

Lecture on physical and psychological change during puerperium

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The Objectives:

1. Describe the expected physiological responses of new mothers during the normal puerperium.
2. Explain what advice will give new mothers for self-care during the puerperium at home.

● Introduction

The postpartum period, also known as the **puerperium**, refers to the time after delivery when maternal physiological changes related to pregnancy return to the nonpregnant state. In addition to physiologic changes and medical issues that may arise during this period.

The nurses should be aware of the psychological needs of the postpartum mother and sensitive to cultural differences that surround childbirth.

● Definition of the Postpartum Period

Is the period begins upon delivery of the infant to the end is the six to eight weeks after delivery because the effects of pregnancy on many systems have largely returned to the pre-pregnancy state.

Puerperium is divided into:

1. Immediate postpartum (first 24 hours),
2. Early postpartum (first week),
3. Late postpartum "from second week till end of six weeks".

Physiological changes during puerperium

The major maternal physiological during puerperium:

1. Changes in reproductive organs

a. Uterus

The uterus can be palpated at or near the woman's umbilicus (belly button), as it contracts to expel the placenta and fetal membranes. It normally shrinks to its non-pregnant size during the first six weeks after delivery, but most of the reduction in size and weight occurs in the first two weeks. At around this time, the uterus should have shrunk enough to be located in the woman's pelvis, below her umbilicus.

Involution is the rapid decrease in the size of the uterus as it returns to the non-pregnant state and the breast feed may experience a more rapid involution.

Assessment:

- a. Weight of the uterus decreases
- b. Endometrium regenerate
- c. Fundus descends in to the pelvis
- d. Fundus height decreases about 1 finger (1 cm)/day.
- e. By 10 days postpartum the uterus cannot be palpated abdominally
- f. Note that a flaccid fundus indicate uterine atony and should be massaged until firm a tender fundus indicate an infection.

Lochia: The inner lining of the uterus (the **endometrium**) rapidly heals after the birth, so that by the seventh day, except at the placental site. The inside of the uterus, where the placenta was attached, undergoes a series of changes which reduce the number of blood capillaries entering that site. The capillaries that remain 'leak' blood plasma for a time, which results in a normal vaginal discharge called **lochia**. This discharge often continues for several weeks after the birth. In the first week, the lochia is bloody and brownish red, but it gradually changes over time to a more watery consistency. Over a period of two to three weeks, the discharge continues to decrease in amount and the color changes to pale yellow (straw colored).

Assessment:

- a. Rubra is a bright red discharge that occurs from delivery day to day 3.
- b. Serosa is brownish pink discharge that occurs from days 4 to 10.
- c. Alba is white discharge that occurs from days 10 to 14.
- d. The discharge should smell like normal menstrual flow
- e. Discharge decreases daily in amount
- f. Discharge may be increase with ambulation
- g. Breast feeding may increase lochia.
- h. Foul – smelling lochia and scant may indicate an infection.
- i. Bright red blood indicate cervical or vaginal laceration.

Cervix: cervical involution occurs and after 1 week the muscle begins to regenerate.

Ovarian function and menstruation:

- a. The resumption of normal function by the ovaries is highly variable and is greatly influenced by breastfeeding the infant. The woman who exclusively breastfeeds her baby has a longer period of *amenorrhoea* (absence of monthly bleeding) and delayed first ovulation after the birth, compared with the mother who chooses to bottle-feed. A woman who does not breastfeed may ovulate as early as four weeks after delivery, and most have a menstrual period by twelve weeks; the average time to the first menstruation for a woman who is not breastfeeding is seven to nine weeks after the birth.

Breasts and initiation of lactation

Another important event that happens soon after the birth is the initiation of **lactation**, that is the production of colostrum and then milk by the breasts, and the release of these nutritious fluids when the baby suckles the mother's nipple. The breasts begin to develop the capacity to produce milk as pregnancy progresses, in response to hormones circulating in the mother's blood. For the first few days after the birth, the breasts secrete **colostrum** (a creamy yellow substance). Colostrum: is rich in nutrients for the baby and also has maternal **antibodies** which protect the newborn from infection. Thus, it is very important that all babies are fed colostrum.

Three days after delivery, in response to increased hormones from the pituitary gland in the brain, which stimulate milk production, the breasts become firm and milk supply begins. They rapidly become distended, hard and warm because of increased blood flow; this state of the breasts is called **engorgement**. It lasts about 24-48 hours and will resolve spontaneously. the breasts are not so hard and do not feel excessively warm, but they become firm and somewhat tender as they fill with milk between feeds, and they soften and reduce in size when emptied as the baby suckles milk. Ongoing milk production is stimulated by the suckling of the baby. More baby feeds, more milk breasts will produce.

The nurse should advise new mothers that **early breastfeeding** (within one hour of the birth) and **exclusive breastfeeding** (no other foods or fluids to be given to the baby) for the first six months is the best nutritional start in life. Allow the baby to be put to the breast whenever it wants to feed from the first day onwards. Breastfeeding is neither easy nor automatic, and it takes a lot of time in every day and during the night. It requires much effort on the part of the mother to breastfeed her baby exclusively for six months. Producing plenty of rich breast milk requires a lot of extra energy. The mother will need more nutrients and fluids.

Suppression of lactation in non-breastfeeding women

There are circumstances when the mother cannot or will not breastfeed, for example if the baby is born dead or dies in the first few weeks, or when the mother strongly prefers to feed her baby with formula milk from a bottle. To reduce the discomfort of prolonged breast engorgement, it is recommended to wrap a tight compression bandage around the woman's chest, covering the breasts, for the first two to three days after the birth. Care should be taken not to stimulate the breasts in any way that would encourage milk production. Ice packs can be applied to the breasts .

Excretion of excess body fluids

non-pregnant state. Some of this additional water is held in her tissues, some in her increased volume of blood, and some in the uterus. This excess water is rapidly eliminated after the birth. The amniotic fluid drains away through the vagina. From the second day after the delivery, the urine volume will increase up to three litres per day for a few days, but within one week it returns to the normal pattern of urination. The bladder increases its capacity during the period in which excess body fluids are being eliminated, filling with between 1,000 to 1,500 ml of urine without discomfort. If urine is retained for long periods in the bladder, because the urethra is obstructed by swollen

or bruised tissues after the birth, it increases the risk of urinary tract infections developing.

Gastrointestinal tract

- a. Women are usually hungry after delivery
- b. Constipation can occur
- c. Hemorrhoids are common
- d. Monitor vital signs every 4 hr.

Nursing Care of the Postpartum Woman

Fourth Stage of Labor

- The first two hours after birth
- Maternal organs start to undergo readjustments to the nonpregnant state

Nurse's role during the fourth stage of labor is:

- Identify and manage promptly any deviations from the normal processes that may occur
- Promote and support parent-infant attachment
- Assessment
 - During the first hour in the recovery room, physical assessments of the mother are frequent
 - All factors but temperature are assessed every 15 minutes for the first hour and then every thirty minutes in the second hour
 - Temperature is assessed at the beginning and end of the recovery period
 - Postpartum women experience intense tremors or shivering
 - Provide warm blankets
- Physiologic Assessments
 - Temperature
 - First 24 hours every 4 hours
 - Every 8 hours after that till discharge

Pulse, Respirations, and Blood Pressure

- Every 15 minutes-first hour of delivery
- Every 30 minutes for the next 2 hours after delivery
- Then every 4 hours for the first 24 hours
- Then every 8 hours till discharge

Physiologic Assessments

Fundus, Lochia, and Bladder

- Assess every 15 minutes for the first hour
- Assess ever 4 hours for the next two hours after delivery

- Then assess every 8 hours until discharge

Perineum

- Assess once the first hour after delivery
- Then assess every four hours for the first 24 hours
- Then after 24 hours of delivery assess every 8 hours until discharge

Assessments

- Breasts, Legs
 - Assess every four hours in the first twenty-four hours
 - Then assess every 8 hours thereafter until discharge

Routine Laboratory Test

- Hemoglobin
- Hematocrit
- Rubella
- Rh status

Nursing Diagnoses

- Alteration in comfort related to afterpains, episiotomy, laceration, hemorrhoids, breast engorgement, surgical incision
- Sleep pattern disturbances
- Health seeking behaviors regarding self-care, newborn care, health maintenance, prevention of infections, or complications
- Altered parenting
- Potential for infection/hemorrhage

Couplet Care

- Also called mother and baby care or single-room maternity care
- Nurse functions as the primary nurse for both the mother and baby, even if the baby is in the nursery

Rooming-in

- Mother and baby room together
- Mother and nurse share the care of the infant

Plan of Care

- **Perineal Care**
 - **Pouring a stream of water over the vulva and perineum after voiding or defecation**
 - **Wiping from front to back after voiding or defecation**
 - **Change peri-pad with each voiding or defecation**

- **Cold therapy for 24 to 48 hours**
- **Ice packs**
- **Cold packs**
- **Heat therapy**

Plan of Care

- Prevention of Excessive Bleeding
 - Uterine Atony
 - Failure of the uterine muscle to contract firmly
 - Most frequent cause of excessive bleeding after childbirth
 - Two most important interventions for preventing excessive bleeding are:
 - Maintaining good uterine tone
 - Preventing bladder distention

Plan of Care

- Maintenance of Uterine Tone
 - Fundal massage
 - Teaching patient to do fundal self- massage
 - IV oxytocin, such as pitocin
 - Oral or IM medications (drugs that stimulate contraction of the uterine smooth muscle) such as methergine, cytotec, and hemobate

Plan of care

- Prevention of Bladder Distention
 - Full bladder causes the uterus to be displaced above the umbilicus well to one side of the midline of the abdomen
 - Prevents uterus from contracting normally
 - Focus on helping the woman to empty her bladder spontaneously as soon as possible
- Prevention of Bladder Distention
- Techniques to help the woman void
- Assist woman to the bathroom
- Have woman listen to running water
- Pouring water from a squeeze bottle over her perineum
- Assisting woman into the shower or sitz bath

Plan of Care

- Ambulation
 - Early ambulation is successful in reducing the incidence of thromboembolism and in promoting the woman's more rapid recovery of strength
 - Orthostatic hypotension
 - Women with varicosities are encouraged to wear support hose

Plan of Care

- Bladder
 - After giving birth the woman should void spontaneously within 6 to 8 hours
 - Several of the first voidings should be measured to document adequate emptying of the bladder
 - A volume of 150 ml is expected for each voiding

Plan of Care

- Breast Care
- Breastfeeding
- First 2 hours after birth
- Infant is an alert state
- Aids in the contraction of the uterus
 - Hygiene
 - Avoid soap, alcohol, and other drying agents
 - Cleans nipple with clear water
 - Apply lanolin for sore or cracked nipples

Psychological Changes

The changes that the woman undergoes are crucial within the first 24 hours of postpartum, especially the psychological changes. These changes might affect the woman permanently if not given the appropriate attention and care.

Taking-In Phase

- The taking-in phase usually sets 1 to 2 days after [delivery](#).
- This is the time of reflection for the woman because within the 2 to 3 day period, the woman is passive.
- The woman becomes dependent on her healthcare provider or support person with some of the daily tasks and decision-making.
- This dependence is mainly due to her physical discomfort from hemorrhoids or the after pains, from the uncertainty of how she could care for the [newborn](#), and also from the extreme tiredness she feels that follows childbirth.

- The woman prefers to talk about her experiences during [labor](#) and birth and also her pregnancy.
- The taking-in phase provides time for the woman to regain her physical strength and organize her rambling thoughts about her new role.
- Encouraging the woman to talk about her experiences during [labor](#) and birth would greatly help her adjust and let her incorporate it into her new life.

Taking Hold Phase

- The taking hold phase starts 2 to 4 days after delivery.
- The woman starts to initiate actions on her own and making decisions without relying on others.
- Women who underwent anesthesia reach this phase only hours after her delivery.
- She starts to focus on the newborn instead of herself and begins to actively participate in [newborn care](#).
- Demonstrate newborn care to the mother and watch her do a return demonstration of every procedure.
- The woman still needs positive reinforcements despite the independence that she is already showing because she might still feel insecure about the care of her child.
- Allow the woman to settle in gradually into her new role while still at the hospital or healthcare facility because making decisions about the child's welfare is a difficult part of motherhood.

Letting Go Phase

- During the letting go phase, the woman finally accepts her new role and gives up her old roles like being a childless woman or just a mother of one child.
- This is the phase where **postpartum depression** may set in.
- Readjustment of relationship is needed for an easy transition to this phase.

Methylergonovine (Methergine) is an oxytocic agent used to prevent and treat [postpartum hemorrhage](#) caused by uterine atony or subinvolution.

After a stillbirth, the mother should be allowed to hold the neonate to help her come to terms with the death.

A postpartum patient may resume sexual intercourse after the perineal or uterine wounds heal (usually within 4 weeks after delivery).

If a pregnant patient's test results are negative for glucose but positive for acetone, the nurse should assess the patient's diet for inadequate caloric intake.

Direct antiglobulin (direct Coombs') test is used to detect maternal antibodies attached to red blood cells in the neonate.

Before discharging a patient who has had an abortion, the nurse should instruct her to report bright red clots, bleeding that lasts longer than 7 days, or signs of infection, such as a temperature of greater than 100° F (37.8° C), foul-smelling vaginal discharge, severe uterine cramping, nausea, or vomiting.

The fundus of a postpartum patient is massaged to stimulate contraction of the uterus and prevent hemorrhage.

Laceration of the vagina, cervix, or perineum produces bright red bleeding that often comes in spurts. The bleeding is continuous, even when the fundus is firm.

To avoid puncturing the placenta, a vaginal examination should not be performed on a pregnant patient who is bleeding.

A patient who has postpartum hemorrhage caused by uterine atony should be given oxytocin as prescribed.

After delivery, if the fundus is boggy and deviated to the right side, the patient should empty her bladder.

In the early postpartum period, the fundus should be midline at the umbilicus.

↳ **Factors that enhance involution include:**

- Uncomplicated labor and birth.
- Breast-feeding.
- Early, frequent ambulation.

↳ **Factors that slow uterine involution include:**

- Prolonged labor.
- Incomplete separation and expulsion of placenta.
- Previous labors.
- Distended (full) bladder.
- Anesthesia.

2. Immediately after delivery of the placenta the **cervix** has little tone and become more thicker and firm. Complete cervical involution may take 3-4 months and child birth result in a permanent change in an cervical OS from round to elongated.

3. **Vagina:** smooth and swollen with poor tone after delivery .rugae reappear by 3 – 4 postpartum week.

4. **Perineum:** appear edematous and bruised after delivery

5. **Vulva:** Edema, minute or frank laceration may be seen immediately after labor. Edema disappears gradually in a few days while lacerations, if not properly mended by sutures, may lead to the formation of a post partum ulcer.

☛ Resumption of Ovulation and Menstruation:

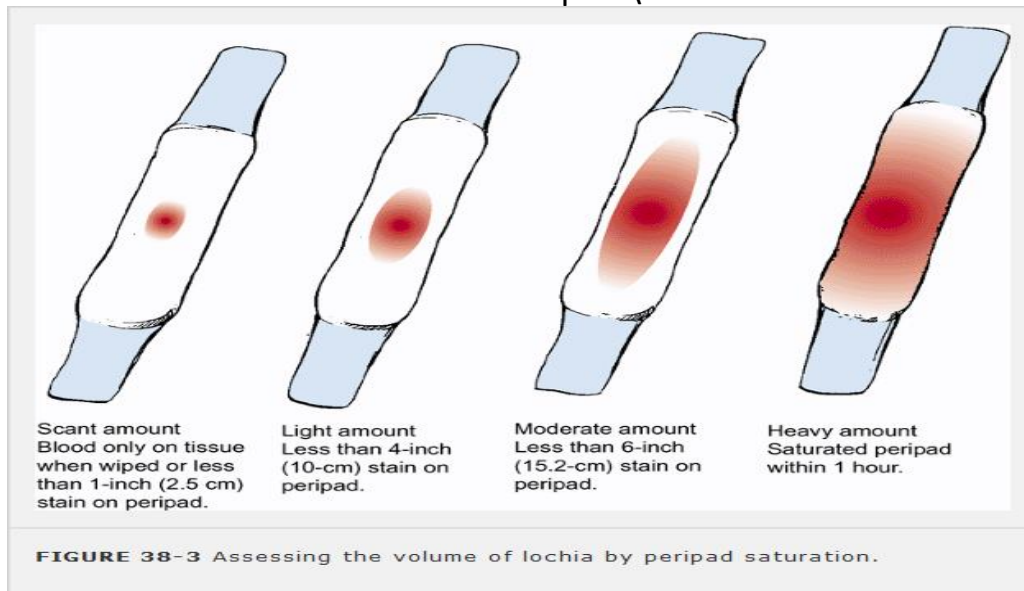
- Most non-nursing mothers resume menstruation within 7 to 9 weeks after childbirth.
- In lactating mothers, menstruation usually reappears not earlier than 3-4 months, and some times as late as 24 months.
- The first period is generally profuse and prolonged.
- It should be mentioned that ovulation can commence in the absence of menstruation, and another pregnancy can occur.

☛ Body weight:

- Loss of weight is observed during the first 10 days particularly in the non-lactating mothers. There is about a 4 – 5 kg loss of body weight (sometimes 8 kg) due to evacuation of uterine contents and diuresis.

****according to the amount the lochia classify to :**

1. **scant lochia:** less than 2-5 cm blood on the perineal pad
2. **light or mild lochia:** less than 10cm blood on the perineal pad\hrs
3. **moderate lochia:** less than 15cm stain perineal pad\hrs
4. **heavy lochia:** 1 saturated pad\hrs
5. **sever lochia :** more than 1 saturated pad \hrs



E: Episiotomy. It is assessed for (REEDA)

- **R:** Redness.
- **E:** Edema.
- **E:** Ecchymosis (purplish patch of blood flow).
- **D:** Discharge.
- **A:** Approximation, or the closeness of the skin edge.

B: Bladder.

-Mild proteinuria is common for 1 to 2 days after delivery in 50% of postpartum women.

-Lactoseuria may occur in breast-feeding woman as a result of the lactation process

- - The urine may also test positive for acetone / ketonuria resulting from dehydration during a prolonged labor.

-Bladder tone returns between 5 and 7 days

-1st day urinary retention due to :

1. loss of the bladder elasticity and tone

2 Urinary retention and over distention of the bladder may cause two complications:

1. Urinary tract infection.

2. Post partum

hemorrhage. loss of sensation

- 2-5 days women has diuresis (increase urine output)

B :Bowel.

-Gastrointestinal tone and motility decreases in the early postpartum , commonly causing constipation.

▪ Constipation may be present as a result of:

1. Intestinal atony.
2. Anorexia after labor.
3. Loss of body fluids.
4. Laxity of the abdominal wall.
5. Hemorrhoids, perineal trauma and episiotomy.
6. Reflex inhibition enema in labor

- Normal bowel function returns approximately 2 to 3 days postpartum

- women feel hungry and thirst .

- Inform the woman that pain from hemorrhoids, lacerations, and episiotomies may cause her to delay her first bowel movement

- Women may return to her prepregnant weight in 6-8 weeks if weight gain during pregnancy within normal range

- Gall bladder contractility increases to normal, allowing for expulsion of small gallstones.

-After cesarean section, bowel tone returns in few days and flatulence causes abdominal discomfort

* Some mothers may experience **postpartum blues** at approximately the third postpartum day and may exhibit irritability, poor appetite, insomnia, tearfulness, or crying. Caused by:

- Changing hormone levels
- Psychologic adjustments
- Unsupportive environment
- Insecurity

- Fatigue
- Discomfort
- Overstimulation

S: Homans' sign.

Inspect legs for signs of thromboembolism

Ovarian function:

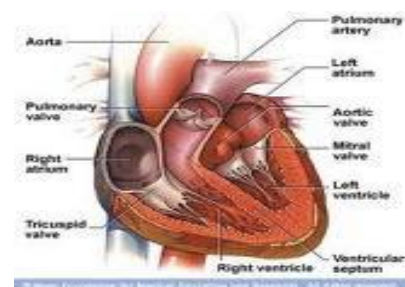
- Estrogen and progesterone levels decrease rapidly after delivery of the placenta.
- Estrogen reaches the follicular phase by 3 weeks after birth, as long as the woman is not lactating.
- Ovulation may occur as early as 27 days after delivery. The average time is 70 to 75 days post delivery and 190 days post delivery if breast-feeding.
- The start of menses after delivery is individualized. Usually, the first menses occurs approximately 3 months after delivery, although breast-feeding women may not start their first menses until 8 months.

Neurological function

- Discomfort and fatigue are common. Frontal and bilateral headaches are common and are caused by fluid shifts in the first week postpartum.

Cardiovascular function

- Most dramatic changes occur in this system.



- Cardiac output decreases rapidly and returns to normal by 2 to 3 weeks postpartum.
- Hematocrit increases and increased red blood cell (RBC) production stops.
- Leukocytosis with increased white blood cells (WBCs) common during the first postpartum week
- If the patient is Rh negative, evaluate her need for Rh₀(D) immune globulin (RhoGAM). If indicated, administer the RhoGAM within 72 hours of delivery
- Following delivery, despite 300 to 500 ml of blood loss during normal vaginal delivery, and 500-1000 ml is lost in cesarean births, excess blood volume, which was necessary during pregnancy, remains in the intravascular compartment and in interstitial spaces.
- ***The body rids itself of the excess fluids by two methods:***

1. Diuresis: “increased excretion of urine” is facilitated by a decline in the adrenal hormone aldosterone, which is increased during pregnancy to counteract the salt-wasting effect of progesterone.

urinary output of 3000 ml per day is not common for the first few days of the post partum period.

2. Diaphoresis “profuse perspiration” also rids the body of excess fluids through skin "sweating often occurs at night"

- **Coagulation:** During pregnancy, plasma fibrinogen necessary for coagulation increased as a protection against post partum hemorrhage. As a result, the mother’s body has a great ability to form clots and thus prevent excessive bleeding

- **. Blood values:**

The white blood cells count increasing 10.000/mm up to 20.000 or even 30.000/mm during postpartum

A moderate increase in the fibrinogen and sedimentation rate occurs during the first postpartum period, and then gradually gets back to normal values.

Respiratory function

Returns to normal by approximately 6 to 8 weeks postpartum

Musculoskeletal function

- Generalized fatigue and weakness is common.
- Decreased abdominal tone is common.
- Diastasis recti heals and resolves by the 4th to 6th week postpartum
Until healing is complete, abdominal exercises are contraindicated.

Integumentary function

- Striae lighten and melasma is usually gone by 6 weeks postpartum .
- Hair loss can increase for the first 4 to 20 weeks postpartum and then re-growth will occur, although the hair may not be as thick as it was before pregnancy.

Endocrine/metabolic function:

- Thyroid levels are normal by 4 to 6 weeks postpartum .
- Glucose levels are low secondary to decreased human placental lactogen and decreased growth hormone.

Vital signs:

at least twice daily and more frequently if indicated:

temperature : may increase in the first 24 hrs reach to 38 c after delivery ,because of the dehydration during labor so encourage fluid intake .

pulse : decrease pulse rate during the 1st week to 60-70 beat\mint(24-48 hrs), if increase you should think of hemorrhage, anxiety, excitement.pain, visitor

Blood pressure : should be unchanged , if BP >140\90mmhg may indicate postpartum hemorrhage.

Respiratory rate: unchanged . **Respiratory function** Returns to normal by approximately 6 to 8 weeks postpartum

Physiology of lactation

Lactation consists of two distinct processes

1. "**Milk production** After labor, sudden fall of estrogen and progesterone levels leads to marked rise of prolactin level. This hormone stimulates the alveolar cells leading to milk secretion.

2.Milk ejection:Stimulation of the nipple and areola (by suckling), leads to increased production of oxytocin from posterior pituitary. This hormone acts on the myoepithelial cells which line the ducts causing its contraction. Milk is ejected into the lactiferous ducts and cisternae, where it is readily available to the suckling infant (**Let down reflex"**) .

***Nipple erection reflex"** results also from stimulation of the nipple by suckling or tactile stimulation of the nipple. This is of great help to the baby during suckling.

Factors Affecting Milk Production

- 1- Regular complete breastfeeding.
- 2- Suckling abilities of newborn.
- 3- Maternal health, and Nutrition.
- 4- Psychological factors.
- 5- Hormones : Prolactin, Oxytocin, Thyroxin, Growth hormone, in addition to Progesterone and estrogen. Normal levels of these hormones are essential for initiation & maintenance of lactation.

Management of Postpartum Period

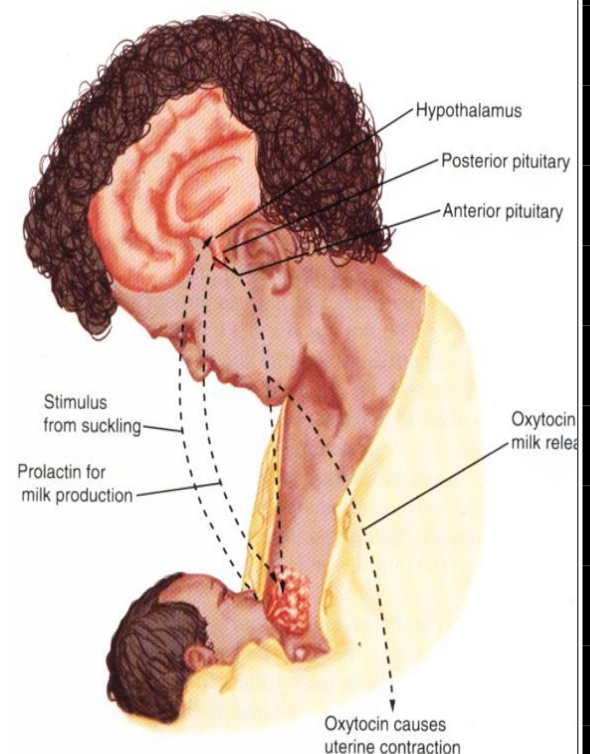
- **Early needs of the mother:**

1- Observation and recording to:

↳ A. Vital signs

- Check vital signs 2 times daily "morning and evening".
- Observe for symptoms of hypovolemic shock and hemorrhage.
- A temperature of 38c or above, for two consecutive days after the first 24hrs. is considered an early sign of puerperal infection
- Bradycardia is a normal physiological phenomenon

↳ B. Subsequent postpartum Assessment:



1. Check firmness of the fundus at regular intervals. Perform fundal massage if the uterus is boggy (not firm)

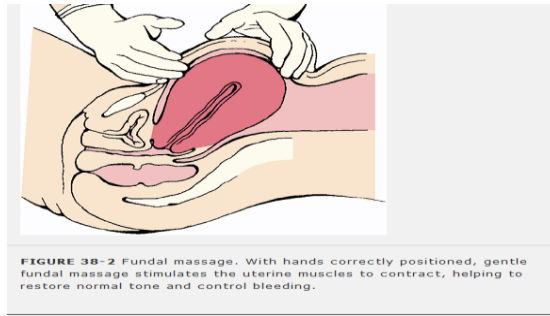


FIGURE 38-2 Fundal massage. With hands correctly positioned, gentle fundal massage stimulates the uterine muscles to contract, helping to restore normal tone and control bleeding.

↳ Perineum

- Observe perineum and suture line if present, for redness, ecchymosis, and edema or gapping. Check healing and cleanliness
- During the examination haemorrhoids may be noted and appropriate treatment advised.

↳ Lochia

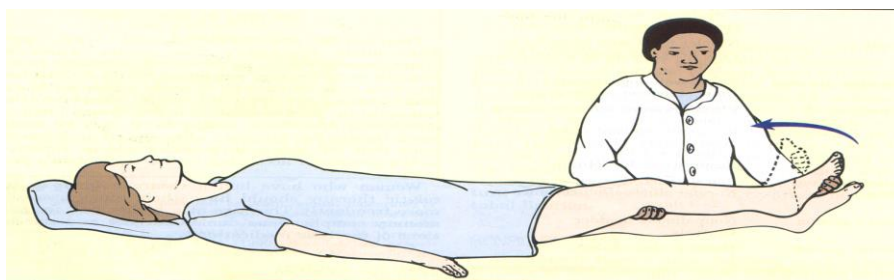
- Check lochia for color, amount, odor, consistency and blood clots.

↳ Urine out put

The urine out put is usually recorded for the first 24 hours after delivery to ensure that the woman is passing an adequate amount of urine. Assess bowel and bladder elimination. Offer the opportunity to void within the first 4 to 8 hrs after delivery and every 2 to 3 hrs thereafter.

↳ Legs

- The midwife examines the patient's leg for pain and edema.



4. Evaluate interaction and care skills of the mother and family with infant.

5. **Assess for breast** engorgement and condition of the nipples if breast-feeding

7. Assess incisions for signs of infection and healing.

9. **Postpartum Vaccination** :If the woman is not rubella immune, a rubella vaccination may be given, and pregnancy must be avoided for at least 3 months.

10. Psychological Assessment:

-Focuses on mother's general attitude, feelings of competence, support systems, caregiving skill

- evaluates fatigue and ability to accomplish developmental tas

-Describe level of attachment to infant

-Determine mother's phase of adjustment to parenting

2. Rest and sleep:

- Provide for sufficient periods of rest and sleep to maintain physical and mental health, as to promote lactation (8hrs nighttime sleep and 2hrs after noon-nap are needed).

3. Diet:

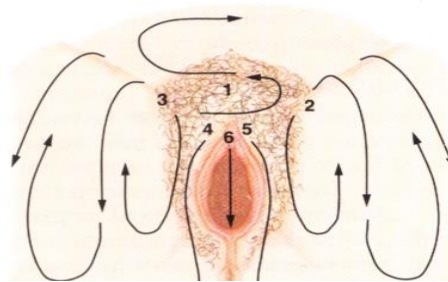
- Provide diet high in proteins and c
- A daily requirement of 3000-3500
well balanced diet rich in 1st class proteins, calcium, iron, vitamins, thiamine, riboflavin and ascorbic acid



- Liberal amounts of fluids are required "the daily fluid intake should be 2.5-3 liters" (e.g. milk, juiceect.)

4. Hygiene:

- The women should be taken shower daily.
- The vulva and perineal care include washing or swabbing with warm water and antiseptic solution, the area must be kept clean and dry and free from infection.
- The perineum must be inspected daily if there are sutures to see that healing is taking place. Non-absorbable sutures are removed on the fifth or sixth day.
- Breast care should be done before and after feeding. The nurse teaches the mother the technique of breast care and encourages her to initiate breast-feeding.



PATIENT EDUCATION GUIDELINES

Post natal exercise:

- Encourage post-partum exercise which promotes circulation.
- Lessen the possibility of venous thrombosis and restore the muscle tone of the abdominal wall and pelvic floor.
- Postnatal exercises help to give the patient a sense of well being.

Certain patients, such as those suffering from heart lesions, should not be allowed to perform all the exercises, though even they may be encouraged, on medical advice to take gentle exercise.

Deep breathing and free movements in the bed should be encouraged from the day of the delivery. On the second day the following exercises may be done provided the labor has been normal and the patient is in health. In prescribing exercises discretion must be used and the exercises must be adapted to the individual. In hospital the exercises will probably be directed by a physiotherapist.

☛ Breathing exercises:

Deep-breathing exercises should be performed as described for antenatal period, with the patient lying flat in bed stretch, stiffen and reflex the muscles of the right and left leg alternately.

☛ Pelvic floor tone. Several exercises may be performed:

1. Lie flat on the back with body relaxed. Tighten the anus for ten seconds as though trying to control a loose motion or retain an enema. Repeat six times, and then rest for one minute. Carry out the same procedure eight times.

2. Lie flat on the bed and forcibly abduct the thighs against resistance (the nurse attempts to hold the thighs together while the patient pushes them apart. Repeat slowly six times. Later the same exercise may be carried out, but with the nurse holding the patient's Knees together instead of the thighs.
3. Lie flat upon the back with the hands upon the hips and elevate the feet alternately, counting one to six, up, and one to four, down.
4. Lie flat with the hands resting lightly on the abdominal wall. Then slowly raise the head and shoulders. The patient must not push the chin forwards or the abdominal wall will be pushed outwards instead of contracting, nor must any weight be rested on the elbows.
5. Sit up in bed with the hands clasped round the flexed knees and endeavor to touch the knees with the chin. The nearer the head and knees approach the greater the contraction of the abdominal muscles.

☛ Strengthening the muscles generally:

The patient, sitting up in bed and bedding forward with legs outstretched places her hands on her ankles. The trunk is then stretched backwards and the arms drawn up and bent to imitate rowing, the knees are slightly flexed at the same time.

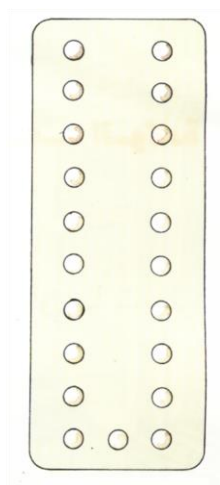
☛ *Late needs of the mother*

☛ Health education and counseling

The midwife nurse plays an important role as health educator and counseling which should provide the woman health education and counseling about:

1. Breast feeding, definite, technique and position.

2. Resumption of sexual relations. Include information about when to expect menstruation.
3. Post natal exercise, hygiene, rest, sleep and nutrition.
4. The care of the baby which includes hygiene, prevention of infection, feeding and giving him love and sense of security feel her about the advantages of rooming in.
5. Family planning methods for spacing of pregnancy.
6. Stress the importance of post partum examination. Visits and follow up to assess involution, general health and well being of the mother before discharge.



References

1. [Dennis CL, Fung K, Grigoriadis S, et al. Traditional postpartum practices and rituals: a qualitative systematic review. Womens Health \(Lond\) 2007; 3:487.](#)