Neonaticide/Infanticide

Progressive Case Conference

Facilitator's Guide

Contributors

Tinsley Grimes, MD
Nina Ross, MD

Session Structure

After completing this module, learners should have a preliminary understanding of neonaticide risk factors, including epidemiology, phenomenology, risk factors, and treating patients at risk. This session is designed to last 60 minutes but can be modified for a longer or shorter session. This module is designed for psychiatry residents who have some clinical experience with pregnant patients. Prior to the session, residents should complete the readings listed in the pre-reading section of this module.

Session Outline

1. Review overview.
2. Case Study Part 1.
3. Case Study Part 2.

Goals and Objectives

1. Describe neonaticide epidemiology, phenomenology, and risk factors.
2. List common characteristics of women with hidden pregnancies.
3. List common characteristics of women who perpetrate neonaticide.

Resources Required

Friedman, S. H. (2018). Neonaticide. In S.H. Friedman (Ed.), Family Murder: Pathologies of Love and Hate (pp. 53-68). New York: Group for the Advancement of Psychiatry.

-Or-

Friedman, S.H. Child Murder by Parents: Toward Prevention. Current Psychiatry. 2023 June; 22(6):12

Case Study: Part 1

Facilitator: Ask one of the trainees to read the case out loud.

You are on the Psychiatry Consult service and asked to see a woman for "delusions." The patient, Sheree, is an 18-year-old woman who has come to the emergency department for abdominal pain. She reported to the primary team that she felt mild cramping and tightness in her abdomen earlier that afternoon and she was worried that she might be coming down with the stomach flu – several people at her work have been ill this week with gastrointestinal symptoms. Review of systems was positive for 5 pounds of weight gain over six months, swelling in her feet and ankles, heartburn, and increased urinary frequency. She didn't recall the date of her last menstrual period. On exam, her abdomen was uniformly distended with linea nigra. On routine laboratory screening, her HCG was positive. The team suggested to the patient that her symptoms might be related to her pregnancy, to which she replied, "But I'm not pregnant. There's no way." When the Emergency Medicine resident calls you for the consult, she explains that further discussion was impossible. "The more we tried to talk about it, the worse it got. She wouldn't let us do anything else and basically kicked me out of the room. She said she wanted to leave AMA."

Case Questions/Discussion

1. What is an important first step in the management of a patient who denies pregnancy?

Elicit the following:

- Order consult for psychiatric evaluation.
- Assess capacity for medical decision-making.

2. Besides a positive HCG, does she exhibit any signs or symptoms of pregnancy?

Elicit the following:

- She has had weight gain, swelling in her feet, heartburn, and increased urinary frequency. She also exhibits a distended abdomen with a linea nigra. These symptoms are not specific for pregnancy but certainly could be due to pregnancy.
- Young women may or may not continue to have vaginal bleeding when pregnant.
- Weight gain may or may not be present in hidden pregnancies.

Case Study: Part 2

Facilitator: Ask one of the trainees to read the case out loud.

Prior to seeing the patient, you review her chart and discover that she does not seem to follow with a primary care or women's health clinician. Beginning in adolescence, she visited the Emergency Department several times for various complaints. She's tested positive for marijuana and cocaine previously. In one emergency department encounter from about six months ago, it was noted that she had bruising on her wrists and upper arms. A few months before that, she had presented for an STI check. A screening questionnaire for intimate partner violence at that time was negative, but the provider documented concern for this.

In the Emergency Department, you find Sheree putting on her shoes. Her purse is in her lap, and she seems ready to leave. After telling her your name and your role on her treatment team, she rolls her eyes. "I'm not crazy. I don't need a psychology person. You can tell everyone I'm leaving." You ask if the two of you can talk for just a moment, and she sighs. "Fine, but I've got work. So whatever you say, I'm leaving in a minute. I can't lose this job."

You ask permission to sit and to keep the door to the treatment room cracked. With reluctance, she tells you why she came to the hospital and about her conviction that she has stomach flu. You learn that she has never been diagnosed with, or treated for, psychiatric disorders. Her medical history is notable for another pregnancy when she was 15 years old. The baby was born four weeks preterm and adopted out. She lives at home with her parents, who are very strict. On weekends, she uses cocaine and marijuana with friends from work and her sometimes-boyfriend, with

whom she has a strained relationship. Initially, she denies any exposure to violence, but as you build rapport together, she admits that her boyfriend "has gotten physical before." When you ask about sexual violence, she looks away and shrugs. "We're broken up now anyway."

3. What factors associated with denial of pregnancy are present in Sheree's case?

Elicit the following:

- Younger age
- Lives at home with parents
- Lack of prenatal care
- Possible substance use during pregnancy
- Possible traumatic inception – there is some evidence (Chen)

4. What are some other factors that may be associated with denial of pregnancy?

Elicit the following:

- Research has shown that this group can be heterogeneous but some common factors include:
    - Education/Employment: Some research shows low educational attainment; other research shows women completed education and/or employed
    - Low intelligence/immaturity may be a risk factor
    - Poor coping skills
    - Previous miscarriage or abortion

Case Study: Part 3

Facilitator: Ask one of the trainees to read the case out loud.

Sheree seems more relaxed with you – she's leaning back in her chair and has set her purse aside. You explain that you were called because the team was concerned about pregnancy complications and wanted to examine her further. Sheree again denies that she is pregnant. "That's not it, I'm telling you. I know from last time. And my parents, they would kill me if I got pregnant again." You acknowledge her worries and suggest that if Sheree is pregnant, you two can work together to find a good solution that would keep her and the baby safe. She is still resistant to this, but she agrees to allow the team to do some testing to rule out problems in her abdomen.

5. What test has been suggested to help patients with pregnancy denial to accept their pregnancy?

Elicit the following:

- Ultrasound

Case Study: Part 4

Facilitator: Ask one of the trainees to read the case out loud.

You speak with the team and explain that Sheree should be given an ultrasound. During the test, Sheree watches the screen intently and when the fetus is pointed out to her, she begins to cry. She tells you that she is pregnant although continues to state that she didn't know until now. She allows the team to do a vaginal exam, and she is diagnosed with Braxton Hicks contractions. You recommend follow up at the women's mental health clinic in two days, and the emergency department sets up an outpatient prenatal visit. After discussing Sheree's safety at home, she says she will stay with her friend from work for a few days. Sheree states that she does feel safe at home right now with her parents, but she wants to stay with a friend for a few days because she is concerned that her parents will react badly

to the pregnancy and she wants to tell them when she is in another location. Social work is consulted, and Sheree is provided with information for an emergency shelter, if she feels unsafe at home.

6. What interventions could be helpful in reducing her risk for neonaticide?

Elicit the following:

- Increasing her social support system. Some women who perpetrate neonaticide are concerned that they do not have or will lose their support system if others discover their pregnancy. They may be concerned about being kicked out of the house, losing their family or partner relationships, or relationships in the church/ culture. Exploring Sheree's support system and potential sources of support, in addition to her parents who may or may not be supportive, may be protective in reducing one risk factor for neonaticide. If she is amenable, strategies in improving her relationship with and support from her parents may be helpful in reducing this risk. Other sources of support can include other relatives and friends.
- Engaging Sheree in therapy to improve her coping skills and self-esteem could also potentially reduce her risk of neonaticide.

Case Study: Part 5

Facilitator: Ask one of the trainees to read the case out loud.

About six weeks later, you are moonlighting on the consult service and a request comes from the OB/GYN team. They are concerned about a patient who delivered an infant girl one day previously, when she was 36 weeks pregnant. The team says she does not appear to be interested in the infant at all and appears "flat." She also had not engaged in prenatal care during her pregnancy. She had initially presented to the emergency department in labor and seemed "completely out of it, like she wasn't even in the room." She refused the team permission to contact any friends or family. Although she stated that she did not use substances while pregnant, her OB/GYN team notes some concern about possible cocaine use during the pregnancy given a history of cocaine use in the chart and the baby being small for gestational age and preterm. The patient's name is Sheree.

In your initial interview, Sheree tells you that she did not follow up with psychiatric or prenatal care after her appointment – she was too worried about what her parents, especially her mother, would do if the baby was discovered. To hide her condition, she tried to eat less to avoid gaining too much weight and wore over-sized clothing. She does not know who the father is, but she suspects it might be her ex-boyfriend, whom she has not seen for several months. No one else knows of the pregnancy, although Sheree thinks her friend from work might have guessed. They have grown closer lately, and the friend has helped Sheree cut back on drug use. They are planning on renting an apartment together once they save enough money.

7. What is denial of pregnancy and how does it differ from concealment of pregnancy? What are the types of denial of pregnancy?

Elicit the following:

- Both denial and concealment of pregnancy are hidden pregnancies.
- In denial of pregnancy, the woman denies the presence of the pregnancy even to herself; in concealment of pregnancy, the woman is aware of the pregnancy, which she hides from others.
- Laura Miller (2003) described three types of pregnancy denial.
    - Affective denial: Woman knows she is pregnant on an intellectual level but is not emotionally prepared to have a child and makes few preparations for childbirth and parenting.

    - Pervasive denial: Woman doesn't know that she's pregnant, does not try to hide her pregnancy and may not show signs (e.g. weight gain) or have symptoms (cessation of menstruation). She may present to the hospital for a chief complaint of abdominal pain and distention, rather than pregnancy or labor.
    - Psychotic denial: Woman attributes signs and symptoms of pregnancy to other, delusional reasons besides pregnancy. She might have a history of schizophrenia or other primary psychotic disorder. As symptoms of psychosis wax and wane, so to may her awareness of the pregnancy.
- Susan Hatters Friedman et al. (2007) further classified denial of pregnancy.
    - Pervasive denial: Woman denies pregnancy until delivery
    - Persistent denial: Woman denies pregnancy until 3rd trimester, no prenatal care
    - Affective denial: Woman is cognitively aware of pregnancy but does not behave as though she is pregnant. The four sub-types of affective denial include
        - Ambivalent – She may make plans to terminate the pregnancy but remains passive. In this case, labor is not as surprising as it is for someone who has pervasive denial.
        - With plans for adoption
        - With failed plans to have an abortion
        - After rape
- Chenchka et al (2023) conducted a literature review of case studies and found the following:
    - Psychotic denial is rare. The authors note some difficulty in determining whether denial of pregnancy in women with schizophrenia or other primary psychotic disorders is a manifestation of their psychosis or, alternatively, a separate phenomenon that happens to coincide alongside psychotic symptoms.
    - Common in the literature are pregnancy denial cases in which the woman simply does not recognize the signs of pregnancy, especially if she is using contraception. In these cases, the symptoms of pregnancy were non-specific (e.g. nausea, fatigue, amenorrhea in the context of irregular menstruation at baseline) or largely absent. The authors propose several possible explanations for the phenomenon of this type of pregnancy denial. Unrecognized pregnancy may be due to: a high perceptual threshold (i.e. the woman does not believe she can be pregnant and does not pay attention to pregnancy symptoms; somatic denial (i.e. the signs of pregnancy, like abdominal swelling, nausea, and amenorrhea, are absent); an evolutionarily adaptive, sub-conscious strategy for maternal survival conditions (i.e. it is beneficial in some way for the woman not to perceive that she is pregnant).

8. What common factors associated with neonaticide are present in Sheree's case?

Elicit the following:

- Age < 30 (Amon et al., 2012; Friedman et al., 2005; Friedman & Resnick, 2009; Milia & Noonan, 2022)
- Previous pregnancy (Amon et al., 2012)
- Possible substance use during pregnancy (Sablone 2023)
- Unmarried with no relationship with the father (Friedman et al., 2005; Friedman & Resnick, 2009). Some research has shown that some women are in relationships at the time of the offense, though these may be unstable, and their partners may not be aware of the pregnancy (Amon et al., 2012; Milia & Noonan, 2022).

- Lack of education (Friedman et al, 2005; Friedman & Resnick, 2009).
- No history of psychiatric diagnosis prior to the offense (Friedman & Resnick, 2009)
- Denial and concealment of pregnancy (Amon et al., 2012; Friedman et al., 2005; Friedman & Resnick, 2009)
- Possible history of intimate partner violence or rape (Milia & Noonan, 2022)

- Lack of prenatal care (Friedman et al., 2005; Friedman & Resnick, 2009)
- Fear of family disappointment or disapproval (Milia & Noonan, 2022)
- Issues bonding with the infant (Milia & Noonan, 2022)

9. What are some additional factors that may be associated with neonaticide?

Elicit the following:

- Lack of social support (Amon et al., 2012; Milia & Noonan, 2022
- Low socioeconomic status (Friedman et al., 2005; Friedman 2018; Milia & Noonan, 2022)
- The child is unwanted (Amon et al., 2012)
- Psychosis is possible but less likely (Amon et al., 2012; Friedman et al., 2005; Friedman & Resnick, 2009)
- Personality disorder – (Amon et al., 2012; Friedman et al., 2005; Friedman & Resnick, 2009)
- Childhood trauma (Amon et al., 2012; Milia & Noonan, 2022)
- Factors associated with neonaticide may vary by country and culture (Friedman 2018).

10. What protective factors does Sheree have against neonaticide?

Elicit the following:

- Social support
- Patient came to hospital in labor – although, there have been cases of neonaticide in the hospital (See Friedman, 2019).

11. What steps can you recommend to decrease her risk for neonaticide?

Elicit the following:

- Contact Child Protective Services due to concern about risk. (See Child Maltreatment self-study)
- Provide information for Safe Haven.
- Social work consult for more resources for single mothers.
- Contraception access.
- Access to information about adoption.
- Consider ongoing discussion about mental health treatment.

References

Amon, Sabine, et al. "Potential predictors in neonaticide: the impact of the circumstances of pregnancy." *Archives of women's mental health* 15 (2012): 167-174.

Beier, K. M., Wille, R., & Wessel, J. (2006). Denial of pregnancy as a reproductive dysfunction: a proposal for international classification systems. J Psychosom Res, 61(5), 723-730. doi:10.1016/j.jpsychores.2005.11.002

Chenko, Natalia, Elena Losse, and Susanne Nehls. "Pregnancy Denial: Toward a New Understanding of the Underlying Mechanisms." *Current Psychiatry Reports* 25.10 (2023): 493-500.

Friedman SH. Neonaticide. Family Murder: Pathologies of Love and Hate. Group for the Advancement of Psychiatry, Edited by Susan Hatters Friedman, MD, and GAP Committee on Psychiatry and Law, American Psychiatric Association Publishing, 2019, pp 53-67.

Friedman, S. H., Heneghan, A., & Rosenthal, M. (2007). Characteristics of women who deny or conceal pregnancy. Psychosomatics, 48(2), 117-122. doi:10.1176/appi.psy.48.2.117

Friedman, S. H., Horwitz, S. M., & Resnick, P. J. (2005). Child murder by mothers: a critical analysis of the current state of knowledge and a research agenda. Am J Psychiatry, 162(9), 1578-1587. doi:10.1176/appi.ajp.162.9.1578

Friedman, S. H., & Resnick, P. J. (2009). Neonaticide: Phenomenology and considerations for prevention. Int J Law Psychiatry, 32(1), 43-47. doi:10.1016/j.ijlp.2008.11.006

Kenner, W. D., & Nicolson, S. E. (2015). Psychosomatic disorders of gravida status: false and denied pregnancies. Psychosomatics, 56(2), 119-128. doi:10.1016/j.psym.2014.09.004

Milia, G., & Noonan, M. (2022). Experiences and perspectives of women who have committed neonaticide, infanticide and filicide: A systematic review and qualitative evidence synthesis. J Psychiatr Ment Health Nurs, 29(6), 813-828. doi:10.1111/jpm.12828

R, F. W., Klevens, J., Fortson, B., Williams, D., Xu, L., & Yuan, K. (2022). Neonaticides in the United States-2008-2017. Acad Forensic Pathol, 12(1), 3-14. doi:10.1177/19253621221077870

Resnick, P. J. (1970). Murder of the newborn: a psychiatric review of neonaticide. Am J Psychiatry, 126(10), 1414-1420. doi:10.1176/ajp.126.10.1414

Sablone, S., Margari, A., Introna, F., Catanesi, R., & Mandarelli, G. (2023). Denial of pregnancy and neonaticide: A historical overview and case report. J Forensic Sci, 68(2), 688-695. doi:10.1111/1556-4029.15202

Spinelli, M. G. (2001). A systematic investigation of 16 cases of neonaticide. Am J Psychiatry, 158(5), 811-813. doi:10.1176/appi.ajp.158.5.811

Stenton, S., & Cohen, M. C. (2020). Assessment of neonaticide in the setting of concealed and denied pregnancies. Forensic Sci Med Pathol, 16(2), 226-233. doi:10.1007/s12024-019-00212-4

Wessel, J. (2007). Additional information on German study about denial and concealment of pregnancy. Psychosomatics, 48(6), 548. doi:10.1176/appi.psy.48.6.548

Wessel, J., Gauruder-Burmester, A., & Gerlinger, C. (2007). Denial of pregnancy--characteristics of women at risk. Acta Obstet Gynecol Scand, 86(5), 542-546. doi:10.1080/00016340601159199

Wilson, R. F., Klevens, J., Williams, D., & Xu, L. (2020). Infant Homicides Within the Context of Safe Haven Laws - United States, 2008-2017. MMWR Morb Mortal Wkly Rep, 69(39), 1385-1390. doi:10.15585/mmwr.mm6939a1