Nurse Education Today 73 (2019) 17–22

Contents lists available at ScienceDirect

Nurse Education Today

journal homepage: www.elsevier.com/locate/nedt

Undergraduate nursing students' experiences and attitudes towards working with patients with opioid use disorder in the clinical setting: A qualitative content analysis

Laura F. Lewis[a,*], Lauren Jarvis[b]

[a] University of Vermont, USA
[b] MedStar Georgetown University Hospital, USA

ARTICLE INFO

Keywords:
Students, nursing
Substance use disorders
Opioid
Qualitative studies
Content analysis
Education, nursing, baccalaureate
Education, clinical

ABSTRACT

Background: With the US facing an opioid epidemic, undergraduate nursing students are increasingly encountering patients with opioid use disorder in the clinical setting. Yet, nursing curriculums have not adapted to meet this need. Previous research indicates students are exposed to negative messages that might influence their views about patients with opioid use disorder.

Objectives: The purpose of this study was to examine nursing students' experiences encountering patients with opioid use disorder in the clinical setting, their attitudes about their encounters, and their perceptions of their educational preparedness to care for this population.

Method: Purposive sampling was used to identify participants. Semi-structured interviews were conducted until saturation. Krippendorff's method for qualitative content analysis was used to cluster units within the data to identify emergent themes.

Participants: Eleven senior nursing students from a public university in New England participated.

Results: Analysis revealed six themes, including: navigating ethical dilemmas, gaining comfort with time and experience, avoiding the "elephant in the room," learning from real-world scenarios, witnessing discriminatory care, and recognizing bias and stigma.

Conclusions: Students were most likely to experience bias and internal conflict in maternity clinical rotations. Education should include practical communication strategies to reduce avoidance behaviors among nursing students as well as techniques to manage difficult situations and reduce moral distress. Nurses must be mindful of their power to influence students and should model non-judgmental language and behavior. Students ultimately expressed a desire to provide informed and empathetic care.

More than 63,600 people in the United States died from drug overdose in 2016, and approximately 66% of those cases involved an opioid (Centers for Disease Control and Prevention, 2017). This number has increased fivefold since 1999, indicating an epidemic of opioid use disorder [OUD]. Patients with OUD present across care settings (Bartlett et al., 2013), and nursing students encounter these patients during clinical rotations. Despite increased prevalence, OUD education is insufficiently incorporated into nursing school curriculums (Finnell et al., 2018).

The purpose of this qualitative content analysis was to explore nursing students' experiences and attitudes about caring for patients with OUD during clinical rotations and to assess their perceptions of their educational preparedness in working with this population.

1. Review of Literature

A review of literature from the last 10 years on CINAHL and PubMed yielded limited research on nursing students' perceptions about substance use disorder [SUD], including OUD. In a grounded theory of UK nursing students' attitudes about SUD, researchers concluded that students encountered persistent negative messages that would likely influence their care of these patients (Harling and Turner, 2011). Some quantitative studies exploring nursing students' attitudes about patients with SUD indicate negative biases and low empathy (Aggarwal et al., 2012; Harling, 2017), while others reveal non-judgmental and positive views about working with patients with SUD (de Vargas, 2012; Pereira et al., 2018). None of these studies focused specifically on OUD, and none took place in the US.

* Corresponding author at: University of Vermont Nursing Department, 216 Rowell Building, 106 Carrigan Drive, Burlington, VT 05405, USA.
E-mail address: laura.lewis@uvm.edu (L.F. Lewis).

https://doi.org/10.1016/j.nedt.2018.11.001
Received 24 July 2018; Received in revised form 11 October 2018; Accepted 2 November 2018

Studies exploring registered nurses' attitudes about patients with SUD indicate an overarching culture of negativity in healthcare. A systematic review of 28 articles on the attitudes of health professionals revealed that participants felt patients with SUD were difficult to care for due to manipulative, violent, and unsafe behaviors, and professionals viewed patients as responsible for their conditions (van Boekel et al., 2013). These negative attitudes directly affected patient care. For example, nurses in one study in this review demonstrated an avoidance approach towards patients with SUD, and another study found patients who perceived discrimination were less likely to complete treatment.

Similarly, Daibes et al. (2016) found nurses in addictive rehabilitation centers in Jordan exhibited stigma, marginalizing, avoidance, and discriminatory behaviors towards patients. Other studies also suggest that nurses generally have neutral or negative views towards caring for patients with SUD, often citing insufficient training and poor role support as contributing factors (Chu and Galang, 2013; Neville and Roan, 2014).

Inexperienced nursing students may learn poor practices by modeling behaviors and language of nurses who have not been appropriately trained which may perpetuate stigma, misinformation, and improper care. Perceptions of nursing students must be examined to tailor educational interventions prior to their initiation into practice. In this study, researchers aimed to provide a richer understanding of nursing students' views by providing an opportunity for students to describe their actual patient encounters and their thoughts and feelings about those experiences.

2. Methods

The purpose of this study was to answer the research questions:

1) What are the experiences and attitudes of undergraduate nursing students working with patients with OUD?
2) How prepared do nursing students feel to care for this population?

2.1. Ethical Considerations

This study was approved by the University IRB. Recruitment and interviews were conducted by an undergraduate nursing student trained in qualitative research to limit coercion and response bias. The faculty co-researcher was not responsible for clinical oversight of eligible participants at any point during their education. Students were notified that participation would have no impact on their grades. Informed consent was obtained prior to all interviews.

2.2. Data Collection

Purposive sampling was used to recruit senior nursing students at a public university in New England. Recruitment posters were placed in a nursing building on campus and an announcement about the study was made during a required senior nursing course. Semi-structured interviews were conducted in locations convenient for participants. Table 1 illustrates the interview guide. Interviews were audio-recorded and transcribed verbatim. Interviews were conducted until saturation of new information was reached.

2.3. Data Analysis

Krippendorff (2013)'s method for qualitative content analysis through "clustering" was used to analyze data. This method allowed researchers to make inferences from interview transcripts by grouping data "based on intuitively meaningful similarities among units of analysis" (Krippendorff, 2013, p. 206). It also allowed researchers to explore student interviews in a broad sense, looking not only at the meaning of their experiences but also on their feelings of preparedness and their suggestions for nursing education.

Table 1
Interview guide.

Interview questions
1. How would you know if someone was addicted to opioids?
2. Could you describe any experiences you had working with opioid dependent patients in the clinical setting? Please share any thoughts, feelings, and specific memories you have about these experiences in as much detail as possible.
3. How comfortable did you feel caring for these patients? How comfortable did you feel discussing opioid addiction and treatment options when working with this patient?
4. Can you discuss some biases that you may have when working with this population? How do you feel these biases may have affected your delivery of care to the patients?
5. Tell me about your education in regards to opioid addiction and treatment options that you know of. How prepared did you feel to work with opioid dependent patients in the clinical setting?
6. What education did you receive about harm reduction? What are your thoughts on it?
7. What was the most beneficial in terms of education you received about opioid addiction while in nursing school?
8. What suggestions or modifications would you make to the education you received about opioid addiction while in nursing school?

Transcripts of interviews were broken down into "units" based on thematic distinctions. Units were words, phrases, or sentences that described a single idea. Units were clustered, which involved "forming perceptual wholes from things that are connected, belong together, or have common meanings" and continued until there was no content remaining to merge together (Krippendorff, 2013, p. 206). Clustering was illustrated by dendrograms, or tree-like diagrams, depicted in Fig. 1.

2.4. Rigor and Trustworthiness

Lincoln and Guba's (1985) evaluative criteria were used to establish trustworthiness. After independent analysis, findings were reviewed and discussed in-depth with a co-researcher and resorted until consensus was reached. Member-checking occurred by sharing and discussing findings with two participants. Both participants felt findings were representative of their experiences and did not recommend any changes.

3. Results

Eleven senior nursing students participated in this study. Participants were 20–23 years old and all were White females. In total, 497 units were extracted from transcribed interviews and clustered to reveal six themes: 1) navigating ethical dilemmas; 2) gaining comfort with time and experience; 3) avoiding the "elephant in the room"; 4) learning from real-world scenarios; 5) witnessing discriminatory care; and 6) recognizing bias and stigma. The following sections will describe each theme.

3.1. Navigating Ethical Dilemmas

Participants faced significant ethical dilemmas when working with patients with OUD. Most described encounters as "hard" and "difficult." Participants described particular challenges assessing and treating pain. This was further complicated because they lacked control in their limited roles as students. One participant cared for a patient post-operatively where the patient was yelling out in pain but requesting specific medications only. She shared:

> It was really hard as a student because I didn't have much say in what happened, but I was also concerned, because how do you differentiate between what's real pain that he's feeling from surgery and what's manipulative or abusive behavior? [06]

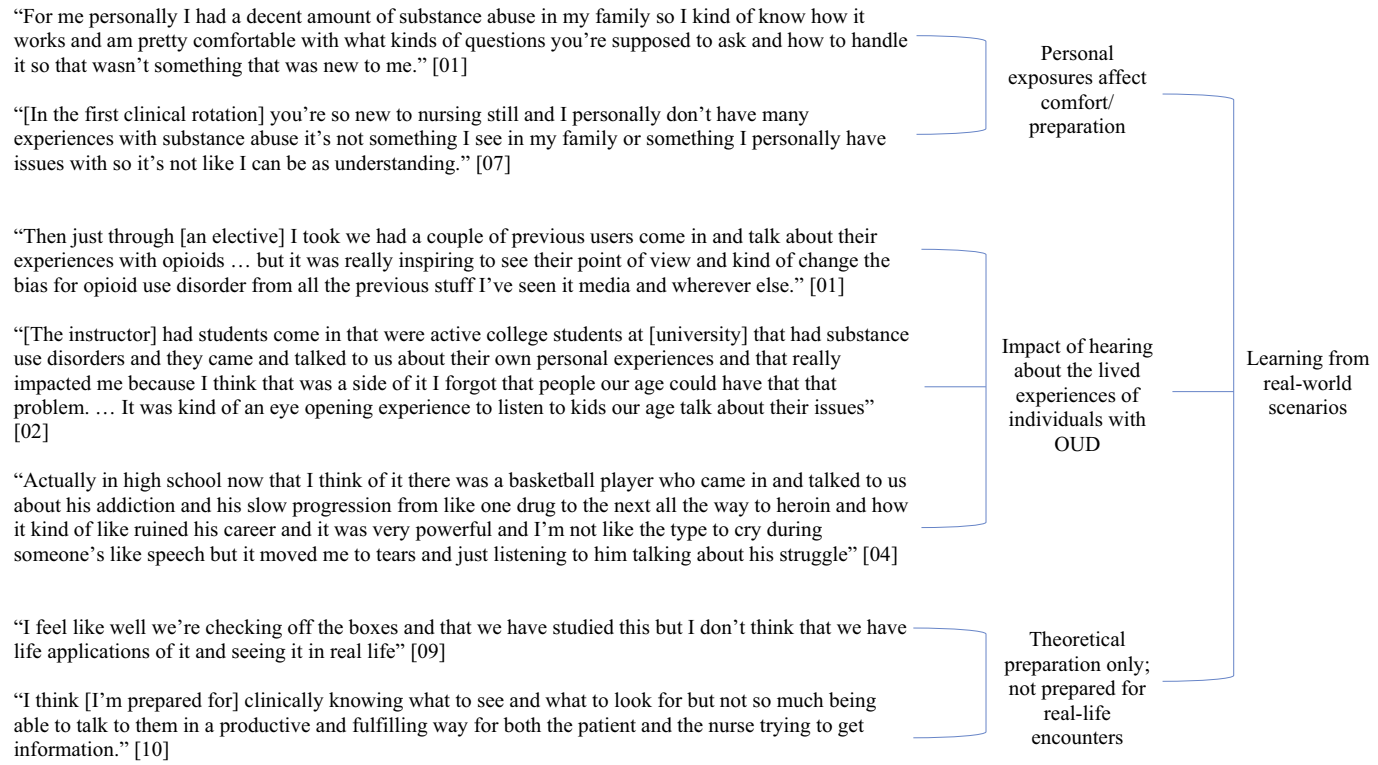

Fig. 1. Partial example of dendrogram.

Another participant shared an experience where she struggled to focus on preparing a patient's pain medications because the patient continuously interrupted to request the medications faster. She described challenges identifying an appropriate dose, and ultimately administered a dose that she felt was inappropriate and possibly even dangerous:

> Looking at her and knowing that her respiration rate was two we still had to give her methadone and on top of that she wanted her IV Dilaudid and it's literally going to stop your breathing and you still want this. … I felt uncomfortable taking care of that patient. [04]

Students also described internal conflicts related to patient privacy, especially in the maternity setting. For example, one participant was asked to conceal a mother's OUD from her partner. She shared:

> The mother hadn't told the father that there was any type of substance use going on so the baby was born addicted, and the baby was actually in a study about pupil size after birth with [OUD], and the father had no idea that was going on. So that was kind of difficult. I felt like that was ethically wrong. [02]

Another participant shared a similar experience:

> I worked with a patient who had delivered her baby and the baby was in the [neonatal intensive care unit] because of [neonatal abstinence syndrome] scoring and she didn't want her significant other to know why the baby was there and that she had been using and all these things. So it was an interesting dynamic where it's her patient information so you can't tell, but it's the other guy's baby so he should know. It's just like, what's the right thing? [03]

Participants were left questioning their own actions and the actions of the healthcare team.

3.2. Gaining Comfort With Time and Experience

Participants described first encounters with patients with OUD as "uncomfortable," "overwhelming," "awkward," and "sad." One participant reflected on her first encounter, "I mean it was our first clinical rotation and everything was so new and it was like wow this is some crazy shit" [03]. When asked if she felt comfortable with OUD, another participant responded, "I would say no, especially not that first rotation. … I think it's definitely a little bit overwhelming if you're assigned a patient with substance use disorder" [07]. Another described witnessing a situation where a patient deliberately deceived a nurse and said, "It was like, very awkward from my experience. And, like, unsettling. Because I was like, oh my God what just happened?" [11].

While a majority of participants indicated they felt uncomfortable caring for patients with OUD, some felt more comfortable with time and experience. One participant said, "I wouldn't say that I'm totally prepared but as I went through school I become more comfortable with it" [05], and another, "I think I got more comfortable as I went on" [07]. One described how a challenging experience with OUD prepared her to work with future patients: "Even having [OUD] patients after that specific patient I felt prepared" [11]. Students gained comfort as they were able to improve their skills through experience.

3.3. Avoiding the "Elephant in the Room"

When asked how they would identify if a patient had OUD, 4 out of 11 participants indicated they would rely on the chart or shift report rather than assessing the patient. When they were aware the patient had OUD, participants indicated they were uncomfortable addressing it due to inexperience and lack of knowledge. One participant explained:

> I never actually talked to them about their addiction and I never talked to them about their options of what they do from here. Like do they go to rehab? What do they do in rehab? They detox and then they go to counseling? Like I don't really know necessarily how that process works and so I guess I feel uncomfortable talking to my patients about it because like, how do you bring it up you know? Is it in your head to toe assessment when you're like, look at your track lines. Like, so, you're a user huh? And it's just kind of like awkward,

and it's almost like the elephant in the room. [09]

Another participant described her experience providing smoking cessation education to a young patient admitted after a heart attack with illicit drugs in his system. She described that it was challenging "just trying to like portray myself as knowledgeable and mature about substance abuse when he has obviously had more experiences than me out in the world with substance abuse" [10].

Other participants shared a similar lack of comfort and confidence in their skills. One said:

> I didn't feel like I had the language or communication skills at that point to sit down and talk to them about their substance abuse and what their life looks like… and I don't know … how to bring up this tricky conversation and what words are right and how to not be offensive. [03]

Concern that discussion about OUD would appear "offensive" or "accusatory" was especially present when working with patients with suspected OUD. One participant reported that she did not discuss treatment options with a patient with suspected OUD and reflected, "It's hard to say if I would've felt comfortable with that because it seems accusatory if they don't have an established addiction that we are aware of. So I don't know. It's a hard thing to maneuver" [05]. Without feeling comfortable to discuss OUD, students failed to address their patients' holistic needs.

3.4. Learning From Real-world Scenarios

Participants were knowledgeable about signs and symptoms of OUD but indicated they did not know how to approach patients in real-life settings. As one participant shared, "We learned the symptoms of [OUD], but I wouldn't say that we necessarily learned how to actually deal with them" [04]. Another suggested using simulation to learn about OUD and said:

> I honestly don't feel like my nursing program really prepared me for any type of conversation I'd have about substance abuse. … I think more of a hands on experience is better than reading it or being presented to by PowerPoint because you can't really get a good feel for how you might react unless you're actually talking to someone. [02]

Four students reported that talking to individuals with OUD positively changed their perspectives. One said: "I think the most beneficial thing was caring for somebody and seeing a lived experience of the opioid addiction because you talk about it over and over and over and you get it and empathize with these people when you hear stories about them in class" [08]. Another said, "That was really helpful having the point of view and listening to their struggles from their side and how they got to this point in their life. Because no 13-year-old is sitting there like, I'll probably use heroin someday" [04]. These participants felt a guest lecture would be a powerful educational experience. Others suggested use of case studies, watching videos, participating in outpatient programs, and learning how to manage their own biases.

Participants also addressed timing of education. Most students encountered OUD in their first clinical rotation in the maternity setting, and many perceived this was the rotation where OUD was most prevalent. Participants wished they received education prior to this rotation. One participant said, "I do feel like the education came a little too late and we should've had a lot more education about that during mom and baby when we were working with those patients" [03], and another, "During the first rotation we were definitely not prepared" [07]. Participants desired more specific knowledge as well. For example, when asked what improvements she would suggest, one participant said, "…Talking through like what interventions will look like and not just saying, like okay we send them to rehab. Like what do they do there?" [04].

When asked about harm reduction, several students were able to define it and engage in conversation about risks and benefits. These participants reported that discussion-based teaching was effective and memorable. Others indicated that instructors "briefly touched upon it" but felt they needed more education [01, 04, 05], and one demonstrated a lack of understanding of harm reduction [02].

Participants expressed a desire for more education on OUD. One student said, "I feel that's definitely a part that [nursing schools] should expand on because it's becoming a more and more prevalent issue in the United States and we're going to be seeing it a lot more in the clinical setting" [01]. Another said, "I know there's tons of other material to cover, but I do feel that under the current circumstances of the opioid problem in [this area] there should be more" [09].

3.5. Witnessing Discriminatory Care

Participants reflected on messages they received from nurses in the clinical setting. One participant shared the positive influence that nurses had on her views about OUD:

> I think also another good thing was having a couple of nurses like as my mentors who were not judgmental towards those patients who showed empathy towards them. Not just in the room when you're like, okay like I know that they can have a good bedside manner but might think whatever they want to in the hallway, or say whatever they want to other nurses in the hallway, but they genuinely cared and they genuinely were concerned and wanted to get the patient help. And they were the ones saying it's not their fault that they're manipulative in this way doing what they think they have to in order to get what they need. And so I'd say that was probably the most beneficial was seeing other people that didn't have a negative attitude and negative bias towards them in healthcare. [04]

Another described a clinical rotation where nurses provided information without judgment: "I think that the nurses did a good job explaining the [neonatal abstinence syndrome] score and giving the students as much information about opioid withdrawal without, you know, having judgments" [07].

Unfortunately, these same participants described scenarios where nurses demonstrated negative biases that affected patient care. One participant described asking a nurse about appropriate dosages of pain medication and shared:

> My nurse would also kind of brush it off and be like well she's manipulative, oh she's an addict. And so it's hard when you have the person, your mentor, the person you're going to is also brushing off certain care aspects. [04]

Another described shadowing a nurse caring for an infant with neonatal abstinence syndrome:

> The nurse had a lot of biases about that mother. I as a [nursing student] hadn't really encountered that open sharing of those biases. I saw how they inhibited her ability to care for the patient and provide all the education that she was providing to her other patients that day. [09]

One summarized, "In the mother baby setting I felt more uncomfortable there because of how the nurses stigmatize the patients in that setting" [08]. These encounters with nurses made participants feel even more uncomfortable in situations where they already lacked skills and confidence.

3.6. Recognizing Bias and Stigma

Eight of eleven participants recognized that they experienced bias towards a patient, particularly in maternity. One said, "I think we all say we wouldn't have any judgment towards the patient, but I'd say holding a newborn baby and knowing the mother willingly put them

through that, it's a bit difficult" [02]. The use of the word "willingly" reflects an implicit belief that OUD was a choice. Another reported her struggle to view OUD as a disease:

> I definitely did have some sort of bias towards these mothers. I mean, they're not choosing this drug over their child. They don't have that option because they physically can't, but it was difficult trying to make myself think and feel and understand that it's not their choice, it's this disorder that they have. [01]

Some participants admitted that they blamed mothers for symptoms in newborns, using the phrase, "How could you?" when considering the mother's actions [04, 09, 11]. One said, "I realized that addiction is a disease … but my compassion for people who are addicted – it wavers a bit when there's a baby involved" [05]. Another shared:

> It was hard to remain non-judgmental and still provide quality care to the mom and not say, like, look at the baby and be like, this is the mother's fault. She's to blame, she did this to her baby, how could she? [04]

One student's perspective changed after becoming involved in an outpatient substance-abuse program for pregnant women:

> In the inpatient setting, I was thinking, "How could you do this to your child?" and "You're not gonna be a good mother as you worry about all of your own substance abuse problems." … But I will say working with mothers at that program has really made me realize how much they love and care for their children, and I think that is something that was sort of lacking in my view before. [09]

Participants also struggled with bias related to manipulative behaviors and trust. One participant said, "It's just so hard to still take care of them in the same way. I just don't trust them as much" [04]. Another shared:

> I think there's some stigma especially with IV drug use and people assuming they're uneducated or aren't motivated, or some character biases I can see myself falling into sometimes. I think maybe subconsciously it may have affected how I treated them. But I felt like I was reflective enough to step back and realize what I was thinking about. [06]

While participants admitted bias, they also demonstrated empathy and a desire to be non-judgmental. When asked about most beneficial aspects of her education, one participant summarized, "I would say probably understanding that this could happen to anyone. Like it's not a lifestyle, how you're raised, it's not who you are – the substance use disorder doesn't define you. It can happen to anybody anywhere" [01].

4. Discussion

Six themes emerged that described the attitudes, experiences, and preparation of nursing students caring for patients with OUD, including facing ethical dilemmas, increasing comfort with experience, avoiding discussion of OUD, preferring education with real-world applicability, observing nursing bias, and recognizing their own biases. Findings were consistent with previous research showing that health professionals experience difficulty and discomfort caring for patients with SUD, leading to avoidance and missed opportunities for intervention (Daibes et al., 2016; van Boekel et al., 2013), but previous studies have not explored these phenomenon in student nurses. This study further adds evidence about students' preferences for education on OUD and the impact of nursing role models on students. Despite facing challenges, participants in this study expressed a desire to provide informed and empathetic care, a readiness to learn, and an attempt to identify and reduce their own biases.

One noticeable trend in this study was the impact of encountering OUD in the maternity setting. Students perceived OUD was most common in this population, yet there is no evidence to support this. One possible explanation is that students had increased awareness of OUD due to patient disclosure or symptoms witnessed in newborns. This was also the first clinical rotation for students in this sample, which may have caused these experiences to be more memorable.

In addition, students felt these situations led to bias and internal conflict more often than other settings. Qualitative studies on the experiences of registered nurses caring for childbearing women with OUD and their newborns reveal similar findings, where nurses face "difficult" situations and feel concerned about the capacity of mothers with OUD to care for their babies (Maguire et al., 2012; Shaw et al., 2016). Nurse educators can assist students in preparing for ethical dilemmas and minimizing moral distress by using group debriefing about values and experiences, discussion of real scenarios as case studies, and meditative writing (Sasso et al., 2016). Future research should also replicate this study with students who enter the maternity rotation later in their clinical curriculum for comparison to determine optimal order of placements to reduce students' biases and perceptions of ethical distress.

Findings also suggest that students require content training on OUD prior to entering the clinical setting, particularly before maternity rotations. Participants desired specific and realistic education, such as using simulation as a safe environment to enact a difficult conversation or dilemma. Simulation has been shown to have a positive impact on knowledge and performance (Orique and Phillips, 2018). Practicing real conversations in educational settings might also help students gain confidence and limit avoidance in the practice setting.

Participants also suggested strategies such as sharing the lived experiences of those with OUD and coordinating shadow experiences in treatment centers. Shadowing experts in OUD may expose students to positive healthcare role models, which could help diminish the power of negative role models students will likely encounter in other settings. By incorporating real life experiences of individuals with OUD in the curriculum, nurse educators may assist students in developing empathy and understanding when working with this population. Future research should explore the effects of educational interventions such as simulation, guest lecture, and/or shadowing integrated prior to the maternity rotation on reducing bias and improving knowledge and self-efficacy.

Students also recalled minimal education on harm reduction, which offers nurses the opportunity to provide education about topics such as overdose prevention, management in case of an overdose, phlebotomy, and prevention and management of common comorbidities such as hepatitis C and human immunodeficiency virus (Bartlett et al., 2013). Nursing students are well positioned to bring awareness of harm reduction strategies to the practice setting as they become professionals, and early education may help mitigate stigma and bias.

Participants' accounts added evidence that stigma, bias, and discrimination are present in the clinical setting. The impact of bias on patient care has been documented (Daibes et al., 2016; van Boekel et al., 2013), but this study highlights a further consequence of bias as it influences nursing students and potentially their future practice. Nurses must be mindful of the power of their words and actions on students and recognize that this influence persists even outside the patient's room. Nurses should embrace the opportunity to be positive role models by providing students with information without judgment and encouraging empathy and understanding.

4.1. Limitations

This study included participants from one university in New England. All participants were White females of similar ages. Findings reflect a limited geographic and cultural context. Further research is needed to explore attitudes of nursing students in other regions in the US. Participants were interviewed by a fellow classmate, which may have influenced responses, though this might also be considered a strength as participants felt comfortable sharing openly with the student researcher. Self-selection to participate in this study may have biased findings, as students who felt most strongly about OUD would be

those most likely to participate.

5. Conclusion

This qualitative content analysis revealed that nursing students' attempt to work through ethical dilemmas and personal discomfort as they care for patients with OUD in the clinical setting. Students often avoid discussion of OUD and witness discriminatory behaviors by nurses. Participants offered honest reflections on their own assumptions and expressed a desire to overcome internal biases. They reported that real-world discussions, simulations, and interactions were most effective in promoting empathy and acquiring practical knowledge for working with patients with OUD. Given the growing prevalence of OUD and the potential impact of bias on care of these patients, nurse educators must answer the call to address a significant gap in nursing curriculum to improve delivery of care and patient outcomes.

Acknowledgements

This work was supported by the University of Vermont Honors College. The authors wish to thank the participants of this study for their willingness to share their experiences with us.

Contribution Statement

L.J. conceived of the idea, conducted all interviews, analyzed findings, and drafted a thesis on which this manuscript was based. L.F.L. supervised the research process, co-analyzed data, and wrote the manuscript.

Conflict of Interest

The authors declare that they have no conflicts of interest.

References

Aggarwal, M., Ghai, S., Basu, D., 2012. Attitude of nursing students towards psychoactive substance use: does training matter? Int. J. Nurs. Educ. 4 (2), 146–150.

Bartlett, R., Brown, L., Shattell, M., Wright, T., Lewallen, L., 2013. Harm reduction: compassionate care of persons with addictions. J. MedSurg Nurs. 22 (6), 349–358.

Centers for Disease Control & Prevention, 2017. Opioid Overdose: Understanding the Epidemic. Retrieved from: https://www.cdc.gov/drugoverdose/epidemic/index.html.

Chu, C., Galang, A., 2013. Hospital nurses' attitudes toward patients with a history of illicit drug use. Can. Nurse 109 (6), 29–33.

Daibes, M.A., Al-Btoush, M.S., Marji, T., Rasmussen, J.A., 2016. Factors influencing nurses' attitudes towards patients in Jordanian addiction rehabilitation centres: a qualitative study. Int. J. Ment. Heal. Addict. 15 (3), 588–603. https://doi.org/10.1007/s11469-016-9682-2.

Finnell, D.S., Savage, C.L., Hansen, B.R., Sanchez, M., White, K.M., Johnson, J.A., Seale, J.P., 2018. Integrating substance use content in an “overcrowded” nursing curriculum. Nurse Educ. 43 (3), 128–131. https://doi.org/10.1097/nne.0000000000000438.

Harling, M.R., 2017. Comparisons between the attitudes of student nurses and other health and social care students toward illicit drug use: an attitudinal survey. Nurse Educ. Today 48, 153–159. https://doi.org/10.1016/j.nedt.2016.10.012.

Harling, M.R., Turner, W., 2011. Student nurses' attitudes to illicit drugs: a grounded theory study. Nurse Educ. Today 32, 235–240. https://doi.org/10.1016/j.nedt.2011.05.002.

Krippendorff, K., 2013. Content Analysis: An Introduction to its Methodology. Sage, Thousand Oaks, CA.

Lincoln, Y., Guba, E., 1985. Naturalistic Inquiry. Sage Publications, Newbury Park, CA.

Maguire, D., Webb, M., Passmore, D., Cline, G., 2012. NICU nurses' lived experience. Adv. Neonatal Care 12 (5), 281–285. https://doi.org/10.1097/anc.0b013e3182677bc1.

Neville, K., Roan, N., 2014. Challenges in nursing practice: nurses' perceptions in caring for hospitalized medical-surgical patients with substance abuse/dependence. J. Nurs. Adm. 44 (6), 339–346. https://doi.org/10.1097/nna.0000000000000079.

Orique, S., Phillips, L., 2018. The effectiveness of simulation on recognizing and managing clinical deterioration: meta-analyses. West. J. Nurs. Res. 40 (4), 582–609.

Pereira, S.C.C., Andreto, L.M., Souza, A.I., Frazao, I.S., Rassool, G.H., Pillon, S.C., 2018. Knowledge and perceptions of undergraduate nurses towards the use of cocaine (smoked) in a Brazilian context. Arch. Psychiatr. Nurs. 32 (3), 348–352. https://doi.org/10.1016/j.apnu.2017.11.024.

Sasso, L., Bagnasco, A., Bianchi, M., Bressan, V., Carnevale, F., 2016. Moral distress in undergraduate nursing students. Nurs. Ethics 23 (5), 523–534. https://doi.org/10.1177/0969733015574926.

Shaw, M.R., Lederhos, C., Haberman, M., Howell, D., Fleming, S., Roll, J., 2016. Nurses' perceptions of caring for childbearing women who misuse opioids. Am. J. Matern. Child Nurs. 41 (1), 37–42. https://doi.org/10.1097/nmc.0000000000000208.

Van Boekel, L.C., Brouwers, E.P.M., van Weeghel, J., Garretsen, H.F.L., 2013. Stigma among health professionals towards patients with substance use disorders and its consequences for healthcare delivery: systematic review. Drug Alcohol Depend. 131 (1–2), 23–35. https://doi.org/10.1016/j.drugalcdep.2013.02.018.

de Vargas, D., 2012. Nursing students' attitudes towards alcohol, alcoholism and alcoholics: a study of a Brazilian sample. J. Nurs. Educ. Pract. 2 (1), 1–8. https://doi.org/10.5430/jnep.v2n1p1.