GUIDELINE FOR POSTNATAL & POSTABORTAL CARE IN PRIMARY HEALTH CARE SETTINGS AND OUTPATIENT CLINICS IN THE KINGDOM OF BAHRAIN

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CHAPTER ONE

INTRODUCTION

**Definition of postpartum period:**

The postpartum period, or puerperium, starts about an hour after the delivery of the placenta and includes the following six weeks. Postpartum care should respond to the special needs of the mother and baby during this special phase \(^{(1)}\).

The postpartum period is an exciting, dynamic time in a woman’s life, and the family physician plays an important role in promoting a smooth transition through this period. Physicians can ensure quality postpartum care through a thorough and consistent approach to medical and psychological conditions \(^{(2)}\).

The American Academy of Pediatrics (AAP) and the American College of Obstetricians and Gynecologists (ACOG) recommend that women who give birth have a postpartum care visit (PPCV) 4-6 weeks after delivery \(^{(3)}\). The World Health Organization (WHO) points out that although there is no official definition, the traditional six week duration is consistent with the 40-day period commonly observed in many countries \(^{(2)}\).

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. The uterus and vagina have regained their pre-pregnant proportions. Physiological changes during pregnancy, such as increased cardiac output and blood volume, increased extracellular fluid (oedema) and changes in the composition of the blood, have subsided. The sudden disappearance of placental hormones after delivery, and the start of lactation have caused drastic endocrinological changes in the first weeks, but after six weeks a steady state has been reached. The psychosocial adaptation of the mother, the baby and the family to the new situation usually has attained a new balance. 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 be problematic for many couples at this time \(^{(4)}\).

**Breastfeeding:** \(^{(2)}\)

Breastfeeding is beneficial for the baby and the mother. Breastfeeding reduces the baby’s
risk for gastrointestinal tract infections and atopic eczema and, for at least six months, it can serve as a contraception method for lactating women who remain amenorrheic postpartum. WHO recommends at least four to six months of breastfeeding and, initially, eight or more feedings per 24 hours. Breastfeeding is a learned skill for mother and baby and can be aided by early practice and encouragement and specific coaching on the positioning and attachment of the infant to the breast. Unrestricted breastfeeding intervals and duration help reduce engorgement and sore nipples and increase the likelihood that the mother will be breastfeeding full time at one month postpartum. Women who have access to bottle supplements at the hospital or at discharge are five times more likely to stop breastfeeding in the first week following delivery and two times more likely to stop in the second week.

A systematic evidence review and meta-analysis found that educational programs were the most effective single intervention in promoting initiation and short term duration of breastfeeding. Telephone or face-to-face support increased short- and long-term duration of breastfeeding. Written materials did not increase breastfeeding rates. The U.S. Preventive Services Task Force (USPSTF) found fair evidence that combining structured breastfeeding education and behavioral counseling programs increased initiation and continuance rates by up to three months. They also found fair evidence that ongoing support increased continuation rates at six months. The USPSTF found insufficient evidence that counseling by primary care providers during routine visits was effective and poor evidence that peer counseling alone was effective. Evaluation should begin with a breastfeeding history (i.e., frequency and duration of feeds; nipple problems such as cracking, pain, and bleeding; and mastitis symptoms such as redness, warmth, pain, fever, and malaise). During the physical examination, the physician should ensure proper positioning and attachment of the infant during breastfeeding and assess for nipple problems and engorgement with erythema, tenderness, and induration. Physicians should also encourage the patient to increase the frequency and duration of feedings for maximal milk production, and should suggest that the mother use nipple shields, creams, and topical breast milk for nipple problems.

Early referral to a lactation service or feeding clinic should be considered if the mother is discouraged or struggling, or if infant nutrition is a concern. Hospitals and health systems usually have lactation services, and local groups also may offer support for the breastfeeding mother. Women who return to work can best maintain breastfeeding if they plan for the challenges of this transition by learning how to use a breast pump and properly store milk. Early mastitis usually can be managed by improving milk removal through increased nursing and expression of milk (manually or via breast pump). If the mastitis is secondary to a bacterial infection and does not improve within 12 to 24 hours, or if initial presentation is severe, antibiotics are indicated (e.g., 500 mg dicloxacillin [Dynapen] or cephalexin [Keflex] four times daily for seven to 10 days). Breast abscesses usually require incision and drainage.
**Sexuality and Contraception:** (2)

Libido and sexuality are common concerns during the postpartum period. Libido may decrease after delivery, possibly because of decreased estrogen levels. Some surveys have shown that pre-pregnancy estrogen levels may not return for as long as one year postpartum. The length of time for women to wait to have intercourse following delivery is variable; the average is six to eight weeks in the United States, but it may be shorter or much longer.

No consistent correlation exists between delivery complications (e.g., vaginal lacerations) and a delay in resuming intercourse. However, the majority of patients report some type of sexual problem postpartum. Breastfeeding can delay the return to intercourse, possibly because estrogen levels remain low in these women. Other significant factors affecting postpartum sexual function include body image changes, fatigue, and fear of pregnancy.

Breastfeeding or not, postpartum women have unique contraceptive needs. Although evidence suggests a delay in resumption of ovulation in breastfeeding women, contraception should be addressed before the traditional six-week postpartum office visit to prevent unintended closely spaced pregnancies.

The prenatal period is the best time to discuss postpartum contraception; many women feel that these discussions are too brief when held in the hospital after delivery and are crowded by additional postpartum information. Written materials also have been shown to improve a woman’s ability to make an informed choice about her method of birth control.

**Weight Retention:** (5)

Weight change in the postpartum period is a dominant concern of new mothers. Postpartum weight retention has important public health implications as well, because retention of gestational weight can be a significant contributor to long-term obesity and associated health risks. Family physicians should be aware of normal postpartum weight loss patterns, as well as risk factors for weight retention, so they can assist their patients in achieving a healthy postpartum weight.

The greatest amount of weight loss occurs in the first three months postpartum and then continues at a slow and steady rate until six months postpartum.

A recent prospective trial of 21 overweight, exclusively breastfeeding women found that caloric restriction by 500 kcal per day and 45 minutes of exercise per day, four days a week, resulting in a weight loss of approximately 0.5 kg per week between four and 14 weeks postpartum, did not affect the growth of their infants when they were compared with a control group who neither restricted calories nor exercised more than once a week.
Besides lactation, factors such as pre-gravid weight, gestational weight gain, age, parity, race, smoking status, exercise history, marital status, and employment have been investigated for a relationship to postpartum weight loss.

The Institute of Medicine (IOM) recommends that women with a normal pre-gravid body mass index (BMI) of 19.8 to 26 should gain 11.5 to 16 kg during pregnancy; underweight women (BMI of less than 19.8) should gain 12.5 to 18 kg; overweight women (BMI of 26 to 29) should gain 7 to 11.5 kg; and obese women (BMI of greater than 29) should gain 6 kg.

Adolescent and black patients are at higher risk for postpartum weight retention.

Family physicians should counsel their patients during pregnancy about the risks of excessive weight gain and subsequent obesity. Gestational weight gain in excess of current IOM recommendations (even in patients with a normal pre-gravid BMI) can lead to significant postpartum weight retention, especially in growing adolescents, minorities, and low-income patients.

Family physicians can help patients develop realistic weight loss goals in the postpartum period and beyond, emphasizing that postpartum weight loss normally proceeds slowly and steadily. Lactation may not facilitate weight loss, especially if the patient consumes a high-calorie diet and does not routinely exercise for an adequate amount of time.

**Exercise:**

Published studies confirm the importance of regular exercise in the postpartum period, as in other times of life, although its effect on weight loss may not be significant without specific calorie restriction. Women can be reassured that exercise will promote healing, support emotional well-being, and not adversely affect their ability to breastfeed successfully. Even strenuous exercise minimally increases lactic acid levels in breast milk and has no effect on an infant’s acceptance of breast milk one hour after exercise.

One study found that women who consume adequate amounts of long-chain polyunsaturated fatty acids (LC-PUFA), which are essential for infants’ growth and development, can exercise moderately without decreasing the LC-PUFA in their breast milk. Breastfeeding before exercise may reduce the discomfort of engorged breasts.

Evaluating the integrity and function of the pelvic floor and assessing the diastasis recti are integral components of the postpartum visit. Kegel exercises have been shown to be effective in reducing the incidence of stress incontinence. Proper technique is important.

Patients should be instructed to contract the pelvic muscles for 10 seconds and then relax them for 10 seconds for 15 minutes four times per day. Women may need help from a qualified provider in locating the right muscles antepartum.

Providers can offer information on postpartum exercise programs available at the YMCA,
fitness centers, or hospitals in the community to all new mothers in the birth center, hospital, or at the four- to six-week visit. Postpartum exercise programs are good resources that offer opportunities for physical activity, mutual support, short-term daycare, and a way to meet other women with infants. New mothers also may find it convenient to use postpartum DVDs or videos to supplement their exercise regimen. Fast walking with a baby jogger-type stroller, either outdoors or in a local indoor mall, also can be recommended. Many pregnancy magazines are an excellent resource for women of all fitness levels, both during pregnancy and postpartum. They offer step-by-step exercise programs, which are particularly useful for women who were not very physically fit before they became pregnant. The appropriate exercise level will depend on each woman’s medical history, obstetrical course, level of fitness, and postpartum recovery.

Some women may be able to engage in an exercise routine within days of delivery; others may need to wait four to six weeks. Gradual resumption of exercise is recommended to gauge effect and identify appropriate level of intensity.

As with vaginal birth, recommendations for exercise after cesarean birth depend upon obstetric and medical history and rate of physical recovery. In most cases, exercises to restore abdominal muscle tone in the cesarean mother can begin as soon as abdominal soreness diminishes. According to some experts, women can safely start doing straight and diagonal curl-ups within the first few days after a cesarean birth. These exercises can help in bringing the rectus muscles back together.

Medical problems: (2)

Common medical complications during this period include persistent postpartum bleeding, endometritis, urinary incontinence, and thyroid disorders.

Women with heavy, persistent postpartum bleeding should be evaluated for complications such as retained placenta, uterine atony, laceration, hematoma, or coagulation disorders (e.g., disseminated intravascular coagulopathy, von Willebrand’s disease).

Postpartum endometritis occurs after 1 to 3 percent of vaginal deliveries; chorioamnionitis and prolonged rupture of membranes increase the risk. A Cochrane meta-analysis found a 7 percent risk of endometritis after elective cesarean section. In nonelective cesarean deliveries, the average endometritis rate was 19 percent in women who received intraoperative antibiotics and 30 percent in women who did not. Clindamycin (Cleocin) and gentamicin are the drugs of choice to manage endometritis, which usually is polymicrobial and involves anaerobes. For prophylaxis during cesarean section, ampicillin and first-generation cephalosporins are the drugs of choice. Broad-spectrum agents or multiple-dose regimens do not seem to offer added benefit.

Urinary incontinence is common during the postpartum period, with a prevalence of 2.7 to 23.4 percent in the first year postpartum. Risk factors for urinary incontinence three months postpartum include higher prepregnancy body mass index, parity, urinary
incontinence during pregnancy, smoking, longer duration of breastfeeding, use of forceps, and vaginal delivery (compared with cesarean delivery). Whether prior vaginal delivery is a risk factor for urinary incontinence in postmenopausal women remains unclear, because studies have produced conflicting results.

Thyroid disorders are common in postpartum women, with a prevalence of 4 to 7 percent in the first year postpartum. Incidence peaks at two to five months postpartum. Symptoms of thyroid disorders can include those of hypothyroidism or hyperthyroidism and may overlap with other common postpartum problems (e.g., fatigue, emotional lability, depression). Although thyroid screening is not generally recommended for asymptomatic postpartum patients, physicians should consider screening high-risk women (i.e., those with type 1 diabetes, a history of postpartum thyroiditis, or postpartum depression). Twenty-five percent of women with postpartum hypothyroidism develop longterm hypothyroidism.

Postpartum Depression: (2,7)

Postpartum depression has potentially serious consequences, making early recognition and screening important. Thirty to 70 percent of women experience the “blues,” sadness, and emotional instability with onset in the first week postpartum and resolution by 10 days postpartum. The blues generally is considered a physiologic phenomenon triggered by hormonal changes and augmented by sleep deprivation, nutritional deficiencies, and the stress of new motherhood. Postpartum depression is one of the most common complications after childbirth (500,000 cases occur in the United States per year, accounting for 13 percent of postpartum women). A history of postpartum depression increases the risk to 25 percent.

According to the Diagnostic and Statistical Manual of Mental Disorders, 4th ed. (DSM-IV), postpartum depression has its onset within four weeks postpartum, although studies often define onset up to three months postpartum. The depression usually lasts about seven months if untreated. Predisposing factors include hormonal changes, stressful life events, history of depression, and family history of depression. The mother’s education level, the child’s sex, breastfeeding, mode of delivery, and an unplanned pregnancy are not risk factors. Cultures with strong support systems for new mothers help foster a strong mother-infant bond and have lower rates of postpartum depression.

Symptoms of postpartum depression are similar to nonpostpartum depression and interfere with functioning (e.g., depressed mood; anhedonia; and disturbances in appetite, sleep, energy, concentration, and attachment).

The Edinburgh Postnatal Depression Scale (EPDS) has been shown to significantly increase identification of high-risk women compared with routine care. Postpartum evaluation should include screening for depression.

Postpartum psychosis usually presents in the first two weeks postpartum as manic, restless behavior. The incidence rate is only 0.1 to 0.2 percent, but rapid referral to
psychiatry is critical. Postpartum psychosis is usually a manifestation of bipolar affective disorder, and women with this disorder are at increased risk of recurrence following future pregnancies and stressful life events.

Management of postpartum depression may include cognitive therapy and antidepressant treatment. Identifying high-risk patients and considering starting treatment prior to delivery is appropriate. After determining safety in pregnancy and lactation, physicians should select an antidepressant that has been effective in the past. Antidepressants and emotional support during and after labor can help prevent postpartum depression in at-risk women.

Tricyclic antidepressants have been shown to have little to no effect on the breastfeeding infant, although the American Academy of pediatrics (AAP) finds most tricyclic agents to be of possible concern. Taking a single daily dose at bedtime will limit the infant’s exposure to the medication. The selective serotonin reuptake inhibitors (SSRIs) are generally the first choice of treatment for depression. Sertraline (Zoloft) is likely to be the safest choice among them because it has been studied extensively and because drug levels found in nursing infants are usually minimal. Fluoxetine (Prozac) use during pregnancy has been well-studied, and many new mothers are already taking it at delivery. Its use during breast-feeding is controversial, however. Fluoxetine’s long half-life and potential for accumulation in breast milk has prompted some recommendations to avoid its use in women who are breast-feeding young infants. Colic and fussiness have been attributed to elevated serum concentrations of fluoxetine and its metabolite in nursing infants. Results from a recent study showed a decrease in the level of fluoxetine and its metabolite in the early weeks of life in nursing infants whose mothers were maintained on fluoxetine throughout pregnancy and breast-feeding. This decrease implies an absence of accumulation of fluoxetine during exposure from breast milk. No long-term studies of neurologic outcomes of children with breast milk exposure to SSRIs are available. These children should be observed closely. At this time, it seems prudent to choose an SSRI with the lowest plasma levels in infants, such as sertraline (Zoloft) or paroxetine (Paxil). Another option is to measure serum concentrations of the SSRI and major metabolites in the infant at two to six weeks postpartum to verify that the medication is not accumulating. If the mother has taken fluoxetine during pregnancy, an infant serum level of fluoxetine and norfluoxetine at about six weeks should reflect drug accumulation from the breast milk instead of continued presence of the prenatal medication.

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<th>Recommended agents</th>
<th>Alternative agents</th>
<th>Use with caution</th>
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<tbody>
<tr>
<td>Depression</td>
<td>Sertraline (Zoloft)</td>
<td>Nortriptyline (Pamelor)</td>
<td>Fluoxetine (Prozac)</td>
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<tr>
<td></td>
<td>Paroxetine (Paxil)</td>
<td>Desipramine (Norpramin)</td>
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TABLE 3
Medications Commonly Prescribed for Maternal Ailments During Breast-Feeding
Violence: \(^{(8)}\)

Many studies report that domestic violence often begins during pregnancy; if already present, it may escalate. Up to 20 percent of all pregnant women may be subject to abuse. In addition, violence may increase during the postpartum period. Therefore, women should be asked about violence at least once in each trimester, during the postpartum period and whenever bruising, injury or depression is noted.

Clinical Evaluation:

The USPSTF found good evidence from multiple observational studies that screening with cervical cytology (Pap smears) reduces incidence of and mortality from cervical cancer. Direct evidence to determine the optimal starting and stopping age and interval for screening is limited. Indirect evidence suggests most of the benefit can be obtained by beginning screening within 3 years of onset of sexual activity or age 21 (whichever comes first) and screening at least every 3 years. The USPSTF concludes that the benefits of screening substantially outweigh potential harms \(^{(9)}\).

The USPSTF found no direct evidence that annual screening achieves better outcomes than screening every 3 years. Modeling studies suggest little added benefit of more frequent screening for most women. The majority of cervical cancers in the United States occur in women who have never been screened or who have not been screened within the past 5 years; additional cases occur in women who do not receive appropriate follow up after an abnormal Pap smear. Because sensitivity of a single Pap test for high-grade lesions may only be 60-80 percent; however, most organizations in the United States recommend that annual Pap smears be performed until a specified number (usually two or three) are cytologically normal before lengthening the screening interval \(^{(9)}\).

Literature Review:

In a study conducted to estimate the prevalence of postpartum care visits (PPCVs) among U.S. women who deliver live infants during 2004 in 12 areas (11 states and New York City) \(^{(3)}\), the results indicated that although the overall prevalence of PPCVs among U.S. women who deliver is high (89%), rates are significantly lower in certain population subgroups (e.g., 71% among women with \(\leq 8\) years of education and 66% among women who had not received prenatal care). This study recommended that the importance of the PPCV should be communicated to all women at the time of discharge from the hospital after delivery.

In Kingdom of Bahrain \(^{(10)}\), the prevalence of postnatal and postabortal rate was 39%, 41% and 39% in 2005, 2006 and 2007 respectively.
In a study (11) conducted to determine the reasons identified by Bahraini women for their attendance or nonattendance at the six week postnatal visit, 50 Bahraini women of childbearing age were interviewed after normal delivery during period between May 15 and July 15, 1985. Fifteen (30%) of the Bahraini women had attended postnatal care. The reasons given for nonattendance (35, or 70%) were being healthy, fear of the vaginal examination, and lack of information about the importance of the postnatal visit. There were no associations between the demographic characteristics of the women's age, duration of marriage, education, parity, family structure, occupational status, and attendance at the six week postnatal visit. The investigator recommended further development of health services for women. The importance of health care providers who are aware of women's needs is emphasized.

In a review which examined the published evidence on post partum care in 1999 and in 2003 for the effectiveness of selected contraceptive methods, Papanicolaou (Pap) tests, and rubella immunization (12), some evidence was available to support selected postpartum contraceptive methods and the postpartum rubella vaccine, but data were lacking on the effectiveness and optimal timing of the postpartum Pap smear.

Major depression is a common and disabling complication of the postpartum period in women. It is thought to occur three times more commonly in the developing than in developed countries.

In a study (13) that was done to determine the prevalence of and factors associated with major depression among women attending a peri-urban primary health care unit in Kampala, Uganda, at six weeks postpartum found that the point prevalence of major depression at six weeks postpartum was 6.1%. Psychiatric disorder was significantly associated with young age, being single, negative life events, unplanned pregnancy, unwanted sex of baby and current physical illness in both mother and newborn. It was concluded that there is indication for routine screening of at risk women in the peri-natal period to avoid, recognize and manage postpartum psychiatric morbidity and its consequence on mothers and their developing children.

Another study aimed to compare the effectiveness of three screening instruments—Edinburgh Postnatal Depression Scale (EPDS), Patient Health Questionnaire (PHQ-9), and the 7-item screen of the Postpartum Depression Screening Scale (PDSS)—for identifying women with postpartum depression in the first 6 months after delivery. It concluded that administering the EPDS by phone at 6-8 weeks postpartum is an efficient and accurate way to identify women at high risk for postpartum depression within the first 6 months after delivery (14).

One study found that routine use of the Edinburgh Postnatal Depression Scale (EPDS) screening tool improved diagnosis rates, facilitating appropriate treatment (2).

**Objective of the Program:**
The objectives of the 6 weeks postnatal visit are:

1. To determine whether:
   - The woman is healthy and has returned to her normal activities
   - Breastfeeding has been satisfactorily established
   - Contraception has been arranged to the patient's satisfaction

2. Discuss with the patient any questions about herself, her infant or her family.

Recommendations & Guidelines:

- **Postnatal care visit for every woman after delivery by 6 weeks in which:**
  - General abdominal and breast examination performed for all women.
  - Pelvic examination performed IF the woman complains about pain or other discomfort. Check for healing of large tears, pain, swelling or pus \(^{(15)}\)
  - Pap smear done for women:
    - As an opportunistic screening for those who are at average risk for cancer (unless otherwise specified) and without any specific symptoms following the guidelines for early detection of cervical cancer recommended by the American Cancer Society: \(^{(16)}\)
      - All women should begin cervical cancer screening about 3 years after they begin having vaginal intercourse, but no later than when they are 21 years old. Screening should be done every year with the regular Pap test or every 2 years using the newer liquid-based Pap test.
      - Beginning at age 30, women who have had 3 normal Pap test results in a row may get screened every 2 to 3 years. Women who have certain risk factors (Table 1) such as diethylstilbestrol (DES) exposure before birth, HIV infection, or a weakened immune system due to organ transplant, chemotherapy, or chronic steroid use should continue to be screened annually.
    - Who have clinical finding on pelvic examination
      - High vaginal swab for culture and sensitivity (HVS C/S) collected for women with vaginal discharge.
      - Hemoglobin level (Hb.) checked for women who had anemia during pregnancy or in the postpartum period (15).
      - Glucose tolerance test (GTT) requested for women who had gestational diabetes.
      - Immunization
- Anti-D immunoglobulin should be offered to every non-sensitized Rh-D negative woman within 72 hours following the delivery of an Rh-positive baby (17)
- Women found to be sero-negative on antenatal screening for rubella should be offered an MMR (measles, mumps rubella) vaccination after birth and before discharge from the maternity unit if they are in hospital (17)
- Women should be advised that pregnancy should be avoided for one month after receiving MMR, but that breastfeeding may continue (11).
- If in a country most women of childbearing age have not been immunized with tetanus toxoid (TT) in their infancy or before pregnancy, it is recommended that they receive the first dose (TT1) at first contact during pregnancy, and TT2 at least 4 weeks after TT1. TT3 should be given at least 6 months after TT2. The two remaining doses should be given after subsequent intervals of one year minimum. If pregnant women have documentation of prior receipt of tetanus-toxoid-containing vaccines in early childhood or school-age, they may receive a booster dose during pregnancy (4)

- Decide on choice of contraceptive method to be used by every woman (2)
  - Both breastfeeding and non-breastfeeding women can use barrier contraceptives, intrauterine devices (IUDs; copper-releasing and hormone-releasing), or progestin-only contraception.
  - Diaphragms and cervical caps must be refitted, usually six weeks after delivery.
  - Although IUDs may be inserted immediately after delivery of the placenta, the usual practice in the United States is to wait until six weeks postpartum because of an increased risk of expulsion.
  - WHO recommends breastfeeding women wait six weeks postpartum before starting progestin-only contraceptives (e.g., depot-medroxyprogesterone acetate [Depo-Provera], progestin-only pills). Several studies have failed to show that progestin-only contraceptives affect the growth or development of breastfed babies; however, evidence is limited.
  - Combination estrogen-progestin contraceptives (e.g., oral pills, the patch [Ortho Evra], the vaginal ring [NuvaRing]) interfere with breast milk production.
  - The American College of Obstetricians and Gynecologists (ACOG) says that progestin-only contraceptives are the best hormonal contraceptive choice for breastfeeding women. ACOG also recommends that women wait at least six weeks before starting combination hormonal contraceptives but acknowledges that this may depend on the clinical situation.
  - Non-breastfeeding women should wait three weeks before starting estrogen-containing contraceptives because of the increased risk of...
- Thromboembolism.
- Breastfeeding women also may use the lactational amenorrhea method, alone or with other forms of contraception, for the first six months postpartum. For this method to be effective, the woman must be breastfeeding exclusively on demand, be amenorrheic (no vaginal bleeding after eight weeks postpartum), and have an infant younger than six months. The failure rate is less than 2 percent if these criteria are fulfilled.

- Postnatal Depression Assessment done for every woman (18)
- Inquiry about any sexual problems after delivery.
- Advice on exercise
- Inquiry about any kind of abuse or violence a woman is suffering in this period.

**Implementation:**

- A 6 weeks postnatal appointment will be given for the mother through the MCH department in the HC at the time attending for registering the baby for birth certificate.
- A specialized postnatal care clinic is set in the Maternal and Child Health (MCH) department of each health center.
- A community nurse will assist the family physician in running the clinic and delivering the proper care for the mother
- A telephone calling system will be reinforced for reminding every woman two days prior to her appointment to assure her attendance and readiness for the consultation.
- In the first postnatal visit, the following will be done:

  - The nurse will:
    - Ask every woman about her well-being and possible complaints or problems.
    - Fill in the first page of the postnatal sheet for every woman
    - Take the vital signs (Height, weight and blood pressure) and record it in the sheet.

  - The family physician will:
    - Review the PN sheet history and ask the woman about any complains or concerns about herself, her infant or her family
    - Fill in the PN sheet by:
      - Performing the necessary examination and investigations according to the recommendations
      - Discussing the various methods of contraception available and the ones suitting the woman’s condition
- Manage and refer to the proper channels if needed for any complaints.
- Decide about need for revisit appointments.

- In the revisit appointment:
  - Review the result of requested investigations
  - Ask about the contraceptive method choice if not decided previously

**Evaluation:**

The postnatal service in each health center will be evaluated through the monthly statistics which include:

- Number of women booked for postnatal clinic
- Number of women attended their appointments
- Number of women decided on using any of the contraceptive methods

Centers with high defaulter rate will be studied to find out the causes and set the solution to overcome it to improve the quality of postnatal care.
PN Appendix 1: Edinburgh Postnatal Depression Scale (EPDS)\(^{(12)}\)

<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
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| 1. I have been able to laugh and see the funny side of things.           | 0 As much as I always could  
1 Not quite so much now  
2 Not so much now  
3 Not at all |
| 2. I have looked forward with enjoyment to things.                       | 0 As much as I ever did  
1 Somewhat less than I used to  
2 A lot less than I used to  
3 Hardly at all |
| 3. I have blamed myself unnecessarily when things went wrong.            | 0 No, not at all  
1 Hardly ever  
2 Yes, sometimes  
3 Yes, very often |
| 4. I have been anxious or worried for no good reason.                    | 0 No, not at all  
3 Yes, often  
2 Yes, sometimes  
1 No, not much  
0 No, not at all |
| 5. I have felt scared or panicky for no good reason.                     | 0 No, not at all  
3 Yes, often  
2 Yes, sometimes  
1 No, not much  
0 No, not at all |
| 6. Things have been too much for me.                                     | 0 No, I have been coping as well as ever  
3 Yes, most of the time I haven’t been able to cope at all  
2 Yes, sometimes I haven’t been coping as well as usual  
1 No, most of the time I have coped well |
| 7. I have been so unhappy that I have had difficulty sleeping.           | 0 No, not at all  
3 Yes, most of the time  
2 Yes, sometimes  
1 Not very often |
| 8. I have felt sad or miserable                                          | 0 No, not at all  
3 Yes, most of the time  
2 Yes, quite often  
1 Not very often |
| 9. I have been so unhappy that I have been crying.                       | 0 No, not at all  
3 Yes, most of the time  
2 Yes, quite often  
1 Only occasionally  
0 No, never |
| 10. The thought of harming myself has occurred to me.                    | 0 No, never  
3 Yes, quite often  
2 Sometimes  
1 Hardly ever  
0 Never |

Please circle the answer which comes closest to how you have felt in the past 7 days.
TOTAL SCORE: ________

**EPDS scores and appropriate action:**

- 1-8 (Normal): No action usually needed
- 9-13 (Borderline): Repeat EPDS after two weeks and assess patient, Consider care as appropriate
- 14-19 (Significant score, Action needed): Home visit, Repeat EPDS, Assess patient, Consider NDC, Consider anti-depressants.
- 20+ (Major problems, immediate action needed): As for 14-19 score, In addition, consider referral for psychiatric opinion.
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15. Key Elements of Postpartum Care at the Community Level Based on WHO Guidelines Prepared by May Post.
17. NCCPC, The National Collaborating Centre for Primary Care, Postnatal care, Routine postnatal care of women and their babies, July 2006
18. Guidelines for the Treatment of Postnatal Depression in General Practice South ambridgeshire and Cambridge City Primary Care Trust’s, March 2003