STAGE IV (FIRST 4 HOURS FOLLOWING DELIVERY OF THE PLACENTA)

CLIENT ASSESSMENT DATA BASE

Activity/Rest
May appear “energized” or fatigued/exhausted, sleepy

Circulation
Pulse usually slow (50–70 beats per minute [bpm], owing to vagal hypersensitivity).
Blood pressure (BP) variable; may be lower in response to analgesia/anesthesia, or elevated in response to oxytocin administration or pregnancy-induced hypertension (PIH).
Edema, if present, may be dependent (e.g., confined to lower extremities); or may include upper extremities and facies, or may be generalized (signs of PIH).
Blood loss during labor and delivery up to 400–500 ml for vaginal delivery or 600–800 ml for cesarean birth.

Ego Integrity
Emotional reactions regarding birth experience varied and changeable, e.g., excitement, disinterest (exhausted), or disappointment
May express concern or apologize for intrapartal behavior or loss of control; may express fears regarding condition of newborn and immediate neonatal care

Elimination
Hemorrhoids often present and protruding.
Bladder may be palpable over symphysis pubis, or urinary catheter may be in place.
Diuresis may occur if pressure of presenting part obstructs urinary flow, and/or intravenous (IV) fluids are administered during labor and delivery.

Flood/Fluid
May report thirst, hunger, or nausea

Neurosensory
Sensation and movement of lower extremities decreased in presence of spinal anesthesia or caudal/epidural analgesia.
Hyperreflexia may be present (suggests developing or persistent hypertension, especially in diabetic, adolescent, or primiparous client).

Pain/Discomfort
May report discomfort from various sources; e.g., afterpains, tissue trauma/episiotomy repair, bladder fullness, or feeling cold/muscle tremors with “chills”

Safety
Slight temperature elevation initially (exertion, dehydration).
Episiotomy/laceration repair intact, with tissue edges closely approximated.
Perineum free of redness, edema, ecchymosis, or discharge.
Striae may be present on abdomen, thighs, and breasts.

Sexuality
Fundus firmly contracted, midline, and located at the level of the umbilicus
Moderate amount of vaginal drainage or lochia, dark red, with only a few small clots at most (up to small plum size)
Breasts soft, with nipples erect

**Social Interaction**
Varied response to infant based on individual expectations, energy level, response of others, and condition of infant

**Teaching/Learning**
Various medications may have been administered during intrapartal period (note time and amount). Questions or concerns voiced regarding self/infant care.

**DIAGNOSTIC STUDIES**
Hemoglobin/Hematocrit (Hb/Hct), Complete Blood Count (CBC), Urinalysis (UA), Other Studies: May be done as indicated by physical findings.

**NURSING PRIORITIES**
1. Promote family unity and bonding.
2. Prevent or control bleeding.
3. Enhance comfort.

**DISCHARGE CRITERIA (FROM RECOVERY SETTING)**
1. Physiologically stable
2. Ambulating/appropriate movement of lower extremities

<table>
<thead>
<tr>
<th>NURSING DIAGNOSIS:</th>
<th>FAMILY PROCESSES, altered (bonding process)</th>
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</thead>
<tbody>
<tr>
<td>May Be Related To:</td>
<td>Developmental transition/gain of a family member</td>
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<tr>
<td>Possibly Evidenced By:</td>
<td>Hesitance to hold/interact with infant, verbalization of concerns</td>
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<tr>
<td>DESIRED OUTCOMES/EVALUATION CRITERIA—CLIENT/COUPLE WILL:</td>
<td>Hold infant, as maternal and neonatal conditions permit.</td>
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<td></td>
<td>Demonstrate culturally appropriate attachment and bonding behaviors.</td>
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**ACTIONS/INTERVENTIONS**

**RATIONALE**

Independent
Encourage client to hold, touch, and examine the infant, preferably touching skin to skin. The first hours after delivery offer a unique opportunity for family bonding to occur, because both mother and infant are emotionally receptive to cues from each other, which initiates the attachment and acquaintance. Close physical contact soon after birth facilitates the bonding process and capitalizes on infant’s receptivity during the first period of reactivity, which coincides with a maternal period of heightened awareness ("ecstasy") in the 1st hour postpartum. Note: Even if the client has chosen to relinquish her child, interacting with the newborn may facilitate the grieving process.

Encourage father to touch and hold infant and assist with infant care, as allowed by the situation. Helps facilitate bonding/attachment between father and infant. Fathers who actively participate in the birth process and early infant interactional activities commonly report feeling a special bond with the infant.

Observe and record family-infant interactions, noting behaviors thought to indicate bonding and attachment within specific culture. Eye-to-eye contact, use of en face position, talking in a high-pitched voice, and holding infant closely are associated with attachment in American culture. On first contact with the infant, a mother manifests a progressive pattern of behaviors whereby she initially uses fingertips to explore the infant’s extremities and progresses to use of the palm before enfolding the infant with whole hand and arms.

Note verbalizations/behaviors suggesting disappointment or lack of interest/attachment. The arrival of a new family member, even when wanted and anticipated, creates a transient period of disequilibrium, requiring incorporation of the new child into the existing family.

Welcome family and siblings during recovery period, if desired by client and if allowed by maternal/neonatal condition and setting. Promotes family unit, and helps siblings to begin process of positive adaptation to new roles and incorporation of new member into family structure.

Ensure family privacy between examinations during initial interaction with the newborn, as conditions of mother and infant permit. Client, father, siblings, and infant need time to become acquainted with one another.

Encourage and assist with breastfeeding, dependent on client’s choice and cultural beliefs/practices. Early contact has a positive effect on duration of breastfeedings; skin-to-skin contact and initiation of maternal tasks promotes bonding. Some cultures (e.g., Hispanic, Navajo, Filipino, Vietnamese) may refrain from breastfeeding until the milk flow is established.

Answer client’s questions regarding protocol of care during postdelivery period. Information relieves anxiety that may interfere with bonding or result in self-absorption rather than in attention to newborn.

Collaborative

Notify appropriate healthcare team members (e.g., nursery staff or postpartal nurse) of observations, as indicated. Inadequate bonding behaviors or poor interaction between client/couple and infant necessitates support and further evaluation. (Refer to CP: The Client at 4 Hours to 3 Days Postpartum; NDs: Parenting, risk for altered; Family Coping: potential for growth.)
**NURSING DIAGNOSIS:** FLUID VOLUME, risk for deficit

**Risk Factors May Include:** Myometrial fatigue/failure of homeostatic mechanisms (e.g., continued uteroplacental circulation, incomplete vasoconstriction, inadequate fluid shifts, effects of PIH)

**Possibly Evidenced By:** [Not applicable; presence of signs/symptoms establishes an actual diagnosis]

**DESIRED OUTCOMES EVALUATION**

**CRITERIA—CLIENT WILL:** Display stable vital signs within normal limits.

Demonstrate uterus firmly contracted at the umbilicus, lochial flow moderate and free of clots.

Display episiotomy repair or cesarean incision approximated and surgical dressing dry and intact.

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**ACTIONS/INTERVENTIONS**

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<th>RATIONALE</th>
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<td>Place client in recumbent position. and vaginal flow.</td>
<td>Optimizes cerebral blood flow, and facilitates monitoring of fundus</td>
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Assess contributing intrapartal events, especially induced/augmented labor or prolonged labor. | In many cases, oxytocin-stimulated labor requires increased amounts of oxytocin in the postpartal period to maintain myometrial contractility. Prolonged labor results in myometrial fatigue, increasing risk of uterine atony. |

Note type of delivery and anesthesia, blood loss at delivery, and length of stage III labor. | Excess uterine manipulation, operative delivery, anesthesia, or problems with placental separation may contribute to blood loss and myometrial fatigue. The postdelivery client may incur loss of as much as 300–400 ml of blood during a vaginal birth, and twice that amount in a cesarean birth, with no negative effects. Blood loss during delivery is quickly replaced by mobilization of extravascular fluid (physiological edema), so that total blood volume changes are minimal unless losses exceed normal fluid shifts. |

Palpate location and consistency of the fundus every 15 min (advance per protocol/client’s condition), and record findings. | Uterine myometrial activity contributes to hemostasis by compressing the endometrial blood vessels. The fundus should be firm and located at the umbilicus. Displacement may indicate a full bladder, retained blood clots, or uterine relaxation. |

Gently massage fundus if it is soft (boggy). Hold or support uterus with one hand just above the symphysis pubis while massaging the fundus with the other hand. Use a firm, steady, downward pressure on the fundus. Record results of intervention. | Fundal massage stimulates uterine contractions and controls bleeding. Overstimulation can cause uterine relaxation owing to muscle exhaustion. Downward pressure enhances expulsion of clots that may have interfered with uterine contractility. |
Place infant at client’s breast if client has chosen to breastfeed, respecting cultural beliefs. Infant suckling stimulates posterior pituitary release of oxytocin, which promotes myometrial contractility. Some clients may choose to postpone breastfeeding until milk production begins.

Assess for bladder fullness above symphysis pubis. Notify physician if distension is noted and client is unable to void. (Refer to CP: The Client at 4 Hours to 2 Days Postpartum; ND: Urinary Elimination, altered.) A full bladder displaces the fundus and interferes with uterine contractility.

Assess amount (using a predetermined scale), color, and nature of lochial flow every 15 min (advance per protocol and client’s condition). Helps identify potential lacerations of vagina and cervix, which could result in excessive, bright red flow. (Saturation of a perineal pad in a 15-min period is considered excessive flow and requires prompt evaluation.) Uterine atony increases lochial flow.

Assess BP and pulse every 15 min. As fluid shifts occur and blood is redistributed into the venous bed, a moderate drop in the systolic and diastolic BP and mild tachycardia may be noted. More marked changes may occur in response to anesthesia, magnesium sulfate (MgSO₄), or shock, or may be elevated in response to oxytocin or PIH. Bradycardia may occur normally in response to increased cardiac output and increased stroke volume, and vagal hypersensitivity following delivery. Sustained tachycardia may accompany shock.

Examine perineum every 15 min per protocol, noting condition of episiotomy/laceration repair, excess edema, ecchymosis, or intense internal pressure. Excess edema may cause loss of approximation of wound edges. Ecchymosis, excess perineal edema, signs or symptoms of shock in presence of well-contracted uterus, and no visible vaginal blood loss may indicate hematoma formation. Note: Continuous trickle of blood in presence of firm fundus may reflect missed lacerations of the vagina/cervix or unligated vessel in episiotomy.

Notify physician or healthcare provider if blood loss is excessive and/or vital signs are unstable. Prepare for transfer to acute-care facility if client is in a home setting, or free-standing birth center as indicated. Medical intervention may be needed to identify or treat underlying problems. Although freestanding birth center can provide basic care if problem is severe, more advanced care may be required.

Collaborative

Review initial Hb and Hct levels. Obtain stat levels as indicated. (Refer to CP: Postpartal Hemorrhage; ND: Tissue Perfusion, altered.) Aids in estimating amount of blood loss. Pregnancy-induced hypervolemia acts as a safeguard against hemorrhage. Client with lower-than-normal Hb (10 mg or less) or Hct (30% or less) is less able to tolerate blood loss. Usually, as much as 10% of total blood volume can be lost with no negative effects.

Start/maintain IV infusion of isotonic solution or insert saline lock, as indicated. Increases blood volume and provides open vein for administration of emergency medication, if needed.
Administer oxytocin or ergot preparation. Increase rate of IV oxytocin infusion per protocol if uterine bleeding persists.

Obtain platelet count, levels of fibrinogen and fibrin split products, prothrombin time (PT), and activated partial thromboplastin time (APTT).

Replace fluid losses with plasma, packed cells, or whole blood as indicated.

Assist in preparation, as necessary, for further treatment such as dilation and curettage (D&C), laparotomy, evacuation of hematoma, repair of birth canal lacerations, or hysterectomy.

Stimulates contractility of myometrium, closing off exposed blood vessels at former placental site, and reduces blood loss.

Alterations may suggest developing coagulation disorders.

Replacement of fluid losses may be needed to increase circulating volume and prevent shock.

If bleeding does not respond to conservative measures/oxytocin administration, surgery may be indicated.

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**NURSING DIAGNOSIS:**

**PAIN [acute]**

May Be Related To:

Effects of hormones/medications, mechanical trauma/tissue edema, physical and psychological exhaustion, anxiety

Possibly Evidenced By:

Reports of cramping (afterpains), muscle tremors, guarding/distraction behaviors, facial mask of pain

**DESIREO OUTCOMES/EVALUATION**

Verbalize reduction of level of discomfort/pain.

**CRITERIA—CLIENT WILL:**

Display relaxed posture and facial expression.

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**ACTIONS/INTERVENTIONS**

**RATIONALE**

Independent

Assess nature and degree of discomfort, type of delivery, nature of intrapartal events, length of labor, and anesthesia or analgesia administered.

Helps identify factors that intensify discomfort/pain.

Congratulate the client/couple on birth of newborn. Provide opportunity for talking about childbirth experience.

Promotes a sense of accomplishment, positive self-esteem, and emotional well-being. Helps relieve tension. Allows client/couple opportunity to work through and accept intrapartal events.

Provide appropriate information about routine care during postpartal period.

Information may lessen anxiety associated with fear of the unknown, which could intensify perception of pain.

Inspect episiotomy/laceration repair. Evaluate approximation of wound repair; note presence of edema or hemorrhoids. Apply ice pack.

Trauma and edema increase degree of discomfort and may cause stress on suture line. Ice provides local anesthesia, promotes vasoconstriction, and reduces edema formation.
Assess for leg or body tremors or uncontrollable shaking. Place warm blankets on client.

Postdelivery tremors (chills) may be due to sudden release of pressure on pelvic nerves or may possibly be related to fetus-to-mother transfusion occurring with placental separation. Warm blankets may promote muscle relaxation and a feeling of well-being.

Institute comfort measures (e.g., mouth care, partial bath; clean, dry linen; periodic perineal care).

Promotes comfort, feeling of cleanliness, and well-being. Higher-level psychological needs can be met only after basic physical needs are satisfied.

Offer clear fluids, as appropriate.

Relieves thirst associated with fluid losses in delivery, side effects of anesthesia, and breathing through mouth.

Assess for bladder fullness by palpating above symphysis pubis. Determine time of last voiding; note prenatal fluid retention.

Intrapartal bedrest, postdelivery mobilization of fluids, and IV fluid support may result in diuresis and discomfort associated with a full bladder.

Massage uterus gently as indicated. Note presence of factors that intensify the severity and frequency of afterpains.

Gentle massage promotes contractility but should not cause excessive discomfort. Multiparity, uterine overdistension, oxytocin stimulation, and breastfeeding increase degree of afterpains associated with myometrial contractions.

Encourage use of breathing/relaxation techniques.

Enhances sense of control and may reduce severity of discomfort associated with afterpains (contractions) and fundal massage.

Position or reposition client as needed. Assess for combined effects of anesthesia.

Sensation and movement of lower extremities may still be affected by subarachnoid or peridural block, which interferes with client’s ability to assume a comfortable position.

Provide quiet environment; encourage rest between assessments.

Labor and delivery are exhausting processes. Although client may be “too excited to sleep,” quiet and rest may prevent undue fatigue.

Collaborative

Administer analgesic as needed.

Analgesics act on higher brain centers to reduce perception of pain, promoting relaxation, facilitating rest and sense of well-being.