be at risk of exposure to hormones through breast milk. - Decreases the quantity of breast milk.

IUD	At six weeks after delivery	<ul style="list-style-type: none"> - Fewer side effects such as pain or bleeding in breastfeeding women. - Does not affect the quantity or quality of breast milk.
Condoms	Any time	Useful as an interim method, if use of another method has to be postponed.

Source: MOH-Afghanistan. National Standards for Family Planning Services for Birth Spacing. MOH, Kabul, November 2003.

Breast-feeding mother

In the immediate postpartum period, it is of prime importance for the care provider to help the woman initiate breastfeeding and to support her to continue it. If the mother fully breastfeeds the baby, she can (at least for the first 6 weeks) rely on the contraceptive effect of lactational amenorrhoea. If she is breastfeeding, she is advised not to take any hormonal preparation during this period.

After 6 weeks the decision has to be taken whether the mother plans to continue full breastfeeding in the next months. If so, she may decide to rely on lactational amenorrhoea as a contraceptive method, strictly adhering to the rules that an alternative method is required as soon as menstruation returns or when she is giving the baby more than occasional supplements.

If 6 weeks or more after birth an alternative contraceptive is required, during lactation the first choice of a hormonal method is injectable DMPA. Combined oral contraceptives are generally not advised, but may be given if other methods are not available or acceptable to the woman. Combined contraceptives should be avoided until 6 months after birth, or until the baby is weaned, whatever comes first. Other methods of choice are the introduction of an IUD and barrier methods (condoms), which are good alternatives.

Non-breast-feeding mother

If the mother decides not to breastfeed immediately after birth, she will need the protection of a contraceptive at an earlier date, because ovulation is to be expected earlier. Injectable DMPA is the contraceptive of choice in this case. The objection against the immediate start with combined contraceptives is the risk of thrombosis. If she wishes to use combined contraceptives, it is advised to start with a low-dose preparation at least 3 weeks after delivery, because of coagulation factors in the postpartum period.

4. IMMUNIZATION

Immunizing the mother is an important way of preventing a disease or a malformation in the newborns. If this was done for this birth, the opportunity in the perinatal period should not be missed for the next pregnancy.

The target diseases

- 1- Tetanus: Women (pregnant or non-pregnant) of childbearing age who have not previously been immunized with TT in their infancy or adolescence should be immunized, both to protect themselves and to protect their newborns against neonatal tetanus. A five-dose schedule is recommended for the previously unprotected woman as follows:
 - TT1 at first contact or as early as possible in pregnancy.
 - TT2 at least 4 weeks after TT1.
 - TT3 at least 6 months after TT2.
 - The two last doses are given after at least one year, or during a subsequent pregnancy.

- 2- Passive immunization postpartum against rhesus-sensitization
One of the most effective immunological interventions postpartum is the Rh-prophylaxis in Rh-negative women who did not produce anti Rh-D antibodies during pregnancy, and who gave birth to an Rh-positive infant. They receive anti Rh-D 200 µg within 24 hours or at the latest 72 hours postpartum. This eliminates fetal Rh-D positive erythrocytes that have reached the maternal circulation during labour and delivery, and prevents Rh-sensitization of the mother in a high percentage. The implementation of Rh-prophylaxis requires an elaborate organization and is not universally available. Where the possibility exists, all pregnant women are screened for Rh-D, and if they are Rh-negative, Rh-D antibodies are determined at 32 weeks of pregnancy. After birth Rh-D of infants of Rh-negative mothers is determined, and anti Rh-D should be available if the infant is Rh-D positive.

- 3- Postpartum rubella vaccination
The postpartum period is an appropriate time for immunization against rubella, because pregnancy is a relative contraindication to rubella immunization, and the probability of pregnancy occurring within 30 days of delivery is extremely small. It has been shown to be effective. If during pregnancy a rubella test has been done and has shown the woman to be non-immune to rubella, immunization can be offered in the early puerperium, if feasible. Thus congenital malformations due to rubella in subsequent pregnancies may be prevented.

4. POSTPARTUM HEALTH CHALLENGES

A number of serious complications and the majority of maternal deaths occur in the postpartum period, especially in developing countries. Table 4 briefly describes the main life threatening and other major complications in the postpartum period. This is followed by a description of the task of the care provider in the early detection of problems and the measures to be taken to provide adequate care. "Care provider" is not understood to mean the care provider in a well-equipped hospital, but the skilled birth attendant (midwife, physician, or nurse working in primary care) in the community, in a birth center, or in the maternity clinic. In the home, the primary care provider may be a TBA, trained or untrained. Her role can complement that of the skilled personnel within the health system. The woman may be at home or in the birth center. If

necessary, the care should include transport to a place where appropriate treatment can be provided.

Table 4 Major postpartum health challenges

Condition	Major Features	Key Actions
Postpartum hemorrhage *	<ul style="list-style-type: none"> - The most important single cause of maternal death, majority of deaths (88%) occur within 4 hours of delivery. - Major predisposing factor is anemia. - Major causes: uterine atony, retained placenta, vaginal or cervical lacerations, and uterine rupture or inversion - Usually hemorrhage starts in the third stage of labour or shortly thereafter, but sometimes occur in the days following birth or even in the second week (secondary postpartum hemorrhage) usually because of retained parts of the placenta. - Rarely manifested by vulval hematoma. 	<ul style="list-style-type: none"> - Evaluate blood pressure, pulse, and general well-being urgently. - In case of completely delivered placenta, first administer oxytocin, then perform gentle abdominal massage until the uterus contracts. - Empty the bladder. - Stabilize the patient. - Arrange emergency transportation and referral to hospital.
Pre-eclampsia *	<ul style="list-style-type: none"> - Third most important cause of maternal mortality, substantially occur in less than 48 hours postpartum. - The most serious complication is intracerebral hemorrhage. 	<ul style="list-style-type: none"> - Measure and record blood pressure after delivery frequently. - Identify swiftly symptoms - Arrange emergency transportation and referral to a hospital or referral center. - Stabilization, support, and adequate nursing care are critical during transfer. - The treatment of choice is magnesium sulphate.
Puerperal genital infection	<ul style="list-style-type: none"> - still a major cause of maternal mortality - Predisposing factors include prolonged labour, pre-labour rupture of the membranes, frequent vaginal examination, and caesarean section. - Fever (temperature >38.0°C oral) - Increase in lochia with a bad smell. - May proceed to sepsis. - a rise of temperature during labour or in the first hours or days after delivery is a danger sign 	<ul style="list-style-type: none"> - Refer to specialist. - Antibiotic therapy is the treatment of choice. - In case of sepsis, refer to hospital.

Thromboembolic disease (TED)	<ul style="list-style-type: none"> - The first clinical sign is pain in the leg. - Other signs include a slight rise of temperature and pulse. - Later the leg may become swollen and edematous, initially warm and subsequently cold and pale (phlegmasia alba dolens). - Cerebral thrombosis is rare and resembles eclampsia. - Pulmonary embolism is the most serious manifestation and the main cause of TED mortality. 	<ul style="list-style-type: none"> - Early mobilization after delivery, i.e. day one, is the major prophylactic action. - Treatment is by anticoagulants, preferably in a hospital and supervised with laboratory methods. - A patient suspected of embolism should urgently be transported to a hospital for further diagnosis and treatment.
Retention of urine	<ul style="list-style-type: none"> - A frequent phenomenon. - It is caused by several factors, including fetal press against the urethra and the bladder that cause edema. - Complaints include increasing pain in the lower abdomen, and subsequently of the involuntary loss of small amounts of urine (overflow incontinence). - Signs include upward displacement of the contracted uterine body and a large painful cystic swelling in the lower abdomen. 	The therapy is catheterization.
Incontinence	<ul style="list-style-type: none"> - Stress incontinence is common in the postpartum period. - Serious incontinence may be a sign of a very serious complication: vesicovaginal fistula. - Caused by long-lasting pressure of the fetal head against the bladder and the urethra. - Vesicovaginal fistula can also be caused by traumatic instrumental delivery. 	<ul style="list-style-type: none"> - Prevention include managing prolonged and obstructed labour. - Surgical therapy for vesicovaginal fistula, several months after delivery.
Urinary tract infections	<ul style="list-style-type: none"> - Frequently occur during the postpartum period. - Fever is often a sign of infection. 	Diagnose and treat a urinary tract infection in time.
Complaints about the perineum and the vulva	<ul style="list-style-type: none"> - Pain in the perineum and the vulva. - Trauma (perineal tears, episiotomy, or labial tears) is the major cause. 	<ul style="list-style-type: none"> - Administration of mild analgesics. - Regular inspection of the perineum. - Treatment of infection, if occur. - The use of episiotomies should be restricted.

Puerperal mastitis	<ul style="list-style-type: none"> - In the early stages, mastitis is mainly due to poor drainage of milk from part or the entire breast, as a result of poor suckling technique. - Breast abscess is rare. 	<ul style="list-style-type: none"> - Breastfeeding technique should be corrected and breastfeeding should be continued. - Antibiotics can be given if the condition does not improve within 12-24 hours or if the initial condition is very acute. - The therapy of choice for a breast abscess is surgical, plus antibiotic therapy (flucloxacillin or erythromycin)
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* For detailed information about the management of postpartum hemorrhage, refer to IMPAC manual.

5- POSTPARTUM PSYCHOLOGICAL PROBLEMS

Although the days after birth are generally considered a period of intense happiness, this period has its dark sides too. During some of these days or even during several weeks many mothers do not feel happy at all; the postpartum period should be considered as a vulnerable time for the development of emotional and psychological disorders.

The last part of pregnancy and childbirth can be troublesome. The body goes through rapid changes, especially hormonal. In the first days postpartum the body often feels painful and uncomfortable. The regular care of the baby involves new tasks and uncertainties, and disturbs the night's rest; the relationship with the husband changes, especially after the birth of a first child. In many occasions, women have occupations outside their homes; with the birth of her child the woman assumes her two- or even threefold duties: motherhood, external occupation, and household activities. In the nuclear families these problems may be different from those of extended families, where support from family and neighbors is more commonly available. However, the rapidly growing phenomenon of urbanization is reducing the potential for postpartum support in many places.

Three different types of postpartum psychological disorders have been described: postpartum blues, postpartum depression, and puerperal psychosis.

Postpartum blues

Postpartum blues is characterized by mild mood disturbances, marked by emotional instability (crying spells apparently without cause, insomnia, exaggerated cheerfulness, anxious tension, headache, irritability, etc.). Usually the complaints develop within the first week postpartum, continue for several hours to a maximum of ten days and then disappear spontaneously. Because of their frequency (30-70%) postpartum blues are sometimes considered a normal physiological event. It is assumed that biological changes in the first week postpartum are responsible.

While these symptoms are unpredictable and often unsettling, they do interfere with a woman's ability to function. No specific treatment is required; however, it should be noted that sometimes the blues heralds the development of a more significant mood disorder, particularly in women who have a history of depression. If symptoms of depression persist for longer than two weeks, the patient should be evaluated to rule out a more serious mood disorder.

Postpartum depression

Postpartum depression is a more protracted depressive mood with complaints of affective nature: the woman is gloomy, depressed, irritable, and sad. She may have complaints of cognitive and vital nature: insomnia, lack of appetite, disturbance of concentration, and loss of libido. Major symptoms of postpartum depression include:

- Depressed or sad mood
- Tearfulness
- Loss of interest in usual activities
- Feelings of guilt
- Feelings of worthless or incompetence
- Fatigue
- Sleep disturbance
- Change in appetite
- Poor concentration
- Suicidal thoughts

These complaints are not unique to the postpartum period, and postpartum depression is discussed under depressive disorders. Therefore, postpartum depression is clinically indistinguishable from depression occurring at other times during a woman's life. It is true that the postpartum period is a vulnerable time for some women. Circumstances associated with motherhood (such as availability of social support and changes in life style) play a trigger role. Postpartum thyroid dysfunction may contribute. The incidence of severe postpartum depression has been reported as 6%, and the most vulnerable period is between 8 and 20 weeks postpartum. Depression occurring later is more protracted and more serious than in the early postpartum period. Depression has an important influence on maternal-infant interaction during the first year, because the infant experiences inadequate stimulation.

In severe cases, treatment may consist of psychotherapy (cognitive-behavior therapy) and antidepressants, and is not different from the treatment of depression in general. Conventional antidepressant medications (fluoxetine, sertraline, fluvoxamine, and venlafaxine) are efficient in the treatment of postpartum depression and standard antidepressant doses are effective and well tolerated. The choice of an antidepressant should be guided by the patient's prior response to antidepressant medication and a given medication's side effect profile. Specific serotonin reuptake inhibitors are ideal first-line agents, as they are anxiolytic, non-sedating, and well tolerated. Tricyclic antidepressants are frequently used and, because they tend to be more sedating, may be more appropriate for women who present with prominent sleep disturbance. Given the prevalence of anxiety symptoms in this population, adjunctive use of a benzodiazepine (e.g. clonazepam or lorazepam) may be very helpful.

The support from care providers for distressed postpartum women/couples is also very important and is associated with a decreased incidence of women's distress six months later. It is not yet clear if such support is best provided by highly trained care providers, or if support by lay women or self-help groups is sufficient. For the prevention of depression, the labour

environment also seems important: companionship during labour is associated with lower depression and anxiety ratings 6 weeks after delivery.

Puerperal psychosis

Postpartum psychosis is a much more serious disturbance, that should be distinguished from both other depressive mood disorders. It occurs in 0.1-0.2% of all postpartum women; symptoms usually start at the end of the first week, sometimes in the second week, seldom later.

The woman is anxious, restless, and sometimes manic with paranoid thoughts or delusions. She reacts abnormally towards her family members. Gradually it becomes clear that a psychotic disturbance exists that may become dangerous for herself and for the baby. Admission to a psychiatric department is necessary, preferably with her baby. The psychotic disease as such cannot be distinguished from other psychoses, nevertheless the moment the disease manifests itself is apparently not coincidental. This can be concluded from the fact that the same woman after a subsequent pregnancy has a clearly increased chance of recurrence of the puerperal psychosis. These women also have an increased risk of psychotic disorder in other stressful circumstances.

The task of the primary care provider is to be watchful and to diagnose the disease in time. A past history of psychotic illness should alert care provider to potential problems. Where there are clear signs of psychosis the patient should be admitted to a hospital where she can receive appropriate treatment and support.

Puerperal psychosis is considered a psychiatric emergency that typically requires inpatient treatment. Acute treatment with either typical or atypical anti-psychotic medications is indicated. Given the well-established relationship between puerperal psychosis and bipolar disorder, postpartum psychosis should be treated as an affective psychosis and a mood stabilizer is indicated. Electro-convulsive therapy is well tolerated and rapidly effective for severe postpartum psychosis, as well as well severe cases of postpartum depression.

REFERENCES

- WHO. Postpartum Care of Mother and Newborn: A Practical Guide. WHO, Geneva, 1998.
- WHO and UNICEF. Essential Antenatal, Perinatal, and Postpartum Care. WHO (Regional Office for Europe) and UNICEF, Copenhagen, September 1998.