

Pregnant People Who Inject Illicit Drugs: Stigmatization From Emergency Room Nurses

Aidan Settman
Sociology & Anthropology Department
The University of North Carolina Asheville
One University Heights
Asheville, North Carolina 28804 USA

Faculty Advisor: Dr. Lyndi Hewitt

Abstract

Frontline care providers such as emergency nurses often interface with socially stigmatized individuals in need of medical care. Negative attitudes toward marginalized categories of patients, such as those who use illicit intravenous drugs while pregnant, may significantly affect the quality of healthcare patients receive. This study builds on existing knowledge of healthcare professionals' attitudes regarding pregnancy and drug use. In the Southeastern U.S., An anonymous survey was administered to a convenience sample of emergency room nurses (n=102) using a mix of online and paper-based methods. Survey questions addressed nurses' attitudes on multiple attitudinal dimensions, including but not limited to punishment, interactions with pregnant people who use illicit intravenous drugs, and assumptions about pregnant peoples' judgment. Results indicated that respondents demonstrate mostly negative, punitive attitudes —yet partially favorable perceptions —towards pregnant people who use illicit intravenous drugs. Participating emergency room nurses' negative and punitive attitudes suggest the potential for negative interactions with pregnant people who use illicit intravenous drugs, which may cause this at-risk population to avoid hospitals due to the potential of stigmatization

1. Introduction

The United States has experienced a significant escalation of drug-related deaths from prescription opioids, heroin, and fentanyl, as well as an increase in methamphetamine use in the past 30 years. This increase in drug use includes an increase among pregnant people who inject intravenous drugs. Intravenous drug use includes the use of heroin, fentanyl, methamphetamine, cocaine, ecstasy, ketamine, PCP, or prescription drugs (e.g., Vicodin) administered directly into the vein via syringe. Between 2000 and 2009, opioid use among women who gave birth increased in the United States from 1.19 to 5.63 per 1,000 hospital births per year¹³. The exploration of the lived experience of pregnant IV drug users is imperative to our understanding of the various ways they experience stigma, obstacles, and legal barriers, in this case, within the healthcare sector.

Illicit substance use is associated with malnutrition and anemia¹⁴. More significantly, illicit intravenous drug use increases the risk of blood-borne pathogens including HIV (human immunodeficiency virus) and the hepatitis C virus (HCV). Illicit substance use can lead to significant negative health implications for maternal and neonatal health. Opiate use during pregnancy is associated with an increased risk of low birth weight, respiratory problems, third trimester bleeding, toxemia, and mortality⁶. Opiate use during pregnancy is also associated with a greater risk of developing neonatal abstinence syndrome (NAS)³. Neonatal abstinence syndrome involves post-natal withdrawal symptoms among newborns. NAS leads to negative health implications for newborns' central nervous system (CNS), gastrointestinal (GI), and autonomic manifestations³.

One explanation for poor pregnancy outcomes is that pregnant women using substances do not seek out or continue contact with maternity services¹¹. Fear and stigma are understood as major barriers to health services for pregnant people who use illicit substances, including fear of detection from health or criminal justice authorities¹⁵. Research is

crucial in understanding stigmatization pregnant people who use injecting drugs face, as stigma has been proven as a major barrier to treatment for pregnant women who use illicit substances during pregnancy.

2. Literature Review

2.1 Attitudinal dimensions

Assessing attitudes is critical to understanding behavior and the emergence of potential stigmatization patterns. Attitude(s) of an individual consists of three components: cognitive, affective, and behavioral, and the individuals' behaviors are influenced by their feelings (affective) and beliefs (cognitive), which are influenced by external factors⁴, such as gender and past experiences⁴. These affective and cognitive beliefs influence perception of patients and implementation of care. Attitudes are separated into positive and negative constructs.

2.2 Perceptual dimensions

Perceptions include interpretations and inferences based on prior knowledge and experiences. An actor perceives the behavior of another, consisting of potentialities of what the "other is up to"¹⁶. Perceptions and interpretations seek to construct meaningful experiences that may or may not be reflective of reality⁹. A perception is the pursuit of attaining awareness of new sensory information. A distinction is important between perceptions and attitudes as attitudinal dimensions comprise evaluative ideas while perceptual dimensions encompass the constructions of interpretations. This distinction is important as attitudinal and perceptual statement responses can vary in the assessment of healthcare workers' beliefs and opinions toward a specific patient population.

2.3 Healthcare workers

No previous studies explore the attitudinal dimensions of emergency nurses and their attitudes and perceptions of pregnant people who inject IV drugs. However, other healthcare professionals with similar positions and educational backgrounds have been explored.

A 2007 Australian study examined nurses' judgments about drug and alcohol use,¹⁴. The majority of nurses believed drug users to hold high levels of responsibility for their alcohol or drug use. Some respondents reported feelings of risk and vulnerability during interactions with people who use drugs. Mental health nurses have also been surveyed in Australia, demonstrating similar findings: Eight-two percent of respondents found dealing with these clients moderately or very difficult. Several studies report nurses find it difficult to interact with people who use drugs^{13,15}. Healthcare workers report feelings of risk, vulnerability, and difficulty interacting with drug users.

One study explored midwives' attitudes toward pregnant people who inject drugs⁷: midwives demonstrated positive, non-punitive toward pregnant people who use drugs (n=127). Only 5% of midwives agreed with the statement, "Women who use drugs when pregnant should be prosecuted." However, some studies have identified punitive attitudes toward the pregnant population. Abel and Kruger surveyed 847 obstetricians, pediatricians, and family practice physicians¹. 52% of doctors were in favor of the compulsory removal of babies from the pregnant drug user and 83% were in favor of compulsory treatment for pregnant drug users.

Although punitive attitudes are common among healthcare workers, evidence-based research demonstrates these attitudes do not facilitate better health and wellbeing for pregnant people who inject drugs. According to the American College of Obstetricians and Gynecologists (ACOG), incarceration or the threat of incarceration does not lead to decreased drug use for pregnant people who use drugs². ACOG also reports that the criminalization of pregnant people who use drugs can prevent them from accessing health care services and treatment during the "critical prenatal time period." Fear of criminalization can result in pregnant drug users being dishonest about their medical history, which can result in the prevention of neonatal care and substance use treatment (Lester & Twomey, 2004).

Due to prevalent negative attitudes among healthcare workers and these negative attitudes' subsequent negative outcomes for their drug-using patients, educational interventions are proposed to reshape healthcare providers' attitudes toward pregnant women who use drugs. Ramirez-Cacho et al. (2007) conducted an experimental study of 104 medical students, of whom visited a specialist clinic in an obstetrics unit. Surveyed medical students demonstrated more comfortability around pregnant people who use drugs and positivity toward that injecting population after attending the specialist clinic. Furthermore, previous research (López et al., 2012) has determined that some health

professionals have difficulties identifying drug dependency as an illness. Evidence-based experiments like Ramirez-Cacho's 2007 study indicate the possibility to increase positive beliefs and knowledge of wellbeing of pregnant people who use drugs through the use of educational interventions. This study provides nurse educators and other health practitioners an understanding of the attitudes and perceptions among their nurses, which may prompt the development of drug and pregnancy educational measures.

3. Methodology

To assess attitudinal and perceptual dimensions of emergency nurses, a Likert questionnaire was conducted using a convenience sample of emergency room nurses in Western North Carolina. Different regions or states may yield different attitudes from ER nurses, because of this, the inclusion criteria stipulated registered nurses must be registered in North Carolina and currently work at an operating NC hospital. A total of 102 emergency nurses were surveyed.

There are two reasons for the choice to survey emergency nurses: 1) overdoses require emergency services, and overdose rates have skyrocketed in recent decades, thus, emergency health professionals' perspectives are critical to explore, 2) when a patient enters a hospital's emergency department it is typically a nurse who determines and prioritizes their care. Therefore, emergency room nurses play an important role in the identification and management of a patient's care, which may have longer term implications for their psychological and physical health.

A questionnaire was implemented using a 5-point Likert scale. The questionnaire also assessed demographic characteristics including race, gender, education, and age. The questionnaire utilized Likert questions from previous studies⁷ while also incorporating additional questions to improve the validity of the questionnaire. Data collection began July 1, 2020 and ended November 16, 2020. A mix of online and paper-based methods were used to increase response rate. The researcher obtained written informed consent from respondents.

Statements survey emergency room nurses' personal, professional satisfaction in their work with pregnant drug users, personal attitudes toward pregnant people who use drugs, perceptions of personal characteristics of pregnant IV drug users, as well as nurses' perception of pregnant drug users's willingness to seek medical help for their substance use. Statements 1, 2, 3, and 4 assess multiple attitudinal dimensions including substance use treatment and the criminal justice system while questions 5, 6, 7, 8, 9, and 10 assess perceptual dimensions including morality of pregnant people who inject drugs and respondents perception of pregnant people who inject drugs knowledge and access to healthcare.

This study seeks to demonstrate negative attitudes prevalent among emergency room nurses and the potential of stigmatization to appear due to these negative attitudes. Negative attitudes toward pregnant people who inject drugs, an at-risk population, may result in a diminished capacity for emergency room nurses to identify substance use illness (López et al., 2012). Negative attitudes may also affect the quality of care pregnant people who inject drugs receive from healthcare workers (Muncan et al., 2020).

4. Results

A total of 102 emergency nurses were surveyed. (81%) of respondents identified as female while (17%) identified as male. The majority of nurses cared for 1-4 pregnant IV drug users in the past 12 months (41%). The majority of respondents held a Bachelor's Degree (56.9%).

Attitudinal and perceptual statements were assessed using a five-point Likert scale: Strongly agree = 1, Agree = 2, Neither agree nor disagree = 3, Disagree = 4, Strongly disagree = 5 (see Table 1).

Table 1. Attitudinal statements

Statement	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
1. I find it difficult to interact with pregnant people who use illicit IV drugs	8 (7.8%)	15 (14.7%)	22 (21.6%)	34 (33.3%)	23 (22.5%)
2. I am in favor of compulsory substance use treatment for pregnant IV drug users	22 (21.6%)	39 (38.2%)	27 (26.5%)	10 (9.8%)	3 (2.9%)
3. Pregnant people who use illicit IV drugs should face jail punishment	21(20.6%)	27 (26.5%)	23 (22.5%)	24 (23.5%)	7 (6.9%)
4. I am in favor of the compulsory removal of babies from illicit IV drug users	27 (26.5%)	36 (35.3%)	23 (22.5%)	11 (10.8%)	5 (4.9%)

Table 2. Perceptual Statements

Statement	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
5. In general, pregnant people are not aware of the health problems associated with illicit IV drug use during pregnancy (birth defects, neonatal abstinence syndrome, etc)	7 (6.9%)	25 (24.5%)	14 (13.7%)	41 (40.2%)	15 (14.7%)
6. Based on my experience, pregnant people who use illicit IV drugs want to stop using drugs	1 (1.0%)	36 (35.3%)	32 (31.4%)	30 (29.4%)	3 (2.9%)

7. Generally speaking, pregnant people who use illicit IV drugs receive adequate healthcare support	3 (2.9%)	17 (16.7%)	24 (23.5%)	41 (40.2%)	17 (16.7%)
8. My perception is that pregnant people who use illicit IV drugs rarely seek medical treatment	9 (8.8)	41 (40.2%)	23 (22.5%)	25 (24.5%)	4 (3.9%)
9. Generally speaking, I don't believe that people who use illicit IV drugs during pregnancy care about the health of their fetus	19 (18.6%)	28 (27.5%)	19 (15.86%)	32 (31.4%)	4 (3.9%)
10. People who use illicit IV drugs while pregnant are typically bad people	1(1.0%)	8 (7.8%)	33 (32.4%)	34 (33.3%)	26 (25.5%)

5. Discussion

5.1 Attitudes

Surveyed emergency nurses displayed negative attitudes toward pregnant people who inject IV drugs. Negative attitudes reflect similar findings in literature¹. Punitive responses and the use of legal coercion are prevalent among surveyed emergency nurses: (47%) of emergency nurses either agree or strongly agree pregnant people who inject drugs should face jail punishment. (59.8%) of surveyed nurses either agree or strongly agree pregnant people who inject drugs should be required to complete substance use treatment. Most notably, (62.3%) of surveyed emergency room nurses agree or strongly agree that newborns should be removed from the illicit IV drug users. None of the studies in the literature review were conducted with emergency room nurses. The prevalence of punitive attitudes among emergency room nurses may be due to geographical, cultural, and social factors.

However, one attitudinal statement did not yield negative results from surveyed emergency room nurses. The majority of surveyed emergency room nurses either strongly disagreed or disagreed with the statement “I find it difficult to interact with pregnant people who use illicit IV drugs” (55.8%). This finding contradicts earlier studies that assess healthcare professionals’ beliefs of risk and danger interacting with people who use drugs^{13,15}. Surveyed emergency room nurses do not find it difficult to interact with pregnant people who inject drugs. Emergency room nurses may perceive the pregnant population as non-threatening due to the patient’s pregnancy. Female-presenting individuals are perceived as less threatening¹² compared to male-presenting individuals. The majority of pregnant people who inject illicit drugs are female-presenting which may reduce feelings of threat and unsafe from healthcare workers.

5.2 Perceptions

Despite negative attitudes and the support for punitive measures, emergency nurses demonstrated some favorable and sympathetic perceptions of pregnant people who inject drugs. Only (8.8%) of respondents believe pregnant people who inject drugs are bad people. Judgments regarding pregnant drug users' morality are *not* negative. Respondents do not believe pregnant people who inject drugs receive adequate health care (56.9%). Almost half of surveyed emergency room nurses (49%) strongly agree or agree pregnant people who inject drugs rarely seek medical treatment.

However, surveyed emergency nurses demonstrated some negative perceptions of pregnant people who inject drugs. (54.9%) of surveyed emergency room nurses either strongly disagree or disagree with the statement "pregnant people are not aware of the health problems associated with illicit IV drug use during pregnancy (birth defects, neonatal abstinence syndrome, etc). (46.1%) of respondents strongly agree or agree pregnant people who inject drugs do not care about the health of the fetus. Statements 6 received mixed results: (36.3%) of respondents strongly agree or agree pregnant people who use illicit IV drugs want to stop using drugs; however, (32.3%) of respondents strongly disagree or disagree with that statement.

Surveyed emergency room nurses demonstrate mostly positive, favorable perceptions of pregnant people who inject drugs, yet, respondents demonstrate mostly negative attitudes. Majority of respondents believe pregnant people who inject drugs do not receive adequate care, yet the majority of respondents support prosecutorial interventions for pregnant people who inject illicit drugs. Disconnection between attitudes and perceptions requires further exploration to establish the reasons for negative attitudes yet favorable perceptions.

5.3 Gender and Statements

Table 3. Pearson Correlation

Statement	Respondents genders
I am in favor of compulsory substance use treatment for pregnant IV drug users	-.266
Generally speaking, pregnant people who use illicit IV drugs receive adequate healthcare support	.200
In general, pregnant people are not aware of the health problems associated with illicit IV drug use during pregnancy (birth defects, neonatal abstinence syndrome, etc)	.226

Gender differences were evident in three variables. Female respondents demonstrated mixed perceptions and a negative attitude towards pregnant people who inject illicit drugs then male respondents. Female respondents were more likely to agree pregnant people who inject illicit drugs should complete compulsory substance use treatment (. Female respondents were more likely to disagree pregnant people who inject drugs receive adequate healthcare. Finally, female respondents were more likely to disagree with the statement, "pregnant people are not aware of the health problems associated with illicit IV drug use during pregnancy." Exploratory research will aid in the explanation of these statistical significances and further explain the mixed perceptual results.

5.4 Race and Statements

Table 4. Pearson Correlation

Statement	Respondents race
My perception is that pregnant people who use illicit IV drugs rarely seek medical treatment	-.250

Bivariate analysis produced one significant correlation between statements and respondent's race. White nurses were more likely than non-white nurses to say that patients rarely seek treatment (-.250). White nurses can produce different beliefs compared to non-white nurses, especially Black nurses. In one study, White nurses were less likely to attribute the cause of health disparities to environmental and societal factors compared to Black nurses¹². White nurses may perceive pregnant people who inject illicit drugs as less proactive in the pursuit of health services. Exploratory research is required to understand why white respondents believe pregnant people who inject illicit drugs rarely seek medical treatment.

5.5 Limitations

This study recruited Western North Carolina emergency nurses. Therefore, attitudes and perceptions of emergency nurses can only represent emergency nurses employed at hospitals in that region. The majority of emergency nurses surveyed interact with only 1-4 pregnant drug users within a 12 month period. Hospitals with a higher prevalence of patients who are pregnant and use drugs may result in emergency nurses with differing attitudes and perceptions. Furthermore, a convenience sample may have diminished the validity of the surveyed population. Social desirability bias could have occurred, however, this is unlikely due to the prevalence of negative attitudes present in findings. Social desirability bias is more likely to occur among perceptual statements that require respondents to provide judgment on pregnant people who inject drug morality.

6. Conclusion

The goal of this study was to explore emergency nurses' attitudes and perceptions toward pregnant people who use intravenous drugs. Results demonstrate mostly negative, punitive-oriented attitudes toward pregnant people who inject intravenous drugs. However, surveyed emergency room nurses demonstrate partially favorable perceptions of drug-using pregnant people that contradict literature findings. Previous studies identify healthcare professionals' perceptions of risk and difficulty interacting with drug users. Surveyed emergency room nurses in this study did not demonstrate a belief of difficulty interacting with pregnant people who inject drugs. Research findings also demonstrate gender and racial statistical significance. Further research is necessary to explore these bivariate correlates. Research findings support the need for educational programs in emergency units for nurses. The literature demonstrates the benefits of educational opportunities to promote positive attitudes and perceptions of the drug-using population. There is a need for added training programs and implementation of protocols and guidelines for the identification and management of pregnant IV drug user patients who present in the emergency department.

7. Acknowledgements

I would like to thank Dr. Lyndi Hewitt, my mother, Dr. Sharon Wallace, Dr. Marcia Ghidina, and Dr. Megan Underhill for their support and guidance throughout this research endeavor.

8. References

1. Abel EL, Kruger M. (2002) Physician attitudes concerning legal coercion of pregnant alcohol and drug abusers. *American Journal of Obstetrics & Gynecology* 186(4): 768-72
2. American Congress of Obstetricians and Gynecologists. Toolkit on State Legislation: Pregnant Women & Prescription Drug Abuse, Dependence and Addiction. N.d.
3. Anbalagan S, Mendez MD. Neonatal Abstinence Syndrome. [Updated 2021 Mar 12]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2021 Jan
4. Crano, W. D., & Prislin, R. (Eds.). (2008). *Frontiers of social psychology. Attitudes and attitude change*. Psychology Press.
5. Eggertson, L. Stigma as a major barrier to treatment for pregnant women with addictions. *Canada Medical Association Journal* 2013;185(18):1562-1562.
6. Forray A. (2016). Substance use during pregnancy. *F1000Research*, 5, F1000 Faculty Rev-887.
7. Jenkins, Lucy, MSc, BSc.R.M., R.N. (2013). A survey of midwives' attitudes towards illicit drug use in pregnancy. *Evidence Based Midwifery*, 11(1), 10-15.
8. Lester BM, Andreozzi L, Appiah L. (2004). Substance use during pregnancy: time for policy to catch up with research. *Harm Reduction Journal*;1(5):5-48
9. Lindsay, P., & Norman, D. A. (1977). *Human information processing: An introduction to psychology*. Harcourt Brace Jovanovich, Inc.
10. Raeside, L. (2003). Attitudes of staff towards mothers affected by substance abuse. *British Journal of Nursing*, 12(5), 302.
11. Roberts, S. C., & Pies, C. (2011). Complex calculations: how drug use during pregnancy becomes a barrier to prenatal care. *Maternal and child health journal*, 15(3), 333–341.
12. Roberts-Dobie, S., Joram, E., Devlin, M., Ambrosion, D., & Chen, J. (2013). Differences in beliefs about the causes of health disparities in Black and White nurses. *Nursing forum*, 48(4), 271–278.
13. Martin, K. M. (2004). Giving each other a lift. *Nursing*, 34(2), 8-8,10.
14. McGillion, J., Wanigaratne, S., Feinmann, C., Godden, T., & Byrne, A. (2000). GPs' attitudes towards the treatment of drug misusers. *The British journal of general practice : the journal of the Royal College of General Practitioners*, 50(454), 385–386.
15. Patrick, S. W., Schumacher, R. E., Benneyworth, B. D., Krans, E. E., McAllister, J. M., & Davis, M. M. (2012). Neonatal abstinence syndrome and associated health care expenditures: United States, 2000-2009. *JAMA*, 307(18), 1934–1940.
16. Peckover, S., & Chidlaw, R. G. (2007). Too frightened to care? Accounts by district nurses working with clients who misuse substances. *Health & social care in the community*, 15(3), 238–245.
17. Sebastiani, G., Borrás-Novell, C., Casanova, M. A., Pascual Tutusaus, M., Ferrero Martínez, S., Gómez Roig, M. D., & García-Algar, O. (2018). The Effects of Alcohol and Drugs of Abuse on Maternal Nutritional Profile during Pregnancy. *Nutrients*, 10(8), 1008.
18. Skinner N, Feather NT, Freeman T, Roche A. (2007) Stigma and discrimination in healthcare provision to drug users: the role of values, affect, and deservingness judgments. *Journal of Applied Social Psychology* 37(1): 163-86.
19. Stone R. (2015). Pregnant women and substance use: fear, stigma, and barriers to care. *Health & Justice*, 3, 2. <https://doi.org/10.1186/s40352-015-0015-5>
20. Wilson, Thomas P. "Conceptions of interaction and forms of sociological explanation." *American Sociological Review* 35 (August 1970), 697-709.