# N432 Newborn Care Plan

Zachary Lensink

Lakeview College of Nursing

N432: Maternal-Newborn Care

Professor Due

June 25, 2023

**Demographics (10 points)**

| | | | |
|---|---|---|---|
| **Date & Time of Clinical Assessment**<br>06/20/2023, 0900 | **Patient Initials**<br>K.R. | **Date & Time of Birth**<br>6/19/2023, 2330 | **Age (in hours at the time of assessment)**<br>9 hours |
| **Gender**<br>Male | **Weight at Birth**<br>(gm) 3580<br>(lb.) 7 (oz.) 14.33 | **Weight at Time of Assessment**<br>(gm) 3441<br>(lb.) 7 (oz.) 9.38 | **Age (in hours) at the Time of Last Weight**<br>9 hours |
| **Race/Ethnicity**<br>White | **Length at Birth**<br>Cm 48.26<br>Inches 19 | **Head Circumference at Birth**<br>Cm 35<br>Inches 13 and ¾ | **Chest Circumference at Birth**<br>Cm 35.5<br>Inches 14 |

***There are times when the weight at the time of your assessment will be the same as birth***

## Mother/Family Medical History (15 Points)

**Prenatal History of the mother:**

**GTPAL:** G2T2P0A0L2

**When prenatal care started:** The patient's first prenatal office visit was 12/27/2022, about 12 weeks into pregnancy.

**Abnormal prenatal labs/diagnostics:** The mother has a history of idiopathic thrombocytopenia purpura, so the provider wanted to have a CBC drawn monthly to monitor the mother's platelet count. The mother's platelet count stayed within range throughout the duration of pregnancy.

**Prenatal complications:** N/A

**Smoking/alcohol/drug use in pregnancy:** None

**Labor History of Mother:**

**Gestation at onset of labor:** 39 weeks, 2 days

**Length of labor:** 16 hours

**ROM:** Artificial

**Medications in labor:** Oxytocin

**Complications in labor and delivery:** 2nd degree tear, requiring 4 sutures. 100 mL blood loss during delivery. Otherwise, no other complications during labor and delivery.

**Family History Pertinent to infant:** Father has a history of spina bifida

**Social History (tobacco/alcohol/drugs) Pertinent to infant:** None

**Father/Co-Parent of Baby Involvement:** The father is a bedside and is the husband to the mother. The father is heavily involved.

**Living Situation of Family:** Mother, Father, 2-year-old daughter, and not their son will live together in a home. Paternal and maternal grandparents of the newborn were also visiting and seem like they will be involved in the newborn's life.

**Education Level of Parents (If applicable to parents' learning barriers or care of infant):** Both parents possess a college degree. The parents have experienced this before with their 2-year-old daughter and have a good grasp on their roles as parents.

## Birth History (10 points)

**Length of Second Stage of Labor:** 53 minutes

**Type of Delivery:** Vaginal

**Complications During Birth:** The newborn did not experience any complications and the mother experienced a second-degree tear which was repairs with four sutures.

**APGAR Scores:**

**1 minute:** 6

**5 minutes:** 8

**Resuscitation methods beyond the normal needed:** None

## Intake and Output (18 points)

**Intake**

**If breastfeeding:** The mother is breast feeding for now and would like to transition to EBM in the future.

**Feeding frequency:** Mother states the baby is eating every 2 hours or so.

**Length of feeding session:** The newborn is spending about 15 minutes on each breast when feeding, 30 minutes per feeding.

**One or both breasts:** Both breasts

**If bottle feeding:** N/A

**Formula type or Expressed breast milk (EBM):** N/A

**Frequency:** N/A

**Volume of formula/EBM per session:** N/A

**Output**

**Void**

**Age (in hours) of first void:** 30 minutes

**Number of voids in 24 hours:** 2 voids in under 24 hours (about 15 hours)

**Stool**

**Age (in hours) of first stool:** 30 minutes

**Type:** Type 3 stool, very soft

**Color:** Brown and black

**Number of times in 24 hours:** One stool in about 15 hours

**Percentage of weight loss at time of assessment:** 6.68% weight change

3580g (birth weight) – 3341g (assessment weight) = 239g weight change

239g (weight change) / 3580g (birth weight) = 0.0668

0.0668 x 100 = 6.68% weight change

**What is normal weight loss for an infant of this age?** Normal weight loss is 7-10% for breast fed newborns (Caglar, 2022)

**Is this neonate's weight loss within normal limits?** No, but the baby is very close to the normal range and is likely a healthy weight loss.

## Laboratory Data and Diagnostic Tests (15 points)

**Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.**

| Name of Test | Why is this test ordered for any infant? | Expected Results | Client's Results | Interpretation of Results |
|---|---|---|---|---|
| **Blood Glucose Levels** | This test is used to monitor for hypoglycemia and hyperglycemia in infants (Ricci et al., 2021) | 60-99 (Ricci et al., 2021) | **N/A** | **N/A** |
| **Blood Type and Rh Factor** | If the infant is Rh+ and the mother is Rh-, the mother will need RhoGAM. In case of infant transfusion, the blood type and Rh factor must be known (Ricci et al., 2021). | Individual Results without "expected" result (Ricci et al., 2021). | **O+** | Mother's blood type is also O+, meaning RhoGAM is not Indicated for the mother (Ricci et al., 2021). |
| **Coombs Test** | This is used to detect the presence of | **Negative** | **Negative** | The patient's blood does not have antibodies attached |

| | | | | |
|---|---|---|---|---|
| | antibodies against RBCs (Ricci et al., 2021) | | | to red blood cells (Ricci et al., 2021). |
| **Bilirubin Level (All babies at 24 hours) *Utilize bilitool.org for bilirubin levels*** | Newborns produce more than twice as much bilirubin as adults for up to 2 weeks postpartum, making the test useful in determining excretion efficiency (Ricci et al., 2021). | Less than 9.3 for the patient's age | 2.9 | The patient is excreting bilirubin effectively; a sign of healthy liver functioning (Ricci et al., 2021). |
| **Newborn Screen (At 24 hours)** | This is a standard screening done for reportable illnesses (Ricci et al., 2021). | **Negative** | **N/A** | This test was not performed yet. |
| **Newborn Hearing Screen** | This is a screening done for newborns to detect hearing deficits (Ricci et al., 2021). | **Passed** | **N/A** | This test was not performed yet. |
| **Newborn Cardiac Screen (At 24 hours)** | This is a screening done for congenital heart abnormality detection (Ricci et al., 2021). | Negative; No findings suggestive of congenital heart abnormalities (Ricci et al., 2021) | **N/A** | This test was not performed yet. |

**Lab Data and Diagnostics Reference (1) (APA):**

BiliTool, Inc. (2023). *Hyperbilirubinemia calculator tool*. BiliTool. Retrieved June 18, 2023, from https://bilitool.org

Ricci, S. S., Kyle, T., & Carman, S. (2021). *Maternity and pediatric nursing* (4th ed.). Wolters Kluwer.

## Newborn Medications (10 points)

**Contain in-text citations in APA format.**

| **Brand/Generic** | **Aquamephyton (Vitamin K)** | **Illotycin (Erythromycin Ointment)** | **Hepatitis B Vaccine** | **Acetaminophen** | **No other medications were given to the newborn.** |
|---|---|---|---|---|---|
| **Dose** | 1 mg | ½ inch applied to each eye | 10 mcg | 25.6 mg (160mg/5mL) | N/A |
| **Frequency** | Given once | Given once | Given once | PRN (One dose given) | N/A |
| **Route** | IM | Topical ophthalmic | IM | PO | N/A |
| **Classification** | Fat-soluble vitamin (Ingold & Sergent, 2023). | Macrolide; Antibiotic (Jones & Bartlett Learning, 2023). | Recombinant antiviral vaccine (CDC, 2021) | Antipyretic, Nonopioid analgesic (Jones & Bartlett Learning, 2023). | N/A |
| **Mechanism of Action** | Medication acts as a cofactor for multiple proteins which serve as clotting factors and aid in the coagulation process (Ingold & Sergent, 2023). | This medication "binds with the 50S ribosomal subunit of the 70S ribosome in many … organisms. This action inhibits RNA-dependent protein synthesis in bacterial cells, causing | This vaccine contains an inactivated virus that stimulates an immune response targeting and can recalling the surface antigen for future exposure to the live virus (CDC, 2021). | This medication "inhibits the enzyme cyclooxygenase, blocking prostaglandin production and interfering with pain impulse generation" (Jones & Bartlett Learning, 2023). | N/A |

| | | | | | |
|---|---|---|---|---|---|
| | | them to die" (Jones & Bartlett Learning, 2023). | | | |
| **Reason Client Taking** | This medication is given reduce blood clotting time and prevent bleeding. | This medication is routinely given to newborns, and it prevents chlamydia and gonorrhea infections of the eye. | This vaccine is routinely given to newborns, aligning with the standard vaccine schedule. It prevents Hepatitis B infection. | Analgesia for pain relief | N/A |
| **Contraindications (2)** | Genetic prolonged clotting time and existing dyspnea (Ingold & Sergent, 2023). | Existing illness/injury to the eye and statin therapy in mother can be contraindications (Jones & Bartlett Learning, 2023). | An allergy to yeast and chloroquine therapy in the mother are contraindications (CDC, 2021). | Liver dysfunction and the use as a calming agent to console the newborn (Jones & Bartlett Learning, 2023) | N/A |
| **Side Effects/Adverse Reactions (2)** | Dyspnea and Redness at the injection site (Ingold & Sergent, 2023). | Vomiting and poor feedings are possible side efefcts (Jones & Bartlett Learning, 2023). | Pyrexia Anaphylaxis can be adverse effects of this vaccine (CDC, 2021). | An increase in bleeding and liver dysfunction (Jones & Bartlett Learning, 2023). | N/A |
| **Nursing Considerations (2)** | Give the injection in vastus lateralis and utilize 25g-5/8 size needle (Ricci et al., 2021) | Apply gently and closed infant eyes. Then wipe off any excess ointment after one | Give in vastus lateralis and give parents the VIS for education (Ricci et al., 2021). | This medication should be used cautiously in the presence of jaundice and high bilirubin. | N/A |

| | | | | | |
|---|---|---|---|---|---|
| | | minute to ensure the medication is present (Ricci et al., 2021). | | Monitor for urine output (Jones & Bartlett Learning, 2023). | |
| **Key Nursing Assessment(s)/Lab(s) Prior to Administration** | The patient must not have a history of prolonged clotting time in either parent, Parental consent | Parental consent and no existing eye injuries. | Parental consent should be obtained before administration and monitor for adverse effects. | Signs of jaundice and bilirubin levels should be monitored. | N/A |
| **Client Teaching needs (2)** | Discuss benefits of this vaccine and discuss clotting factors and deficiency with the parents. | A discuss of the benefits of this ointment, and how it prevents infection should be had with the parents. | Discuss the benefits of this vaccine and educate the parents on the dosage schedule for future vaccinations in the series. | Monitor for signs and symptoms of pain. Notify the provider in the event of elevated bilirubin or signs o jaundice (Jones & Bartlett Learning, 2023). | N/A |

**Medications Reference (1) (APA):**


CDC. (2021). *Hepatitis B.* Centers for Disease Control and Prevention. Retrieved June 24, 2023, from https://www.cdc.gov/vaccines/pubs/pinkbook/hepb.html

Ingold, C. J., & Sergent, S. R. (2023). *Phytonadione (vitamin K1)*. National Library of Medicine. Retrieved June 24, 2023, from https://www.ncbi.nlm.nih.gov/books/NBK557622/

Jones & Bartlett Learning. (2023). *2022 Nurse's drug handbook* (21st ed.). Jones & Bartlett Learning.

Ricci, S. S., Kyle, T., & Carman, S. (2021). *Maternity and pediatric nursing* (4th ed.). Wolters Kluwer

# Newborn Assessment (20 points)

| Area | Your Assessment | Expected Variations and Findings<br>**This can be found in your book on page 622 in Ricci, Kyle, & Carman 4th ed 2021.* |
|---|---|---|
| **Skin** | Intact, pink, smooth/soft, flexible, warm, turgor is expected | Jaundice, acrocyanosis, milia, Mongolian spots, and stork bites (Ricci et al., 2021) |
| **Head** | Circumference: 35 cm, normal hair distribution, symmetrical, normocephalic | Microcephaly, macrocephaly (Ricci et al., 2021) |
| **Fontanels** | Soft and flat (not sunken or bulging) | Sunken or enlarged fontanels (Ricci et al., 2021) |
| **Face** | Symmetrical, at rest, no bruising noted | Facial nerve paralysis, nevus flammeus, nevus vasculosus (Ricci et al., 2021) |
| **Eyes** | Symmetrical, Full eyelashes/eyebrows, Brown color, Clear/white sclerae | Chemical conjunctivitis, subconjunctival hemorrhages (Ricci et al., 2021) |
| **Nose** | Symmetrical, midline, breathes through nose | Malformation or blockage (Ricci et al., 2021) |
| **Mouth** | Symmetrical, midline, intact hard/soft palates | Epstein pearls, erupted precocious teeth, thrush (Ricci et al., 2021) |
| **Ears** | Symmetrical/fully formed, flexible, in middle/upper skull, newborn responds to auditory stimuli | Low-set ears, hearing loss (Ricci et al., 2021) |
| **Neck** | Full range of motion, trachea midline | Restricted movement, clavicular fractures (Ricci et al., 2021) |
| **Chest** | Circumference: 35.5 cm, symmetric, sternum midline, no excess bulging | Nipple engorgement, whitish discharge (Ricci et al., 2021) |
| **Breath Sounds** | Clear in all fields, full/deep respirations, no use of accessory muscles, equal rise and fall of chest | Rubs, crackles, wheezes, stridor (Ricci et al., 2021) |
| **Heart Sounds** | Auscultated $S_1$ and $S_2$ | $S_3$ is not pathologic in most children; $S_4$ indicates pathologic diastolic failure (Ricci et al., 2021) |

| | | |
|---|---|---|
| **Abdomen** | No distension, scaphoid, soft, rounded, three vessels in umbilical cord | Distended (Ricci et al., 2021) |
| **Bowel Sounds** | Normoactive | Hypoactive or hyperactive (Ricci et al., 2021) |
| **Umbilical Cord** | Three vessels present, blue/white/green/gray appearance | Only two vessels in umbilical cord (Ricci et al., 2021) |
| **Genitals** | Clean, swollen, no wounds/lesions/feces present, no evidence of inguinal hernia; Only male genitals are present | Edematous scrotum in males, vaginal discharge in females (Ricci et al., 2021) |
| **Anus** | Midline, wink reflex present | Not midline, fistula to vagina present, no BM within 24 hours of birth (Ricci et al., 2021) |
| **Extremities** | 10 fingers, 10 toes, full range of motion, no clicking hips, lines in palms and soles, no clubbing | Congenital hip or other joint dislocations (Ricci et al., 2021) |
| **Spine** | Midline, curved, no gaps/dimples in spinal column, no tufts | Tuft or dimple on spine (Ricci et al., 2021) |
| **Safety**<br>• **Matching ID bands with parents**<br>• **Hugs tag**<br>• **Sleep position** | The newborn's ID matches the parents. Hug tag present. The newborn is swaddled and sleeping comfortably on his back in the supine position | N/A |

## Vital Signs, 3 sets (6 points)

| **Time** | **Temperature** | **Pulse** | **Respirations** |
|---|---|---|---|
| **Birth** | 36.6ºC | 189 | 42 |
| **4 Hours After Birth** | 36.8ºC | 134 | 56 |
| **At the Time of Your Assessment** | 36.8 ºC | 130 | 44 |

**Vital Sign Trends:** Heart rate has come down and the newborn's vital signs are currently stable

## Pain Assessment, 1 set (2 points)

| Time | Scale | Location | Severity | Characteristics | Interventions |
|---|---|---|---|---|---|
| 0900 | FLACC | N/A | 0 | N/A | Reassess the newborn for pain at the next room visit. |

## Nursing Interventions and Medical Treatments for the Newborn (6 points)

| Nursing Interventions and Medical Treatments (Identify nursing interventions with "N" after you list them, identify medical treatments with "M" after you list them.) | Frequency | Why was this intervention/ treatment provided to this patient? Please give a short rationale. |
|---|---|---|
| Provided the mother with water (N) | Occurred twice | This intervention hydrates the mother and can help the mother produce mil for the newborn. |
| Reassessed respirations as the first count were high (N). | Occurred once | Assessing the newborns respirations again helped determine if the newborn was in any respiratory distress. Newborns can have irregular breathing patterns, so the nurse must assess for a full minute |
| Swaddled the newborn in blanket after assessment (N) | Occurred once | This was done after the assessment to keep the newborn warm and comfortable |

## Discharge Planning (3 points)

**Discharge location:** The newborn is planned to be discharged home with the family.

**Follow up plan (include plan for newborn ONLY):** Continue to monitor the timing and number of feedings for the newborn. Along with feedings, continue to monitor changes in

weight. Set a newborn appointment with a preferred pediatrician, and schedule future vaccinations if parents want them.

**Education needs:** The parents are both comfortable with their newborn and understand how to care and report adverse changes to their pediatrician. They have a 2-year-old at home, but handouts and informational guides could be beneficial for the family to take home.

## Nursing Diagnosis (30 points)

***Must be NANDA approved nursing diagnosis and listed in order of priority***
**Two of the Nursing Diagnoses must be education related i.e. the interventions must be education for the client."**

**2 points for correct priority**

| **Nursing Diagnosis (2 pt each)** Identify problems that are specific to this patient. Include full nursing diagnosis with "related to" and "as evidenced by" components | **Rational (1 pt each)** Explain why the nursing diagnosis was chosen | **Intervention/Rational (2 per dx) (1 pt each)** Interventions should be specific and individualized for his patient. Be sure to include a time interval such as Assess vital signs q 12 hours." List a rationale for each intervention and using APA format, cite the source for your rationale. | **Evaluation (2 pts each)**<br>• How did the patient/family respond to the nurse's actions?<br>• Client response, status of goals and outcomes, modifications to plan. |
|---|---|---|---|
| 1. Risk for surgical site infection related to type of surgical procedure as evidenced by a circumcision. | This procedure is a high-risk procedure that could lead to an infection. | 1.Minimize the patient's risk to infection by washing hands before and after care (Phelps, 2020).<br>Rationale: this will greatly reduce the risk of infection when the mother or father need to clean and touch the area (Phelps, 2020).<br>2.Monitor temperature at least every 4 hours and record on graph paper. Report elevations immediately (Phelps, 2020).<br>Rationale: this will help the family stay ahead of infections by catching changes in temperature early (Phelps, 2020). | The family responded positively to this diagnosis, stating that they want to keep the surgical site clean and dry. The parents agreed that washing hands frequently will lower the risk for infections, and that they will follow through with the interventions. |

| | | | |
|---|---|---|---|
| 2. Ineffective breathing pattern related neuromuscular immaturity as evidenced by rapid and irregular respiration rate. | This was chosen because the nurse and this student nurse had to count the newborn's respirations a few times to accurately assess the respiratory rate. The newborn has irregular rhythms of breathing, causing the count to be inaccurate. | 1. Assess respiratory rate and depth at least every 2 hours (Phelps, 2020). Rationale: this will give the nurse a better understanding of how the newborn is breathing, making it easier to assess for changes in RR (Phelps, 2020).<br>2.Teach parents how to monitor for respiratory distress (Phelps, 2020) Rationale: this will give the parents a better chance of identifying respiratory distress in their child, increasing the likelihood of effective care (Phelps, 2020). | The reaction was positive because the mother had noticed the irregular respiratory rate too. She is willing to help monitor the patient's respirations. |
| 1. Ineffective breastfeeding related to as evidenced by mother demonstrating ineffective handling of the newborn | This was chosen because the mother is concerned with the newborn not getting enough to eat. It is also concerning to the nurse because the nurse wants the baby to get sufficient nutrition. | 1. Be available, yet discreet, during initial and future breastfeeding sessions (Phelps, 2020). Rationale: being available to help the mother will make her feel more comfortable attempting to feed. Also, staying discrete will give respect and privacy to the patient (Phelps, 2020).<br>2. Educate the mother in breastfeeding techniques (Phelps, 2020). Rationale: While the lactation consultant isn't available, the nurse can provide some common breastfeeding techniques that can improve feeding. | The mother was happy that the nurse was able to give some pointers on effective breastfeeding while the lactation consultant was in other rooms. |

| | | | |
|---|---|---|---|
| 3. Readiness for enhanced organized infant behavior related to parent expresses desire to enhance recognition of infant's self-regulatory behaviors, as evidenced by mother wanting the newborn to get on a consistent feeding schedule. | This diagnosis was chosen because the mother is adamant about getting the baby on a schedule for feeding. It is also important from a nursing perspective because it increases the likelihood of healthy baby. | 1. Discuss with parents how their actions can help promote infant development. Make it clear, however, that infant maturation isn't completely within their control (Phelps, 2020).<br>Rationale: this will be good for the parents to understand when improving the newborn's feeding schedule. They are in control (Phelps, 2020).<br>2. Assist parents in interpreting behavioral cues from their infant to foster healthy parent–child interaction (Phelps, 2020).<br>Rationale: they have had a baby before, but all babies are different. Giving education on some common ques can improve the parents' ability to recognize needs (Phelps, 2020). | The mother is very motivated to get her new son on a regular feeding schedule, stating "my daughter was perfect after we got her on a good schedule." She is willing to go above and beyond for her children, to see them improve. |

**Other References (APA):**

Caglar, D. (2022, October 4). *Evaluation of weight loss in infants six months of age and younger*. UpToDate. Retrieved June 24, 2023, from https://www.uptodate.com/contents/evaluation-of-weight-loss-in-infants-six-months-of-age-andyounger#:~:text=Weight%20loss%20is%20often%20seen,(30%20grams)%20per%20day.

Phelps, L. L. (2020). *Sparks and Taylor's nursing diagnosis reference manual* (11th ed.). Wolters Kluwer.