

# Simulation 3: Family Centered Neonatal Abstinence Syndrome



This image was created with the assistance of DALL-E 2

**Estimated Run Time:** 15 minutes  
**Adapted for Student Population:** Graduate  
**Setting:** Level 2 nursery  
**Patient Population:** Infant



**NOSTIGMA**  
Building pathways to equitable care

## Learning Objectives

### General Objectives:

1. Examines awareness of implicit attitudes that contribute to stigma
2. Constructs clear and empathetic communication of health information and treatment options devoid of stigma
3. Employs strategies to reduce risk of harm to the patient and family

### Simulation Scenario Objectives:

1. Develops an understanding of unconscious (implicit) bias influenced by stereotyping and manifested in the language used by nurses when interacting with family members of infants born with NAS (AMERSA Standards 4, 7)
2. Tests strategies to redirect and educate nursing students on appropriate language when interacting with patients and their families with the goal of creating a safe, non-stigmatizing environment so that family members feel welcome and as a part of the team responsible for caring for their infant (AMERSA Standards 4, 13, 16)
3. Formulates harm reduction approaches when considering person/family-centered outcomes (AMERSA Standards 3, 16)

## Psychomotor Skills Required of Participants Prior to Simulation

- Ability to recognize the role of the mother in caring for the infant
  - Ability to have a therapeutic conversation with the mother

### If integrating assessment and care of infant with NAS:

- Assessment of the infant
  - Assess for s/s withdrawal
  - Complete Finnegan Score
- Interventions to reduce infant stress
  - Swaddling, holding, nonnutritive sucking, pressure, rubbing, swaying, rocking, and reducing external stimulation
  - Medication management

## Cognitive Activities Required of Participants Prior to Simulation

(textbooks, notes, articles, websites, etc.)

Committee on Obstetric Practice. (2017, August). *ACOG committee opinion: Opioid use and opioid use disorder in pregnancy* (Report No. 711). The American College of Obstetricians and Gynecologists & American Society of Addiction Medicine.

<https://www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2017/08/opioid-use-and-opioid-use-disorder-in-pregnancy>

**Simulation Design Template** (revised February 2023)

© 2023, National League for Nursing. Originally adapted from Childs, Sepples, Chambers (2007). Designing simulations for nursing education. In P.R. Jeffries (Ed.) *Simulation in nursing education: From conceptualization to evaluation* (p 42-58).

Washington, DC: National League for Nursing.

Kondili, E., & Duryea, D. G. (2019). The role of mother-infant bond in neonatal abstinence syndrome (NAS) management. *Archives of Psychiatric Nursing*, 33(3), 267-274. <https://doi.org/10.1016/j.apnu.2019.02.003>

Mossabeb, R., & Sowti, K. (2021). Neonatal abstinence syndrome: A call for mother-infant dyad treatment approach. *American Family Physician*, 104(3), 222-223.

Nguyen, T. T., Toney-Noland, C., Wong, J., Chyi, L., Castro, R., Huang, A., Aron-Johnson, P., Lee, H. C., & Quinn, M. K. (2022). Neonatal abstinence syndrome and mother's own milk at discharge. *Journal of Perinatology*, 42(8), 1044-1050. <https://doi.org/10.1038/s41372-022-01430-5>

Schierholz, E., French, R., & Boucher, A.-M. (2020, January 5). Caring for infants and families affected by neonatal abstinence syndrome. *American Nurse*, 15(1), 6-11. <https://www.myamericannurse.com/wp-content/uploads/2020/01/AN-CE-NAS-12-11.pdf>

Wu, D., & Carre, C. (2018). The impact of breastfeeding on health outcomes for infants diagnosed with neonatal abstinence syndrome: A review. *Cureus*, 10(7), e3061. <https://doi.org/10.7759/cureus.3061>

If running simulation as maternity/pediatric focus:

Modified Finnegan Neonatal Abstinence Score (NAS). <https://www.mdcalc.com/modified-finnegan-neonatal-abstinence-score-nas>

Schierholz, E., French, R., & Boucher, A.-M. (2020, January 5). Caring for infants and families affected by neonatal abstinence syndrome. *American Nurse*, 15(1), 6-11. <https://www.myamericannurse.com/wp-content/uploads/2020/01/AN-CE-NAS-12-11.pdf>

Wachman, E. M., & Werler, M. M. (2019, January 22). Pharmacologic treatment for neonatal abstinence syndrome: Which medication is best? *JAMA Pediatrics*, 173(3), 221-223. doi:10.1001/jamapediatrics.2018.5029

## No Stigma Simulation Design Template

(Revised 2/25/24)

### Simulation 3: Family Centered Neonatal Abstinence Syndrome

MS instructor OR clinical educator simulation

**Date:**

**Discipline:** MS Educator/Clinical Instructor

**Expected Simulation Run Time:** 15 minutes

**Location:** Level 2 nursery

**Today's Date:**

**File Name:** Jonas Simas/Suzi Morey

**Student Level:** Graduate

**Guided Reflection Time:** 45 minutes

**Location for Reflection:**

#### Brief Description of Patient

Infant is a 5-day-old male born at 34 weeks gestation to a 21-year-old female with a history of SUD/ODU including cocaine, THC, and fentanyl. Mother has been on a methadone program since finding out she was pregnant at 20 weeks; she is currently on 120 mg methadone daily.

Infant was diagnosed with neonatal abstinence syndrome (NAS) and is currently in a Level 2 nursery. Infant was started on morphine 0.04 mg/kg/dose q4 hours along with a loading dose of phenobarbital at (15 mg/kg/day) and maintenance dose (4 mg/kg/day).

The mother has been visiting sporadically. She reported she is having issues with transportation.

A student nurse has been assigned to care for the infant and mother. The student nurse is in the room with the infant and attempting to console the fussy infant.

You are the nurse educator who comes into the room to check in on the student and guide the student nurse in the care he/she gives to the infant and his mother.

**Infant Name:** Jonas Simas

**Mother Name:** Suzi Morey

**Date of Birth:** 5 days ago

**Birth Age:** 35 weeks and 1 day

**Time of Birth:** 11:50 a.m.

Infant is currently 5 days old

**Birth Weight:** 2359 grams

**Length:** 19.9 inches

**Current Weight:** 2250 grams

**Sex Assigned at Birth:** Male

**Gender Identity:** Male

**Apgar Score at Birth:** 7

**Feeding:** High calorie infant formula

**Apgar Score at 5 minutes:** 7

**Racial Group:** Mixed race

**Religion:** Not yet determined

**Language:** English

**Support Person:** Mother and aunt

**Support Phone:** (980) 909-9000

**Allergies:** None

**Immunizations:** Up to date

**Attending Provider/Team:** Dr. Sanchez – attending if needed

NP Darjung – if needed

Nurse Marie

**Home Medications:** None

**Past Medical History:** Infant – none

Mother – SUD

Father – unknown

**History of Present Illness (Infant):** Infant is a 5-day-old male born via vaginal birth to a mother with a history of SUD/OD. Mother reportedly had minimal prenatal care and has been on a methadone treatment program for the last 3 months for her SUD.

Infant was transferred to a Level 2 nursery. On day two of life, infant began exhibiting signs of NAS including hyperactive reflexes, poor feeding, hypertension, tachycardia, and hyperthermia. Infant was started on morphine per protocol. Infant continues to be irritable with multiple bouts of high-pitched crying. Infant had diarrhea 4 times today. Most recent Finnegan Score was 12.

Mother visited with the infant 20 minutes ago and complained that her baby was irritable and difficult to console. Mother will be visiting again in two hours and would like to discuss the following with a nurse:

- She heard “breast milk is best” and would like to breast feed her infant
- She wants to bring her infant home today
- She would like some resources for free diapers

**Social History:** Mother lives with aunt and significant other (not biological father of infant)

**Primary Medical Diagnosis:** Neonatal Abstinence Syndrome

**Surgeries/Procedures & Dates:** None

## Setting/Environment

|  |  |
|--|--|
| <input type="checkbox"/> Emergency Department<br><input type="checkbox"/> Medical-Surgical Unit<br><input type="checkbox"/> Pediatric Unit<br><input type="checkbox"/> Maternity Unit<br><input type="checkbox"/> Behavioral Health Unit<br><input checked="" type="checkbox"/> Level 2 NICU | <input type="checkbox"/> ICU<br><input type="checkbox"/> OR / PACU<br><input type="checkbox"/> Rehabilitation Unit<br><input type="checkbox"/> Home<br><input type="checkbox"/> Outpatient Clinic<br><input type="checkbox"/> Other: |
|--|--|

## Equipment/Supplies (choose all that apply to this simulation)

**Simulated Patient/Manikins Needed:** standardized patient

- Infant (mannequin)
- Nursing student – actor
- MS nurse educator – learner/student

**Recommended Mode for Simulator:** script/training for SP

## Other Props & Moulage

|   |   |
|---|---|
| <p><b>Equipment Attached to Manikin/Simulated Patient:</b></p> <input checked="" type="checkbox"/> ID band<br><input type="checkbox"/> IV tubing with primary line fluids running at ___ mL/hr<br><input type="checkbox"/> Secondary IV line running at ___ mL/hr<br><input type="checkbox"/> IVPB with ___ running at mL/hr<br><input type="checkbox"/> IV pump<br><input type="checkbox"/> PCA pump<br><input type="checkbox"/> Foley catheter with ___mL output<br><input checked="" type="checkbox"/> O2 at bedside PRN<br><input type="checkbox"/> Monitor attached<br><input type="checkbox"/> Other:<br><input checked="" type="checkbox"/> IV access in R dorsal arch (hand) <p><b>Other Essential Equipment:</b></p> <p><b>Medications and Fluids:</b></p> <input type="checkbox"/> Oral Meds:<br><input type="checkbox"/> IV Fluids:<br><input type="checkbox"/> IVPB:<br><input type="checkbox"/> IV Push:<br><input type="checkbox"/> IM or SC: | <p><b>Equipment Available in Room:</b></p> <input type="checkbox"/> Bedpan/urinal<br><input type="checkbox"/> O2 delivery device (type)<br><input type="checkbox"/> Foley kit<br><input type="checkbox"/> Straight catheter kit<br><input type="checkbox"/> Incentive spirometer<br><input type="checkbox"/> Fluids<br><input type="checkbox"/> IV start kit<br><input type="checkbox"/> IV tubing<br><input type="checkbox"/> IVPB tubing<br><input type="checkbox"/> IV pump<br><input type="checkbox"/> Feeding pump<br><input type="checkbox"/> Crash cart with airway devices and emergency medications<br><input type="checkbox"/> Defibrillator/pacer<br><input type="checkbox"/> Suction<br><input type="checkbox"/> Other: |
|---|---|

## Roles

|   |   |
|---|---|
| <input checked="" type="checkbox"/> Student nurse   | <input type="checkbox"/> Observer(s)                    |
| <input checked="" type="checkbox"/> Clinical educator   | <input type="checkbox"/> Recorder(s)                    |
| <input type="checkbox"/> Nurse 3  | <input type="checkbox"/> Family member #1               |
| <input type="checkbox"/> Provider (physician/advanced practice nurse)                                 | <input type="checkbox"/> Family member #2               |
| <input type="checkbox"/> Other healthcare professionals:<br>(pharmacist, respiratory therapist, etc.) | <input type="checkbox"/> Clergy                         |
|   | <input type="checkbox"/> Unlicensed assistive personnel |
|   | <input type="checkbox"/> Other:                         |

## Guidelines/Information Related to Roles

Information on behaviors, emotional tone, and what cues are permitted should be clearly communicated for each role. A script may be created from scenario progression outline.

Roles:

- Infant (mannequin)
- Nursing student (actor)
- Nurse educator (learner)

## **Pre-Briefing/Briefing**

Prior to report, participants will need pre-briefing/briefing. During this time, faculty/facilitators should establish a safe container for learning, discuss the fiction contract and confidentiality, and orient participants to the environment, roles, time allotment, and objectives.

*The purpose of this stimulation is to provide learners an opportunity to address biases in the healthcare delivery and education systems, while emphasizing the importance of non-judgmental communication among novice nurses/nursing students when caring for families impacted by neonatal abstinence syndrome.*

### **Simulation Pre-Briefing\*:**

1. Welcome participant
2. Let participant know the objective of today
3. Let participant know what's going to happen today
  - a. Pre-simulation survey and consent
  - b. Simulation during which the student will engage with the mannequin/teacher/patient in such a way that will address the issue of stigma in some capacity
    - i. Let participant know you are looking for engagement with the mannequin (if applicable) as if the mannequin is a 'real human' (Note: this is known as the fiction contract)
      1. The educator will do all she/he is able to create a scenario that is as real as possible within the limitations of the simulated environment
    - ii. Describe role the participant will play
      1. Nurse Educator
    - iii. Describe roles within the simulation
      1. Student nurse
      2. Patient
    - iv. Describe the setting
      1. Level 2 nursery
  - c. Debriefing with educator during which you'll review the simulation and discuss learning opportunities
    - i. Reinforce the concept of simulation as a learning environment
      1. Missteps/errors/oversights etc. are puzzles to be solved, not punishable
  - d. Post-simulation survey
4. Reinforce the concept that the simulation is a safe environment
  - a. Participant will be observed and recorded but no personal identifiers will be used

\*Note: Pre-Brief is based on NLN Pre-Briefing Checklist



**Report MSN-Educator Student will Receive Before Simulation** (Use SBAR format)

|                                 |  |
|---------------------------------|--|
| <b>Time:</b>                    | Now  |
| <b>Person providing report:</b> | Student nurse (actor) to nurse educator (student)  |
| <b>Situation:</b>               | <p>Mother had a vaginal delivery of a 34 week plus 1-day infant 5 days ago. Infant was diagnosed with NAS on day two of life and was started on morphine per protocol. Mother has just visited her baby in the Level 2 nursery where she found her infant irritable and difficult to console. Mother would like to discuss the following with a nurse:</p> <ul style="list-style-type: none"><li>• She heard “breast milk is best” and would like to breast feed her infant</li><li>• She wants to bring her infant home today</li><li>• She would like some resources for free diapers</li></ul> <p><u>If focus is on caring for infant with NAS:</u></p> <p>Infant has not gained weight since birth despite receiving high calorie infant formula and eating every 2 hours.</p> <p>Finnegan scores 9-12 for the last two days.</p> <p>VS: B/P 99/58, HR 125, RR 26, 98% O<sub>2</sub> sat on 2 liters per minute via Nasal Canula, Temp 100.3 rectal (note the infant is hypertensive, tachycardic, and hyperthermic).</p> <p>Mother has arrived at the Level 2 NICU two hours after her scheduled time. Mother wants to speak with the nurse about breast feeding and taking her child home.</p> |
| <b>Background:</b>              | Mother was on 120 mg methadone daily. Mother reports having only minimal prenatal care and had been using cocaine, fentanyl, and THC prior to learning she was pregnant at 20 weeks gestation.   |
| <b>Assessment:</b>              | Infant continues to exhibit symptoms of NAS and has not gained weight despite high calorie infant formula. Mother would like to breast feed infant and is anxious to bring the child home.   |
| <b>Recommendation:</b>          | Address the concerns of the mother and discuss the needs of the infant.  |

## Scenario Progression Outline

**Patient Name:** Jonas Simas - infant  
**Mother:** Suzi Morey

**DOB:** 07/01/\_ \_

| Timing (approx.)   | SP Actions   | Expected Interventions   | May Use the Following Cues  |
|--|--|--|---|
| <b>0-15 min</b><br><br><b>Concept:</b> Stigmatizing language | Student nurse (SN) is holding mannequin (infant) who is fussy.<br><br>SN states she wants to report on her conversation with the mother.<br><br><b>SN:</b> <i>"I just got off the phone with Jonas' drug addicted mother. She's something else. She's making a bunch of ridiculous demands..."</i> | Nurse educator enters the room to check on the student nurse.<br><br>Educator: Address the language that is being used by the student.<br><br>Address the tone of the student.   | <b>SN:</b> <i>"Would you like me to report on what I'm doing with baby Jonas and my conversation with his mom?"</i>   |
| <b>Concept:</b> SUD/OD is a chronic illness                  | <b>SN:</b> <i>"It's all her fault that the baby is going through withdrawals and is addicted."</i>   | Address the concept that SUD/OD is a chronic illness and not a choice.<br><br>Note: Infants cannot be born with addiction because addiction is a behavioral disorder—they are simply born manifesting a withdrawal syndrome. | <b>SN:</b> <i>"She's nothing but a junkie pill popper who probably didn't even want the baby."</i><br><br><i>"It was her choice to take drugs. She decided to do this."</i> |
| <b>Concept:</b> Empathy for both mother and infant           | <b>SN:</b> <i>"I feel so bad for the baby. I just get so mad that she hurt her baby boy even before he was born. I would never want to deal with her if I had her as a patient."</i><br><br><i>"She doesn't even need to be here – we're</i>   | Educator: Discuss the importance of providing all patients with care no matter their past medical history.<br><br>Discuss the term <i>"deal with"</i> and how it is inappropriate.   | <b>SN:</b> <i>"The baby should be given up for adoption – he'll be better off."</i>   |

|  |   |  |   |
|--|---|--|---|
|  | <i>feeding the infant with formula anyway."</i>   | Educator: Address the feelings the SN has. Discuss the role the mother plays in caring for the infant. Discuss ways to support the mother-infant dyad. |   |
| <b>Concept:</b><br>Stigma related to breastfeeding & reinforce non-stigmatizing language | <b>SN:</b> <i>"The druggie wants to breast feed her baby. She's on methadone which makes her high all the time. She'll pass it on to her baby and just make him a junkie too."</i><br><br><i>"She thinks she can take the baby home. She has no idea. I told her she couldn't take the baby home unless she has a bunch of clean urines."</i> | Educator: Address the issue of breast feeding and OUD/SUD.<br><br>Educator: Readdress the terms "druggie", "junkie", "clean/dirty urine", and "high".  | <b>SN:</b> <i>"She could kill the baby with methadone if she breast feeds him – or maybe turn him into an addict later in his life."</i><br><br><i>"I bet her urine will be dirty again today."</i> |
| <b>Concept:</b><br>Bias in understanding needs of mothers                                | <b>SN:</b> <i>"The other thing – she wants all this free stuff. She's taking advantage of us. She should work for this like everyone else does. I told her we could only give her one package."</i>   | Educator: Discuss the bias the student is demonstrating by withholding potentially needed supplies.  |   |

## Debriefing/Guided Reflection

**Note to Faculty:** We recognize that faculty will implement the materials we have provided in many different ways and venues. Some may use them exactly as written and others will adapt and modify. Some may choose to implement materials and initiate relevant discussions around this content in the classroom or clinical setting in addition to providing a simulation experience. We have designed this scenario to provide an enriching experiential learning encounter that will allow learners to accomplish the listed objectives and spark rich discussion during debriefing. Learner actions and responses observed by the debriefer should be specifically addressed using a theory-based debriefing methodology (e.g., Debriefing with Good Judgment, Debriefing for Meaningful Learning, PEARLS). Remember to also identify important concepts or curricular threads that are specific to your program. There are a few main themes that we hope learners will bring up during debriefing, but if they do not, we encourage you to introduce them.

1. How did caring for this patient make you feel (internal stigma)?
2. Who is this patient to you (therapeutic rapport)?
3. What are your main concerns (prioritization)?

### **Themes to consider for this scenario:**

1. Stigmatizing language
  2. Personal/professional bias
  3. Role of the nurse/clinical/faculty educator in shaping perspective
  4. Supporting the mother-infant dyad/family centered care
4. How did you feel about your ability to work through the simulation (empowerment)?
  5. If you were able to do this again, how could you have handled the situation differently?
  6. Do you feel his opioid use disorder impacted the quality of care he received (external stigma)?
  7. Are there other resources or team members that would be important in this patient's care (interprofessional collaboration; social determinates)?
  8. Is there anything else you would like to discuss?

## Faculty References

(references, evidence-based practice guidelines, protocols, or algorithms used for this scenario, etc.)

Association for Multidisciplinary Education and Research in Substance Use and Addiction. (2019, March). *Specific disciplines addressing substance use: AMERSA in the 21<sup>st</sup> century – 2018 update*. <https://amersa.org/wp-content/uploads/AMERSA-Competencies-Final-31119.pdf>

Byerley, E. M., Mohamed, M. W., Grindeland, C. J., & Muzzy Williamson, J. D. (2021). Neonatal abstinence syndrome practices in the United States. *The Journal of Pediatric Pharmacology and Therapeutics*, 26(6), 577–583. <https://doi.org/10.5863/1551-6776-26.6.577>

Committee on Obstetric Practice. (2017, August). *ACOG committee opinion: Opioid use and opioid use disorder in pregnancy* (Report No. 711). The American College of Obstetricians and Gynecologists & American Society of Addiction Medicine. <https://www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2017/08/opioid-use-and-opioid-use-disorder-in-pregnancy>

Devlin, L. A., Breeze, J. L., Terrin, N., Pomar, E. G., Bada, H., Finnegan, L. P., O’Grady, K. E., Jones, H. E., Lester, B., & Davis, J. M. (2020). Association of a simplified Finnegan neonatal abstinence scoring tool with the need for pharmacologic treatment for neonatal abstinence syndrome. *JAMA Network Open*, 3(4), e202275. <https://doi.org/10.1001/jamanetworkopen.2020.2275>

Kondili, E., & Duryea, D. G. (2019). The role of mother-infant bond in neonatal abstinence syndrome (NAS) management. *Archives of Psychiatric Nursing*, 33(3), 267-274. <https://doi.org/10.1016/j.apnu.2019.02.003>

Modified Finnegan Neonatal Abstinence Score (NAS). <https://www.mdcalc.com/modified-finnegan-neonatal-abstinence-score-nas>

Mossabeb, R., & Sowti, K. (2021). Neonatal abstinence syndrome: A call for mother-infant dyad treatment approach. *American Family Physician*, 104(3), 222-223.

Nguyen, T. T., Toney-Noland, C., Wong, J., Chyi, L., Castro, R., Huang, A., Aron-Johnson, P., Lee, H. C., & Quinn, M. K. (2022). Neonatal abstinence syndrome and mother’s own milk at discharge. *Journal of Perinatology*, 42(8), 1044-1050. <https://doi.org/10.1038/s41372-022-01430-5>

Schierholz, E., French, R., & Boucher, A.-M. (2020, January 5). Caring for infants and families affected by neonatal abstinence syndrome. *American Nurse*, 15(1), 6-11. <https://www.myamericannurse.com/wp-content/uploads/2020/01/AN-CE-NAS-12-11.pdf>

Tobin, K. B. (2018). Changing neonatal nurses' perceptions of caring for infants experiencing neonatal abstinence syndrome and their mothers: An evidenced-based practice opportunity. *Advances in Neonatal Care*, 18(2), 128-135. doi:10.1097/ANC.0000000000000476

Wachman, E. M., & Werler, M. M. (2019, January 22). Pharmacologic treatment for neonatal abstinence syndrome: Which medication is best? *JAMA Pediatrics*, 173(3), 221-223. doi:10.1001/jamapediatrics.2018.5029

Wu, D., & Carre, C. (2018). The impact of breastfeeding on health outcomes for infants diagnosed with neonatal abstinence syndrome: A review. *Cureus*, 10(7), e3061. <https://doi.org/10.7759/cureus.3061>