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Burnout by Drugs: Emergency Department Nurses and the Opioid Epidemic

CARRIE MCKIM

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INTRODUCTION

Background on the U.S. Opioid Epidemic

One of the most pressing public health crises in the United States today is the opioid epidemic. Killing more than 42,000 people in 2016 alone, opioid overdoses are now one of the most commonly treated emergencies in hospitals across the nation (CDC, 2017). Often, emergency department (ED) staff are the first line of defense in treating heroin overdoses or other opioid-related medical issues (Greenblatt et al., 1974; Pope et al., 2000). As a result, emergency medical staff tend to bear the burden of treating the unpleasant and difficult consequences of the current U.S. opioid epidemic. This is unfortunate, particularly given that emergency medical providers are already at an increased risk of occupational burnout due to the unpredictable and demanding nature of their work setting (Gillespie et al, 2003; Potter, 2006; Rozo et al., 2017).

In response, some hospitals have implemented programs aimed at providing patients with resources to help them seek treatment for opioid use disorder following their ED visit, such as rehabilitation or counseling. These ED interventions seek to identify patients who might be at risk for substance abuse, initiate a non-judgmental discussion with them about drug use, and refer them to treatment services (Madras et al., 2009). In particular, some EDs have developed initiatives that follow the ‘Screening, Brief Intervention, and Referral to Treatment’ (SBIRT) method. These programs, sometimes carried out by personnel separate from medical staff, assess a patient’s readiness to accept help, and connects them with resources for treatment beyond the ED (Madras et al., 2009). While these initiatives have proven benefits for patients, there is little research regarding the positive collateral benefit such programs may have on emergency medical staff that treat patients with opioid use disorder (Madras et al., 2009; Parker et al., 2012; Slain et

al., 2014; Woolard et al., 2011). This study aims to examine whether nurses benefit from ED substance abuse intervention programs through a reduction in the occupational stress they experience. In order to answer this question, this research compares two hospital EDs: one on the campus of an affluent university in the southern United States (Hospital 1) and another in a metropolitan area in New England (Hospital 2). Hospital 2 has implemented a substance abuse intervention program that employs SBIRT methods when treating patients with opioid use disorder in the ED, while Hospital 1 has no comparable ED substance use program in place.

SBIRT Program at Hospital 2

Hospital 2 (described in more detail below) is a large safety net hospital in New England that has implemented a screening and treatment referral program to operate in its ED. This program has been running since 1994 and uses SBIRT methods to assess patients and connect them with resources beyond the ED for help with substance use. The program also relies on program coordinators, who are licensed drug abuse counselors, to initiate “non-judgmental conversations” with patients about substance use. These patient consultations with program coordinators may result in a range of outcomes, including connecting patients to substance abuse treatment centers or referring them to primary care doctors (Hospital 2, 2017). The main goal of the program is to ensure that patients have access to primary care or treatment resources following their departure from the ED (Bernstein et al., 2017).

The program coordinators are a vital aspect of the SBIRT program, as the presence of these counselors (who are separate from nursing staff) ensures that the program does not add yet another responsibility to those of already overworked ED nurses. Instead, program staff work to connect patients struggling with substance use disorders to resources that will assist them outside

of the ED. This allows nurses to completely focus their efforts on addressing the issues a patient has at the time of treatment. The goal of this research, therefore, is to investigate whether this program has a positive impact on the mental strain experienced by ED nurses who treat opioid-using patients. Through ensuring higher quality of patient care without directly requiring more of nurses themselves, it is possible that programs such as this not only result in better patient outcomes, but also protect ED staff from negative consequences like occupational burnout and compassion fatigue. These negative consequences, further elaborated upon below, have the potential to result in decreased satisfaction among nursing staff and lower quality of care for patients (Hooper et al., 2010; Sabo, 2006). Investigating the stress levels reported by ED nurses working alongside the SBIRT program at Hospital 2 may provide vital insight into the mutually beneficial relationship between nurses and ED intervention programs targeting opioid abuse.

ED NURSE STRESS AND THE OPIOID EPIDEMIC – A REVIEW OF LITERATURE

The topic of mental strain in ED medical staff is largely unexplored, particularly in relation to specific issues like the U.S. opioid epidemic. In fact, much of the existing literature alludes to the distinct lack of research that has been done to examine stress in relation to compassion fatigue and burnout in ED workers (Potter, 2006; Hooper et al., 2010; Rozo et al., 2017; Hunsaker et al., 2015). Further, while there is ample research surrounding the effects that ED drug abuse intervention programs have on patient outcomes, there is considerably less knowledge of the impact these same interventions may have on the medical staff treating patients. Because patients struggling with substance use often seek help from the ED, nurses regularly bear the consequences of treating patients who struggle with opioid use disorder (Greenblatt et al., 1974, Parker et al., 2012). However, it is possible that the placement of

substance abuse counselors in the ED for patient consultation may partially alleviate that burden. This potential link has not been investigated thoroughly in peer-reviewed literature. This research therefore seeks to assess the possibility of a connection between ED opioid use intervention programs and reduced strain on ED nurses.

To set the stage, a literature review was conducted to: (1) provide context for the opioid epidemic and the role of the ED in treating substance use disorder, (2) review the general workplace factors that impose stress on ED nurses, and (3) offer an introduction to the SBIRT intervention methods that may have a positive collateral impact on ED nurses.

Opioid Use and the U.S. Epidemic

According to the National Institute on Drug Abuse, opioids include heroin, synthetic opioids like fentanyl, and legal pain relievers such as oxycodone, hydrocodone, codeine, and morphine (2017). Heroin itself is a highly addictive substance, and has several negative potential outcomes for users, ranging from societal stigma to accidental overdose and sometimes death (Bauer et al., 2017; Greene et al., 2018). Opioids are particularly difficult for users to quit, as symptoms of withdrawal are uniquely unpleasant (Bauer et al., 2017; Greenblatt et al., 1974). While opioid use disorder may take the form of either prescription abuse or the use of illegal substances, this research focuses on any opioid use that leads to ED admissions (Greene et al., 2018). Therefore, substance abuse in the context of this study will be defined as “a cluster of cognitive, behavioral, and physiological symptoms indicating that an individual continues to use the substance despite significant substance-related problems” (Greene et al., 2018). The important distinctions between the abuses of prescription medication versus illegal substances are relevant in other contexts, but there will be no further differentiation between them for the

purposes of this research. Further, per the recommendation of medical personnel consulted for this project, the phrase “patient with opioid use disorder” will be used whenever possible to describe people who have traditionally been referred to as “addicts.” This shift is in an effort to medicalize the topic of opioid abuse, and distance bias or stigma from the individuals.

Opioid use in the United States requires urgent attention, with over 42,000 opioid-related overdose deaths occurring in 2016 alone (Greene et al., 2018). The CDC reports that “Since 2000, the rate of deaths from drug overdoses has increased 137%, including a 200% increase in the rate of overdose deaths involving opioids (opioid pain relievers and heroin)” (Rudd et al., 2016). President Donald Trump classified the opioid epidemic as a ‘public health emergency’ in 2017, and the federal government is on track to allocate 4.6 billion dollars toward addressing the crisis in 2018 (Merica, 2017; Mulvihill, 2018). In addition to the deaths caused by opioid use, the devastating impacts can also include adverse other health outcomes, lost worker productivity, significant caregiver burden, increased strain on the criminal justice system, and stigma (Greene et al., 2018; Birnbaum et al., 2011).

Aside from the overwhelming effects of opioid use disorder on individuals and their families, the financial burden of this epidemic is also severe (Birnbaum et al., 2011). Demonstrating the sheer scope of the issue, improper opioid use cost the U.S. healthcare system 28 billion dollars in 2013, and the overall U.S. economy more than 500 billion in 2015 (Greene et al., 2018; Mulvihill, 2018). It is therefore evident that the prevalence of opioid use disorder both drains national resources and results in severely negative outcomes for individuals struggling with substance abuse. What is less well understood, however, is the negative impact that treating patients using opioids is having on medical staff (Sabo, 2006; Bride, 2015). This question is particularly pertinent to EDs, which are often the first form of help sought by opioid

users, either during or immediately following an overdose (Parker et al., 2012; Greenblatt et al., 1974). Because EDs are on the front line in combatting this epidemic, it is vital to investigate potential strategies to improve both the treatment of opioid users and the reduction of strain imposed on the healthcare professionals who care for them.

Treating Opioid Use Disorder in the ED

The use of opioids, and illegal drugs in general, is associated with a host of undesirable symptoms and behaviors, and ED nurses must regularly contend with these complicating factors (Greenblatt et al., 1974; Pope et al., 2000; Hoaken et al., 2003; Bauer et al., 2017). The difficult symptoms associated with opioid abuse are not only dangerous to patients, but also make the task of treating them particularly challenging and unpleasant for ED nurses. For example, symptoms of withdrawal from opioids can include: diarrhea, vomiting, kicking movements, cold-flashes, and insomnia (Bauer et al., 2017). In the ED, patients with opioid use disorder are generally the most difficult as they begin to go through these withdrawal symptoms (as quickly as a few hours after opioids leave the patient's system), or when some sort of antagonist is administered to reverse the effects of the drug (Greenblatt et al., 1974, Hoaken et al., 2003). During this period, patients may present as "delirious and combative," and sometimes "agitation is unmanageably severe" (Greenblatt, 1974). The presence of these undesirable symptoms increases patient discomfort, and also makes the job of ED nurses caring for them abnormally difficult.

Opioid use disorder is also commonly associated with "drug-seeking" behavior in patients, often making it difficult for healthcare professionals to discern between patients who are reporting genuine pain and those who are classified as seeking opioid prescriptions to support their use disorder (Hansen, 2005; Pope et al., 2000). This concern is especially relevant to opioid

use, as many of the drugs that can be legitimately used in medical settings also run the risk of contributing to the growth of the epidemic (Greene et al., 2018). As a result, substance-using patients present challenges to ED staff who must use their own judgment to assess whether or not a patient's condition warrants these prescription medications (Compton et al., 1998). Finally, according to Bride et al. and Hoaken et al., substance use is also a major risk factor of violence, a particularly relevant concern for EDs that treat a high volume of patients with substance use disorders (2015; 2003). As further outlined below, ED nursing is already a typically stressful occupation (Potter, 2006; Rozo et al., 2017). Compounded by the factors that make treating substance use particularly difficult in the ED setting, the risk of burnout or compassion fatigue in nurses working to address the opioid epidemic is significant.

Stress, Burnout, and Compassion Fatigue in ED Nursing

As cited by Volker et al., burnout is defined by three primary symptoms: “(1) emotional exhaustion, (2) depersonalization (e.g. detached, impersonal responses toward the service recipient), and (3) reduced personal accomplishment (lack of competence and achievement)” (2010). Independent of addressing substance use disorders in patients, ED nursing tends to be a taxing profession, and one that is often associated with burnout (Gillespie et al., 2003). There is significant literature surrounding the work and environmental factors that contribute to the stress of medical staff in the ED, and García-Izquierdo et al. and Potter both point out that health workers are one of the groups at the highest risk of occupational burnout (2012, 2006). Further, the ED inherently breeds a higher degree of stress than other medical settings (Chapman, 1997; Potter, 2006). A commonly-cited source of stress in ED work is a perceived loss of control on the part of the medical worker (Basu, 2016; Gillespie et al., 2003; Volkner, 2010). Gillespie et al.

defines loss of control as “when individuals cannot resolve inherent difficulties in their daily work,” and highlights that it is linked to higher rates of burnout (2003). Both Gillespie et al. and Basu et al. suggest ED interventions that provide nurses with skills and resources that empower them to provide high quality patient care as a way to combat a perceived loss of control (2003; 2016). However, ED work also generally entails a significant degree of unpredictability, making it highly stressful for the medical professionals involved (Potter, 2006; Rozo et al., 2017). Potter defines unpredictability as the constantly changing work environment and nature of patients in the ED, and nurses are often left to manage this in conjunction with long shifts, regular contact with patient traumas, and lacking infrastructures for social support (2006; Rozo et al., 2017).

In addition to the unpredictability and lack of job control in ED work, factors such as excessive workload, insufficient social support, and interpersonal conflicts contribute to the stress felt by medical staff (García-Izquierdo et al., 2012; Hooper et al., 2010; Hunsaker et al., 2015; Gillespie et al., 2003; Basu et al., 2016). Additionally, Rozo et al. references “long shifts, exposure to traumatic events, and violence” as precursors to the burnout experienced by ED workers (2017). The “demanding” and “fast-paced” environment of the ED clearly has an impact on the workers within, but each of the studies included in this review acknowledge the need for further investigation of both the causes of burnout and potential solutions (Rozo et al., 2017; Hunsaker et al., 2015; Basu, 2016).

Compassion fatigue, which is strongly correlated with burnout, is defined as “a loss of a nurse’s ability to nurture patients” (Hinderer et al., 2014; Yoder, 2010). This phenomenon is the result of nurses “experiencing helplessness and anger in response to the stress they feel watching patients go through devastating illnesses or trauma” and is the “natural consequence of caring for patients who are in pain, suffering, or traumatized” (Yoder, 2010; Sabo, 2006). Yoder also

describes compassion fatigue as occurring “when one cannot rescue or save the individual from harm and result[ing] in guilt and distress” (2008). These concepts are particularly relevant to substance use, as patients who struggle with opioid use disorder tend to repeatedly use ED services (Pope et al., 2000; Kne et al., 1998; Hansen, 2005). However, due to excessive workload and limited resources, ED nurses often lack the time or resources to address patient needs beyond the emergent situation (Potter, 2006; García-Izquierdo et al., 2012). As a result of this cycle, nurses consistently watch the same patients return to the ED for treatment, potentially contributing to increased cynicism or a lack of empathy in the context of their efforts to heal (García-Izquierdo et al., 2012; Sabo, 2006).

There is also a general consensus among the literature that compassion fatigue and burnout have negative impacts on the quality of care provided by ED nurses, and patient satisfaction with care (Hooper et al., 2010; Sabo, 2006; Hinderer et al. 2014). Therefore, not only does the strain felt by ED nurses impact the nurses themselves, but it also has negative implications for the entire patient population treated by “burned out” nurses (Hooper et al., 2010; Sabo et al., 2006). The factors discussed thus far, compounded with the aforementioned difficulty of treating patients struggling with substance use, contribute to the strain experienced by ED nurses. This background informs the primary aim of this research as seeking to investigate the link between SBIRT programs and ED nurse stress, specifically in the context of the opioid epidemic.

Screening, Brief Intervention, and Referral to Treatment (SBIRT) Programs

SBIRT programs, like the one at Hospital 2, are one popular option used to combat substance use from inside the ED (Parker et al., 2012; Slain et al., 2014; Woolard et al., 2011).

SBIRT is defined as a “comprehensive, integrated, public health approach to the delivery of early intervention and treatment services for persons with substance use disorders, as well as those who are at risk of developing these disorders” (Parker et al., 2012). A relatively simple program, SBIRT initiatives include a trained individual¹ assessing the patient’s likelihood of struggling with substance use, engaging the patient in an open, non-judgmental conversation about risky behaviors, and referring the patient to additional services (Madras et al., 2009; Parker et al., 2012; Woolard et al., 2011). This is a more in-depth version of standard brief motivational intervention, a practice during which ED staff discuss substance use with a patient in hopes of helping the patient reflect and move forward with relevant resources (Woolard et al., 2011). When implemented in EDs, these programs have been found to have significant success in reducing substance use, primarily through allowing for proactive treatment or immediate intervention in the case of substance users (Madras et al., 2009; Parker et al., 2012; Slain et al., 2014; Woolard et al., 2011).

There is evidence supporting the value of implementing these programs by creating a new position in the ED, instead of having existing staff use SBIRT methods themselves (Parker et al., 2012; Slain et al., 2014). Since ED nurses regularly experience excessive workloads, the addition of another responsibility may result in program failure. For example, during the implementation of one SBIRT program, Parker et al. found that nurses requested separate staff to administer the screening, due to concerns about an inability to take on this additional task (2012). This research therefore seeks to investigate a potential link between successful implementation of an SBIRT program (through the creation of a new ED position) and reductions in the workplace strain experienced by ED nurses when treating patients with opioid use disorder.

¹ At Hospital 2, these trained individuals are licensed drug abuse counselors. Various SBIRT certification methods were beyond the scope of this study, and therefore are not discussed further.

Hospital 2's SBIRT initiative serves as the example program, and program coordinators provide insight into the necessity of creating a separate position to carry out intervention duties. There is little peer-reviewed research investigating this topic, and the topic of ED nurse strain in general, and thus this study serves to fill a gap in ED nurse literature.

METHODS

Central Research Questions:

1. What is the impact of the opioid epidemic on the work-related stress/strain of ED nurses in the two participating hospitals?
2. Does the presence of certified substance abuse counselors practicing SBIRT methods with opioid overdose patients in the ED reduce nurse stress levels between Hospital 1 and Hospital 2?

To answer these research questions, I studied the impact of Hospital 2's SBIRT program² on the strain that nurses experience in relation to treating opioid users. This research seeks to investigate whether programs like this have a positive impact on the stress levels experienced by ED nurses who regularly treat patients with opioid use disorder.

I chose to focus on Hospital 2 due to the existence of its SBIRT program as a resource to support the treatment of ED patients struggling with substance use. I selected Hospital 1 as the comparison due to the absence of a SBIRT program in the ED. Both hospitals are classified as level 1 trauma centers, meaning they can each take on the most severe emergencies. However,

² This program makes substance abuse counselors available for immediate consultation in the ED. These counselors collaborate with medical staff to offer treatment resources to at-risk patients. See the above section titled 'Screening, Brief Intervention, Referral, and Treatment (SBIRT) Programs' for more information.

aside from providing comparable medical services, these two hospitals operate in differing environments that could impact research outcomes. These inconsistencies are addressed in the Limitations section.

In order to recruit participants, I worked with nurse managers from each ED. They made in-person announcements and sent emails to all eligible ED nursing staff. Interested nurses were told to contact the researcher directly to participate.³ I also delivered flyers to the ED of Hospital 1, and some participants were recruited through this method. All nurses were given a \$10 Visa gift card as incentive for their participation, and as a token of appreciation.

I conducted semi-structured interviews with four ED nurses from Hospital 1 (no SBIRT program) and one ED nurse from Hospital 2 (with an SBIRT program). I chose the interview format to allow nurses to self-report their stress levels and experiences when treating opioid users, specifically in the context of the supplemental programs in their respective EDs. I conducted all interviews over Skype.⁴ Skype allows for interviews to feel as close to in-person as possible, and the ability to read body language and facial expressions is better preserved over Skype than through a phone interview.

I also chose a semi-structured interview format to provide context for this largely unexplored research area, since qualitative research methods are generally accepted when investigating a new field of study (Jamshed, 2014). Survey methodology does not have the capacity to draw out the nuances that this study seeks to investigate. Interviews, however, allow nurses to illustrate their lived experiences and relay firsthand accounts of their stress levels while treating opioid users. Semi-structured interviews provide a solid interview outline, but also allow

³ Nurses were told to reach out directly to the researcher in order to preserve anonymity of participation.

⁴ Recommended by Duke Social Science Research Institute (SSRI)

for flexibility as the interview progresses. However, because this interview format used similar questions for all nurses, I was able to compare responses between the two populations.

During these semi-structured interviews, I asked nurses a set of pre-established, open-ended questions in the same order.⁵ Questions began with broad, vague concepts such as general job satisfaction and the patient populations they typically find difficult to treat. Throughout the interview, however, the questions became more specific to treating patients with an opioid use disorder, and how this impacts the nurses' perceptions of their profession. While all nurses from both hospitals were asked the same baseline questions, the nurse from Hospital 2 was asked about her opinions of the SBIRT program specifically.⁶ Due to the semi-structured nature of the interviews, I often added questions to help the nurses elaborate upon certain responses.

Interviews were recorded and transcribed using a combination of Amazon's automated Transcription Service, 'Amazon Transcribe,' and self-transcription to ensure accuracy. I used NVivo⁷ to code the interviews, and conducted thematic analysis to analyze the qualitative data collected. After familiarizing myself with the interview content from both hospitals, I developed specific codes to identify the most prominent themes throughout the responses. These included concepts such as "Lack of Control" or "Mental Illness in Opioid Users."⁸ Analysis of the aggregated code structure provided insight into the patterns, themes, and common attitudes regarding the various opioid response programs discussed throughout the interviews. Using these patterns, I identified themes and frameworks that accurately represent the overarching trends of

⁵ Interview questions were developed in conjunction with the Duke SSRI to ensure validity.

⁶ See Appendix A for the list of questions posed to nurses from Hospital 1. See Appendix B for the list of questions posed to the nurse from Hospital 2.

⁷ NVivo is a software program designed to store, organize, and analyze qualitative data.

⁸ These codes were developed in conjunction with researchers from Duke SSRI in order to avoid researcher bias and endure validity.

my research. After further refining these themes to embody the most important findings, I developed my final results and conclusions.

RESULTS

Description of Participants

I interviewed four nurses from the ED of a hospital located on an affluent University campus in the southern United States (Hospital 1) and one nurse from the ED of a hospital in a metropolitan area in New England (Hospital 2). Each participant is an ED nurse, with experience levels ranging from six months to five years.

The participants will be referred to as:

Nurse A (Hospital 1)

Nurse B (Hospital 1)

Nurse C (Hospital 1)

Nurse D (Hospital 1)

Nurse E (Hospital 2)

Background on Existing Hospital Programs

Each nurse provided background on the substance abuse response programs offered by their respective hospitals. This set up a framework from which to describe the differences between each hospital's approach to managing treatment of patients with opioid use disorder.⁹

⁹ Many of the nurses spoke about patients with sickle cell disease when describing opioid users in the ED. The sickle cell population includes a unique class of patients who regularly experience an extreme amount of pain for which opioids are a normal and widely accepted course of treatment. Because of this, comments about sickle cell opioid users are excluded from analysis. The population of interest for this research is ED nurses, with a focus on the impact that treating patients with opioid use

As explained by Nurse E (from Hospital 2), nurses have access to both social workers and SBIRT program coordinators when treating patients who struggle with opioid use in the ED. Program staff members are primarily called to assist patients who are seeking programs to help them detox (from any substance, not exclusively opioids). Social workers provide traditional functions ranging from assisting patients with transportation to helping identify unknown patients.

The nurses from Hospital 1 primarily referred to experiences working with social workers when treating patients who use opioids. Their descriptions of the role of Social Work were very similar to those of the SBIRT program at Hospital 2, but there is no separate team at Hospital 1 to provide these functions for substance users. At Hospital 1, social workers refer patients with substance use disorders to outpatient facilities, and if the patient is experiencing psychiatric-related challenges, the Psychiatric team gets involved as well. Nurses from Hospital 1 also spoke about a patient relations program that is sometimes used. Social Work and this patient relations program work in conjunction to address and manage patient cases involving opioid use, and when there is potential for the patient's agitation to escalate in the ED. However, there is no comparable SBIRT program in place at Hospital 1.

Stress Factors Related to Treating Opioid Users in the ED

General Stress

Nurses from both hospitals cited similar factors as contributing to their general work-related strain when on duty in the ED. All five nurses invoked the phrase 'bur nout' to discuss the workplace stress and fatigue experienced by those in the ED nursing profession. In some

disorders have on their stress levels. Patients with sickle cell disease do not fall into a use disorder category and therefore will not be included in this research.

instances, nurses were describing the demanding nature of ED nursing in relation to burnout, such as when Nurse B spoke about efforts to improve resilience within emergency medicine. She said that although programs and committees exist to better the working environment, “It’s a very slow process and I feel like it’s still, we’re not able to retain people because there’s just such a high burnout in pretty much all areas of nursing.” Nurse D echoed this sentiment and elaborated to include the negative impact of high burnout rates on the ED by saying:

The turnover is so high in emergency rooms and, like, and the lack of experience is, is so acute. Like, more experienced nurses take better care of patients, and if they can’t stay in their job for very long, like, that is just, like, the thing that could help people. Like, could help save lives on, like, an every single day basis.¹⁰

Nurses also discussed the factors that they perceive as influencing their own individual feelings of burnout and stress. Nurse C attributed her greatest source of burnout to treating psychiatric patients, while Nurse D discussed the difficulty she has working with children in the ED. While acknowledging that opioid users are not the “main source of emotional stress” in her job, Nurse D said that she spends most of her “mental energy” on these patients. She said the following about her experiences working in emergency medicine:

I would put myself in, like, the extremely emotionally burned out category of nurses. I’m currently, like, actively looking for other jobs to get out of the profession, because of the, sort of, emotional trauma and just, like, how intensely, emotionally exhausting it is to come to work every day. So I would say, like, when I get up in the morning and I go to work, I’m like, pretty terrified about what I’m about to find and I have had just, like – I don’t know – dozens, hundreds of, like, really intensely difficult, emotional, hard, uh, circumstances while I’m at work that I still, I’ll probably spend the rest of my life trying to figure out.

While the rest of the nurses expressed fewer extreme and blatant feelings of stress or work-related burnout, there was consensus among the five participants that burnout is widely

¹⁰ Quotes throughout the Results section contain all original phrasings of each participant, including expressions such as “like,” “you know,” or “um.” The decision to leave these phrases in the quotes (instead of removing them) was intentional and reflects an effort to represent the most authentic version of the nurses’ words. Further, these phrases often indicate points at which nurses experienced difficulty finding the right words to express their sentiments, occasionally during discussions regarding difficult subject matter.

accepted as a common result of ED nursing. Nurse E, for example, indicated that while she currently enjoys her work, she feels confident that eventually she will be unable to continue this profession long term as a result of the “emotional stress” and “high pace” of the ED. The general stress factors discussed by participants mirror the primary stressors described in the Literature Review and are widely accepted as contributors to burnout.

Mental Illness and Substance Use

Three of the five nurses spoke specifically about the difficulties they experience when treating patients who exhibit opioid use disorders in conjunction with mental illness (Nurse A, Nurse C, Nurse B). Nurse A summed it up, saying, “I think a lot of times we’ve found that, like, psychiatric diagnosis, diagnoses can be linked to, you know, the same patients who have these opioid abuse problems.” Similarly, Nurse E mentioned that she sees a lot of “untreated mental illness that’s not addressed.” Caring for substance users in the ED can quickly become a multifaceted issue, due to the treatment complications and logistical challenges these patients may present. As a result of the difficulty associated with these patients, Nurse C said, “If anything is going to burn out an ED nurse, it’s going to be the substance abuse and the psychiatric patients.” Nurse E said the following about treating opioid users with psychiatric concerns:

I find the patients who have psychiatric issues and addiction issues to be the most difficult to treat, because you're combatting more than just this person's addicted to drugs and they'll do anything to get drugs, or they'll, they're struggling. Cause there's, there's a lot of studies about how when you start using heroin, your brain regresses and your maturity levels stay at where whenever age you started using, and, you know, you just have poor reflexes and poor response, emotional responses. So, when you add mental illness on top of it, it is really hard to get through to someone or explain to someone when they have voices in their head already and they're also trying to detox and it's just like a combination of, of like a cat in a bag but then the bag is on fire. Is that a good expression? Like, that's how it feels it's like, you're trying to get the cat out, and then the bag is on fire too, so you're trying to figure out how to best reach them.

When treating opioid users who are also mentally ill, Nurse C identified the Psych unit as “a high source of bur nout” for nurses in general. She also described the challenge of assessing whether a patient is suffering from an “intoxication issue” that causes “acute psychosis,” or if the patient is truly experiencing a pattern of “psychiatric psychosis.” Nurse C also said that this facet of the issue can become further obscured when opioid users attempt to take advantage of hospital resources, saying:

The challenge for me comes when the patients are, kind of, malingering and manipulating the system, knowing that if they say, ‘I want to kill myself,’ they know that they’re going to get a warm bed for the night and a sandwich and meals. And so I think that those are the hardest ones. The ones that know the system and that use the system and that really reuse our resources inappropriately.

In addition to determining the root cause of a patient’s issue, some participants spoke about the struggle of EDs not being properly equipped to handle cases of mental illness for extended periods of time. While some nurses mentioned the involvement of ED Psych teams with these cases, they also frequently discussed the need for more resources to treat mental illness. Nurse C said:

I guess you can't really talk about substance abuse without talking about mental illness and these patients that, our psychiatric patients. They stay with us forever because there's no psychiatric hospitals. There's not enough. There's not enough. So, they end up staying in the ED and they're not getting the care that they need from us because we're just an acute setting, the emergent setting, waiting on placement. But when they're waiting on placement for three weeks, we have a really hard time taking good care of them.

This concept aligns with other nurse comments about the distinct lack of resources available to treat opioid users in the ED, a theme which will be discussed at length later.

Negative Patient Emotions

General Impact of Negative Patient Emotions

Nurses also discussed the stress elicited by negative patient emotions in the ED, a concept explored in the Literature Review as well. When describing the state of patients who enter the ED, Nurse E said “You’re dealing with people on the worst day of their life to them.” As a result, patients in the ED are often scared, anxious, impatient, or stressed. Two of the five participants mentioned feeling as though nurses experience the “brunt” of these negative patient emotions, with Nurses A and E mentioning that verbal abuse regularly comes into play. Multiple participants posited that patients direct their frustration or aggression toward nurses primarily due to the high volume of time that nurses spend at the patient’s bedside and the role they often play in delivering bad news (Nurse A, Nurse D). The most commonly-discussed categories of negative patient emotions are described in detail below.

Violence, Aggression, and Agitation

All five participants cited patient aggression, agitation, and sometimes violence as common factors in the care of opioid users. It is important to note, however, that most nurses clarified that opioid users are not the only difficult or aggressive patients they encounter, nor are all opioid users agitated or challenging in the ED; most participants were able to recount examples of treating pleasant opioid users.¹¹ Nevertheless, due to various factors at play when treating people who use opioids, including the aforementioned possibility of mental illness, these patients may be more likely to become agitated or violent in an ED. Nurse C asserted that her

¹¹ Nurses demonstrated a commitment not to prejudge any individual patient, and an eagerness to recognize the importance of treating patients individually. Here, aggregate, quantitative data could help demonstrate that opioid users impose a higher burden on ED nurses, even as interviews show that they retain their commitment to integrity in patient care.

physical safety is threatened daily, while Nurse D described an instance in which she was forced to bring a police officer each time she entered one patient's room. Similarly, Nurse A said the following about the escalation of verbal abuse and agitation when a patient was seeking medically unwarranted pain medication:

She's coming in and if she doesn't get her pain meds she just is awful. And we've had to, like, escort her off the property before with, like, in police custody. So people can get that agitated and angry. Especially if they feel like, you know, like I said they're not, you know, we're not managing their pain how they want it to be managed. Or they're looking for a very specific, um, type of drug.

The above scenario, in which a patient becomes frustrated or agitated when they are denied access to opioids, was a common theme throughout the participants' anecdotes. Nurse D had the following to say about aggression in patients who are seeking opioids, as well as the impact these situations have on her experience as the nurse treating the patient:

I've seen it more often, like, they're just in pain and they want the opioid quickly, and they are sort of, um, impatient to get there...And so you do get some people who are like, 'I don't want to try ibuprofen. Do not even tell me about ibuprofen. I don't want to talk about it, I don't want to try it, like, give me the drug that I need ...' You do have to be careful of just somebody coming into the ER and, like, getting an opioid super quickly without, sort of, the evidence that that is the step that they need to. So um, so that's always hard because, you know, when you deal with people in pain, you know, I empathize a lot with them, and I don't want them to be in pain. But it has added this complexity of, you know, of, at the end of the day you want to do what's right for them, and just like pumping them full of opioids right when they come in is not the right thing for a lot of people. And so when, and especially if they're, you know, people in pain tend to be very short with you, sometimes they're very aggressive, you know? ...And so it's really hard to be the person standing in between, the perception that we're, that I as the nurse am standing in between them and the thing that they need to not be in pain anymore. Um, so, so that happens a lot.

Nurse A also described her experiences with similar scenarios:

We'll have a lot of people come in with you know, like chronic back pain and you look them up on the database, we can see that their primary care provider was prescribing them all these, like, narcotics and opioids and, um, they're, you know, they get, like, angry when we offer them Tylenol or Motrin or something. Like 'No like I need like my Percocet. I need, you know, this very specific thing' and they can get very frustrated and angry if we're not going to prescribe that to them.

Nurse C has also experienced the irritability of patients who want opioid prescriptions from ED staff and said “We don't, of course, give them their heroin while they're in the Emergency Department. So they're, you know, withdrawing a little bit or, and they're irritable and angry, and they want to leave.” She classified this struggle as “a strain on the entire Department.” Most participants did clarify, however, that rarely does aggression or agitation in opioid users culminate in physical violence, and that a majority of the anger and aggression is expressed verbally or through resisting treatment.

Impatience

All five nurses addressed impatience displayed by patients, with some referring to opioid users specifically. Multiple participants also alluded to the idea that impatience can act as the gateway to other difficult patient behaviors, such as violence or frustration. Nurse C described how impatience can make patients difficult to direct through the ED, and attributed it to a perception that one's needs are the most important, saying “I'm sure every person that comes into the Emergency Department feels that their needs are very important. But, sometimes they're so demanding of [their needs].” Nurse E expanded on this concept when she said:

I think it's just, like, the atmosphere of healthcare. For some reason people feel like they can be agitated and violent because they feel like ‘I'm in pain, I'm sick right now, I'm the most important person.’ Which, they are. They're important to us as patients, but there's, there has to be a little bit more of, uh, self-reflection of like, ‘But the person next to you is not doing well and needs that more attention,’ and that's why there's only so many of us.

Nurse E also suggested that substance abusers in particular might have less of a capacity for patience because, “I think they're so used to their instant gratification from their heroin abuse, or their alcoholism where they instantly feel better that when it comes to waiting for something,

it's very hard for them.” She described impatient opioid users in the ED by saying “They're coming to the nurses’ desk, or they're hitting the button or they're yelling in the room, or you know they're, they're not quite understanding, like, the process isn't instant.”

Some nurses also described the impact of insufficient resources with which to assist patients with opioid use disorder, and how this exacerbates impatience in the ED. When addressing this, Nurse B said “I don't know how many social workers are on staff – but there's not that many of them. And they cover other areas other than the ED, so they're not there sometimes. So, it takes a while for them to come down and then the patient doesn't wanna wait.” Resources to supplement medical treatment in the ED, such as social workers, are expanded upon further below in the context of the impact they have on nurses and work-related strain.

Anxiety and Nerves

Patient anxiety, nerves, and apprehension about withdrawal both increase the difficulty of treatment and heighten the stress experienced by the nurse treating that patient. Nurse E shared an anecdote about treating a “needy” patient who had been using heroin and had come in for clearance to detox. In addition to the large cyst on the patient’s neck (as a result of intravenous drug use), the woman was diagnosed as bipolar. Nurse E recounted the following experience with treating the patient:

A lot of heroin addicts are hard IV placement, because their veins are so, um, worn out from being overused. And because she was injecting in her neck, there was nothing for me to put her arms. So I had to stick her I think three or four times, which added to her anxiety which brought her stress level up, which brought my stress level up because she, you know, she was getting agitated and angry and then lashed out at the doctor. And then we were able to bring her back down, but it was, that was a really tough case because I could not focus her on what was important, which was she could get very sick and she's, you know, the infection was so close to her brain, like, I had to explain it to her so many times, like, you need this medicine or you can't go to detox if you don't do this. And I just felt bad for her because she could not really grasp it, she was so

concerned with withdrawing, which she wasn't close to doing at all because she had recently used. But, *[addicts are]* always in that fear of like, 'I'm gonna have either a seizure' for alcoholics or 'I'm gonna get sick and start throwing up' if, you know, from opioid abuse. So it's just like, it's like this battle of trying to reassure them, and but also be real with them, and it's, it's just hard to be like that.

Relating back to the previous discussion of aggression and agitation in opioid users in the ED, Nurse E also described how this patient became angry and eventually lashed out at the doctor. This resulted in logistical challenges during which a new physician was assigned to the patient, and Nurse E said:

I could only handle her and two other patients, and usually I can take four or five. And it was her and then, like, two very simple – I think they were bone breaks and they were waiting on X-ray – so I didn't really have to constantly be on them because they weren't even breaks, they were sprains.

Nurse D classified ED patients in general as “tense,” and Nurse A described treating an opioid-using patient who worried that if she could not obtain a dose of medication she would be unable to go to work that day. Multiple participants cited the threat of withdrawal as a point of anxiety for many opioid users, and nurse spoke about how it is difficult to treat patients who are worried or scared of confronting that reality.

Lack of Control

Unpredictability of Daily Working Conditions

As discussed in the Literature Review, ED nurses may experience stress as a result of the lack of control they have over their work environment and patients they treat each day. Further, the unpredictable nature of opioid users in the ED prevents nurses from being able to foresee the daily conditions in which they will work. This uncertainty is further exacerbated by certain ED policies. For instance, participants described the rotational work style used in the ED, where nurses may be assigned to any given section of the ED each day. Nurse D said “You get assigned

to whichever station you're in. Like, you go in in the morning and you just find out where you're working that day." Nurse A echoed this structure, saying "So, every day when you come in, you know, you don't really know where you're going to be working" and "every shift that you work, you know, you don't really know what you're going to be doing." While Nurse A pointed out that while she finds this aspect of ED work exciting, it nonetheless facilitates an environment of unpredictability and lack of control on the part of nurses.

When describing the patient populations they treat, no nurse could define a 'typical patient,' and each listed a variety of issues or conditions for which patients may seek out the ED. To illustrate this point, Nurse D said:

You run around from, like, you know, somebody who just had a stroke to somebody who is in a lot of pain, to someone who's in a car accident, someone who has a heart attack, to someone with a, you know, like a clotting disorder to, like, a kid that had a bike accident. It's like, you just run around, there's like, there's no really typical patient.

Although this unpredictability is common in an ED setting, the general volatility may be intensified in the context of a national crisis like the opioid epidemic.

Busy Nature of ED Nursing

A majority of participants commented on the generally busy nature of their profession and described how this aspect of their job makes it difficult to respond to every patient need. For instance, Nurse E said "In the ER we, we're just – I hate to say it – we're always moving onto the next person. That's what we are constantly like 'Okay, you're wrapped up. See you later,' like we have to do the next person." Nurse A said "It's so bad to say but I mean, like, nurses are just so busy. Like we don't have time to, like, sit down with the patient for half an hour and like, you know, try to figure out exactly what they need." About treating patients who use opioids Nurse B said, "I don't have, like, the resources that I need. And I *really* don't have time to help these

people.” She further expanded on how logistics in a crowded and rushed ED play a role in inhibiting a nurse’s ability to take comprehensive care of the patient, saying:

Once someone's deemed discharge, you have to get people out of the room, usually within, like, a fifteen-minute period, because they need that bed. And usually we put beds, like, within two minutes if we really have to get someone in there. So, I don't have much time on top of having, like, three other patients at the same time, to be able to kind of educate people in the way that I want to.

The business described above is often exacerbated by unexpectedly high patient volumes or intense cases, none of which staff can control. Nurse C recounted a day in which her ED, which has the capacity to regularly manage eight psychiatric patients, was slammed with 23 at once. This overwhelmed the resources of the ED, leaving nurses “drowning” (Nurse C). Though she noted that this was a unique scenario, any given day holds the possibility of tremendous, unanticipated ED demand.

Pressure to Safely Administer Opioids and Prevent Worsening of the Epidemic

Finally, Nurse D also spoke extensively about the extreme pressure and responsibility she feels to safely utilize opioids as a nurse, particularly in the context of the current epidemic. Many of the medications used for pain management in the ED are also blamed for a large portion of the epidemic. While this sentiment was not expressed by other participants, the perspective provides valuable insight into the stress or burdens that might be experienced by other ED nurses, and is therefore worthy of mention in this analysis. It is important to note that Nurse D also spoke about the value she places on being able to treat patients with opioids (when medically warranted), as no other form of pain management is as effective. On this topic, she said:

That type of pain, like, I can't imagine, as a nurse, not having a tool that would be able to take that type of pain away. So, I would say, like, yeah, the advanced cancers, the, like, bone fractures, the, like, broken ribs, the gunshot wounds, things like that you know, like, there's no question why this person is in pain. It's, like, a really wonderful thing to be

able to do, to, like, take away their pain and make them a little loopy and make them happier.

However, Nurse D also went into detail about the daily struggle she finds in determining whether opioids are the necessary course of treatment for the patient. She said that after doing some individual research, she realized the potentially devastating impact of opioid prescriptions. According to Nurse D, this revelation brought with it a new burden associated with ED work.

And so every time I hand out, like, a three-day prescription for Oxycodone, like, I learned in that book that, like, there's, like, a really high rate of people who become addicted after one prescription of it. And so it's really, it's, like, painful to hand it to them, knowing that they may become addicted because of me... But so it's, it's hard to figure out, like, I think there is, like, an ethical dilemma – every time I hand one of those prescriptions I think about this epidemic and think about ‘Am I making it better or worse?’ So that's been stressful. Just trying to make sure that my actions don't make it worse.

Nurse D also described the stress she experiences when she is unable to manage the pain of patients in the ED. When working with opioid users, nurses are in the tough position of being responsible for helping patients manage their pain, while simultaneously knowing that administering opioids only further feeds substance use disorders. On this subject, Nurse D said:

These patients that come in that are really addicted to opioids, like, do they make my job more stressful? And the answer is, like, absolutely. Because when somebody's in an amount of pain that I can't control with, sort of, like, regular amounts of opioids, it's really hard.

Nurse E also described her experiences with questioning the value and impact of the ED nurse profession in the face of the epidemic, mentioning the various questions she grapples with throughout the day. On treating opioid users, she said:

The number one thing that I think about now when I go to work is how many people am I going to see today, how many people are actually going to be successful? How many, you know like those questions make it harder, because you see a lot of the same faces over and over and over again, and you just start to wonder to yourself, ‘Is this meaningless?’ ‘Is this what – what are we doing wrong?’ or ‘How can we reach people?’ That that can make the days harder you know. I could take someone screaming yelling,

even trying to assault me, but when there seems to be no answer to something can be kind of hard.

Multiple nurses expressed how these existential questions take a toll on their emotional state in regard to work. The gravity of this situation lends itself to increased stress levels in nurses and sometimes results in inner conflict over how to move forward.

Peer Burnout

Although brought up less frequently in relation to stress than the aforementioned topics, multiple participants described the burnout and detachment they sometimes see in fellow ED nurses. For instance, Nurse D said, “A lot of people will be like, ‘Well, it's [the opioid user’s] fault for being a drug addict. And, like, you know, there's only so much I can do. And like that's really on them.’” This participant also said that some nurses cope by distancing themselves from patients:

[Treating opioid users is] a situation that, like, ER nurses tend to, tend to, like, wrap their heads around those patients in their own unique way that allows them to, like, sort of deal with that going day to day. And I would say that the, the way that, like, a lot of ER nurses deal with that is to, like, really distance themselves from those people emotionally. And I think that's really hard. Like hard to take good care of them long term while also distancing yourself emotionally.

Nurse A had similar thoughts about nurse burnout in relation to opioid users, saying:

I know a lot of the older nurses, you know, I'm not trying like throw my colleagues under the bus, but I think you know, if you've been there for longer and you're more exposed to this and you know, like the more patients – I mean we do see a decent amount of patients come in with like an opioid overdose – and it can kind of get exhausting. Because it's, you know, you're taking up our resources...I think people can get like, very jaded and burnt out.

Nurse E from Hospital 2 also addressed the topic of burnout in fellow nurses, saying “I've seen other nurses be very dismissive of addicts sometimes. Like, ‘Oh well, they're just going to

go out and do it anyways even if they go to detox.”” However, this participant also distinguished between burnout and a healthy sense of detachment from work, saying:

I'm a new nurse, so you know, I have these bright, wide eyes, but I work with a lot of nurses who are over forty years, and some of them don't seem burnt out to me at all but I feel like they have a very good demeanor. Like, they're detached in certain scenarios and they know how to detach themselves, and then in other scenarios they know when to turn on their emotions and their compassion and they're old pros. And they, you know, they're the ones that I watch because they're not burned out, they're not jaded, and I feel like they've learned how to detach themselves in a sense.

Nurses commonly cited four categories as contributing to their lack of control at work: the variety of challenges presented by patients (both physically and emotionally), the busy nature of ED work, questions regarding the value and impact of their work, and peer burnout. The description of these stress factors above leads into the following discussion about existing resources to help opioid users in the ED, as well as what nurses desire to further reduce their stress and burnout rates.

Existing Hospital Resources

Hospital 1

Social Work

Social Work and a ‘patient relations’ program were the two most commonly-cited non-medical resources during discussions about the treatment of opioid users in Hospital 1’s ED. Participants from this hospital expressed differing perceptions and opinions of these resources. While the four nurses agreed about the general benefits of programs such as Social Work and patient relations, there were discrepancies in opinions on whether these resources are enough to serve the realistic needs of the ED. In some capacity, all four nurses from Hospital 1 discussed a distinct lack of programs to support the treatment of opioid users. However, two participants felt

that the hospital itself provides insufficient means to treat opioid users, while the other two nurses felt that the limited outpatient clinics and resources beyond the ED are the primary issue.

Although there was overlap in identifying the source of lacking resources, participants conveyed a range of views on the resources themselves, as well as the impact they have on ED nurse work.

Social workers were the most widely discussed resource for assisting with the treatment of opioid users at Hospital 1. Nurse C expressed an extremely positive perception of Social Work, saying, “I think we would just die without the social workers to be honest. We would have a lot more work. That's for sure.” Nurse A cited the objectivity of social workers as another valuable aspect of the program, saying “I think, like, Social Work again is super helpful with helping with that because they, um, can again, like, come in as kind of, like, a more objective person, like, not providing that direct patient care.” Nurse D, despite describing herself as extremely “burned out” in general, called Social Work “an amazing resource” and also said, “[Social Work] sort of take[s] the discharge planning just off your plate, and you're like, ‘Okay, they're on it. They're gonna figure it out. Go.’” It is, however, important to note that Nurse D did not bring up social workers as a resource for opioid users in the ED until prompted by the interviewer.

Nurses from Hospital 1 expressed an appreciation for the extensive knowledge that social workers provide about outpatient clinics or opioid treatment resources beyond the ED. Nurse A acknowledged the importance of Social Work’s knowledge capacity, saying, “Social Work is huge” and “They are so much more aware of all, like, I mean I don't even know how to, like, find this list of treatment facilities that they, like, always give to patients. So, I mean they're the ones who just have like access to all of these resources to give patients.” Echoing this, Nurse C said, “[Social Work] would be able to tell you all of the community resources and outreach resources

we have” and “I respect our social workers so much and they work so hard, and I think they do a really great job of getting the right resources to the right patients when they want them.” Nurse C also said that the responsibilities of social workers are generally “spread out pretty well” and that they take on an “appropriate” caseload. This participant recalled specific instances in which social workers assisted in the treatment of opioid users by identifying the patient, contacting family members, and facilitating access to the resources necessary following the patient’s time in the ED. After describing the benefits of Social Work in the ED, Nurse C explained the impact this program has on her experience as a nurse. She said:

It makes me feel very supported, um, that they understand and they're so willing to help us. They know we're so busy, they understand that we have a million things to do, and they are, I mean, I can't, we have so many social workers that are just dedicated to the ED alone. That is all they do, is emergency care, like, for our patients. So, I think that's probably one of the best resources we have in the entire Emergency Department. I would not get rid of them for anything.

Conversely, Nurse B did not feel as strongly about the value of Social Work in the ED when treating opioid users; I explore the reasons behind this in the Discussion. Nurse B spoke extensively about feeling unequipped to help patients who ask ED staff for help accessing resources to address opioid use. She said that she was never told about the treatment resources available for patients, and described Social Work as “off-putting” in one anecdote about treating an opioid user. When asked about how they were off-putting, Nurse B described her perception of Social Work’s desensitization to patients that come into the ED repeatedly for opioid use. Nurse B said:

Just because [Social Work] knows, like, most of the patients they know already. And so they've kind of already tried to help in the past, but then it doesn't work. So they kind of get, like, affirmations towards the same people, and they're like, ‘Oh, I already know that person, like, they're not gonna want to do this.’

She noted that various social workers react differently, and also said that they tend to call Social Work for “socioeconomic reasons.” Nurse B feels that social workers are spread thin and are often used for more logistical matters like finding rides home for patients or helping with insurance. She also mentioned that long wait times for social workers inhibit the value of the program, saying:

There’s only, like, usually – I don’t know how many social workers are on staff – but there’s not that many of them. And they cover other areas other than the ED, so they’re not there sometimes. So it takes a while for them to come down and then the patient doesn’t wanna wait.

When asked about the impact of resources like Social Work on nurses’ experiences treating opioid users in the ED, Nurse B said “I feel like that’s kind of a hard question...It’s so hard because, like, we just really, I, like, don’t really have the resources down here. So there’s not much that I can say on that question.” Further, when asked if the lack of resources increases work-related strain, Nurse B specified that she finds it difficult when she is unable to assist patients who request help for treatment. Nurse B continued to say that if further programs were put in place to supplement the treatment of opioid users, she feels it would positively impact her experiences as an ED nurse.

Patient Relations Program

Multiple participants from Hospital 1 also mentioned an ED patient relations program. According to Nurse A, this program provides ‘service recovery’ by having staff speak directly with the patient to understand his or her point of view. Program workers attempt to mitigate the anger and frustration of patients through a two-pronged approach of listening and providing tokens of appreciation, such as a parking pass or meal voucher. This is a variation of the motivational interview techniques described in the Literature Review, and reviews of this

program by the two nurses who mentioned it were positive. Nurse A described the program workers as a “fantastic...objective third party” and said that after calling in patient relations:

I'll go back in and the patient is a completely different person. Like, all they wanted was to feel validated. And, like I said, like, heard and being, like, listened to and all these things. And so they do a great job at that. And then they're much more easier [sic] to, you know, discharge.

While Nurse A did not link this program to helping patients access substance use resources beyond the ED, she made it clear that there is value in this program's ability to make patients feel acknowledged.

Nurse D also touched on the value of this patient relations program, saying “They have the incredibly difficult job of dealing with patients that are unhappy with their care.” Nurse D also said this program often gets involved with the care of opioid users because “A lot of people with opioid, like, abuse, sort of issues who are unhappy in the ER end up working with [patient relations] because they're mad about it, you know?” This participant conveyed a collaborative sense of this program, saying “If somebody's mad, I would, I would call them in and then, and then we do also work together to try to just figure it out. ” There was little discussion of the impact that the patient relations program has on feelings of burnout or strain experienced by ED nurses, indicating that nurses do not associate this program with significant stress relief.

Lack of ED Resources to Assist in Treating Opioid Users

Throughout interviews, nurses indicated the lack of resources available to supplement treatment of opioid users in the ED. All four nurses from Hospital 1 spoke about the limited options and space for patients to enter clinics or rehabilitation facilities following ED treatment. Nurses A and C each emphasized how the lack of psychiatric hospitals specifically drains

resources, as patients end up staying in an emergent setting that is unequipped to properly care for them.

Nurse D feels strongly that her hospital's ED lacks resources or programs to help nurses "navigate" the treatment of opioid-using patients. She expressed appreciation for any research seeking to determine what ED nurses need in order to remain emotionally healthy, and explicitly stated a need to decrease the stress of nurses, saying:

It is so much harder than I ever could have imagined to be dealing with [opioid users in the ED]. And so, like, it's funny, you sort of steel yourself things just to, like, get through the day a lot of the time...It is definitely like, you know, uh, a big stressor for nurses and it's just, like, a population, I think. Like even if I end up, like, not being a bedside nurse anymore, because I basically, like, couldn't hack it emotionally is, like, anything you could do, like, I really feel like, you know, by supporting nurses and, like, if your research could be used to, like, to help support nurses in any way.

Mirroring the results of previous research, Nurse D feels that increased efforts to support nursing staff will result in better outcomes for both patients and nurses. Like Nurse D, Nurse B finds a severe lack of access to knowledge and concrete resources for helping opioid users in the ED, saying, "I definitely feel discouraged sometimes. Because I don't have, like, the resources that I need. And I *really* don't have time to help these people." In addition to reporting that she has not been provided with much information about existing programs and supports, Nurse B feels as though other hospital departments do a better job of helping patients in these scenarios. For example, she mentioned that 'Case Management' (not part of the ED) does a better job handling extended patient care. When discussing resources available in the ED, Nurse B repeatedly stated a perceived inability to assist opioid users with longer-term help in any meaningful way. This is primarily due to a lack of knowledge about treatment options or a resource to which patients can be directed for assistance beyond the ED.

Hospital 2

SBIRT Program

Hospital 2 has implemented a program that directly integrates SBIRT methods and staff dedicated to this program into the ED on a daily basis when treating opioid users. Nurse E (Hospital 2) was extremely positive about the impact of this program, for both patients and nurses. In her description Nurse E said:

I view [the SBIRT program] as a lifesaver for the Emergency Room because I try to imagine the ER right now without it and I don't know where we would be. I feel like a lot of our hallways would be filled with people who have nowhere to go, don't know what direction they go to, and I feel like [this program] is a place that has a lot of answers.

The SBIRT program is available should ED medical staff request it, and the program coordinators also track the ED board themselves. In some cases, particularly when program staff recognize the patient, they reach out to the ED about getting involved before they are called in by doctors or nurses. Nurse E also emphasized the variety of reasons for which they might engage SBIRT program coordinators in the ED. For example, SBIRT staff members are often called to help connect patients with outpatient resources to treat opioid use, but they may also assist in cases where there is a communication breakdown between the patient and medical staff. On this topic, Nurse E said “[Nurses] can give a call over to a certain [program] coordinator and say, ‘Can you come over and explain this to him because it's not clicking with our communication...Can you come over here and explain to him?’ And that's usually worked out positively.” In this sense, Nurse E feels that the program does a good job of simultaneously providing multiple functions saying, “They do a really fantastic job of just interconnecting Social Work plus detox plus Psych and medical.” Nurse E also cited the frequent use of the program as a testament to its value, saying, “[There are] at least ten people a day going for medical clearance

through [the SBIRT program] to go to a [detox] program. Ten people a day...that's like, that's a lot.”

In terms of the impact that this program has on the stress experienced by nurses in the ED, Nurse E said, “[The program] definitely prevents it. I think they prevent the [nurse] burnout.” Nurse E also described the benefit of the motivational interviewing technique utilized by SBIRT program coordinators, and said the following about the general relationship between ED nurses and program staff:

I literally hear nurses, others nurses say, ‘Oh thank god Karen¹² is here’ or ‘Oh thank god Sarah is here,’ because they’ll actually do rounds in the main ED to see if they need to check anyone out, is there someone who needs clearance, or do you guys need any assistance trying to persuade someone. Like if someone’s OD’d in the main ED, they’ll try and get Karen or one of the [program coordinators] to speak with them after their OD being like ‘Do you want to see detox? We had to Narcan you today. Like, you know you could have died today?’ Like they’re – they can walk into the room and be like ‘Look. Let’s, let’s do something different with your life.’ So, I think when I see Sarah or Karen or any of the coordinators, Bryan, I get like relief, because I know that they’re going to grab the patient. Especially if I’m really busy and I’m trying to get everything done and the patients all set, and I just had to walk him over they’ll come over grab him, I’ll be like ‘Thank you.’ Like, that’s a relief. I know they’re going to get where they need to go...And I think other nurses, you know, we all know [the program coordinators] by name. We love them. When they come in we all smile, we all joke with them, and I don’t know, they’re just very – it’s just such a great program because it just takes a lot of work off of our hands I would say for nurses and doctors, Social Work especially.

Similar to the described impact of Social Work at Hospital 1, Nurse E said that part of the “relief” experienced as a result of this SBIRT program is due to the wealth of knowledge it provides about treatment options for opioid use disorder. In terms of how this impacts Nurse E’s ability to perform her job function, she said:

I think it really relieves burnout because we’re not so busy repeating ourselves about different detox centers where you have to go, what you have to do. Like, we can – I actually feel like I have time to be compassionate for them, because I don’t have to worry about finding them that resource, you know?

¹² All program coordinator names have been changed to protect privacy.

Nurse E further described the relief she feels as a result of the program’s ability to assist patients with finding resources saying:

It's pretty incredible what they do. There’s relief. Nurses agree – relief when we see them (laughs). Like ok, we don't have to explain this, they can explain it. Because I don't understand all the systems. I don't understand how many programs there are. There's so many programs. There's, I think there's eight or nine or ten addiction related programs at [redacted], and I know, like, three of them, sort of...I wouldn't know what to do if the patient asked me, ‘Oh which one do you think is a good one for me?’ I would have no idea what to say them, because it's way beyond my scope. And that's [the SBIRT program’s] specialty, and they know how to do that.

Nurse E also spoke about how she is unaware of the process that occurs following the hand-off of the patient between the ED and the SBIRT program. Program coordinators manage all aspects of connecting patients with resources beyond the ED, and medical staff are unrelated to this procedure. Nurse E feels as though all hospitals should have a program equivalent to this, saying that she believes it would play a significant role in reducing the scope of the opioid epidemic. Nurse E also feels that without the SBIRT program, she would be unequipped to effectively assist opioid users in seeking treatment. She said:

I think every hospital should have [this SBIRT program]. Especially with the crisis getting worse – how, how can you direct people if the place that they go to seek help doesn't have the answers? That’s, how I view it. You know, this, we have the answers and that's why people come to us.

Further, when describing the impact of having support infrastructures in place to address the treatment of opioid users in the ED, Nurse E said “I think if we support our support systems and increase them, it levels, it lowers stress of the nurse. Because we know that we have that behind us.” Overall, Nurse E said she feels that the SBIRT program manages “the part that is the longer road ahead for the patient” and thereby “creates a whole other system that supports the whole, like, the whole ER in a way.” Nurse E had few negative opinions about the SBIRT

program, aside from infrequent miscommunications with ED staff and a lack of funds for the program.

Social Work

Finally, in light of the significant role that social workers often play in the treatment of opioid users in Hospital 1, it is important to note that Nurse E did mention the presence of Social Work at her hospital. She expressed that while social workers are an important resource, the extensive responsibilities they shoulder can make it difficult for them to fully commit to helping opioid users connect with longer-term resources. Nurse E said:

Because Social Work has time dealing with DCF [Department of Children and Families] issues, they're dealing with the deaths in the trauma room, they're dealing with getting elderly old ladies back home because they have no ride because they have no family. Like, they have all these other things going on that they're trying to manage.

Despite this strain on Social Work, Nurse E articulated that the SBIRT program fills in many of the gaps that are left over. Subsequently, Nurse E had few comments about a general lack of resources with which to supplement treatment of opioid users in her ED.

Strategies to Better Support Nurses During Treatment of Opioid Users

Hospital 1

Increased Education for ED Nurses about Opioid Epidemic and Resources for Patients

The most commonly suggested strategy to improve treatment of opioid users and support ED nurses in the process was bolstering education for relevant populations. This includes opioid users, ED nursing staff, and the general population. Nurses B and D expressed the most frustration with existing resources to support treatment of opioid users. Each emphasized the importance of educating ED nurses about the opioid epidemic in general, as well as best

practices when treating individual patients with opioid use disorder. Nurse B spoke about the need for education about opioid users from the outset, saying it is necessary "...when new nurses start in the Emergency Department. Because, we have a week-long orientation where we talked about most of the populations, and [opioid users] wasn't really a population that we talked about very much." Nurse B also pointed out the discrepancy between educational resources for other diseases versus those on opioid-related topics, saying:

There's already resources set in place for all the people that have general comorbidities, like diabetes education. You have people with heart failure education, you have sickle cell education. But there's really not that much education on opioid use and trying, like, trying to help people.

Further, when discussing her desire for more information about the resources available to opioid users aside from the ED, Nurse B said:

It's something that I might actually, like, bring up to my nursing management leader just to kind of be like, I would like to start something, and be able to at least, like, give a handout to nurses as resources. Even if they don't use them, or like something that we can post in each of the areas, that if we do have a patient like that you can at least get them the sheet and give them resources.

Nurse D said she began to perform her own research on opioid use as she became more aware of the epidemic, partially out of a desire to understand the role ED nurses might play. She said the following:

I tried to read a bunch of, like, magazine articles and newspaper articles and such about what was going on because I thought, like, 'I don't want to be like playing into this more than I, you know, is there, do I have some personal agency over this, and could I be, if I was more aware of what was happening nationally, could I, you know, take more action, you know, through my job?' And, and I really wish there was more education on the opioid epidemic, because I think we as ER nurses can, can play a really good role in trying to, in sort of helping. And, but we don't, if you don't know some of the, like, external things going on outside the ER, it's, it would be, you know, it's – we have not been trained is, like, this is what you should do to help, you know, stem the tide of opioid use.

Nurse D said this outside research “helped, sort of, make me less stressed,” and expressed a desire for nurses to have access to information about their part in addressing this crisis. Nurse D was particularly interested in best practices with regard to treating opioid users, and said she would be interested to know “What did the studies say? And, like, what are the best practices that other, other hospitals employ that actually work?” She also echoed Nurse B’s point that better opioid education should be extended to new nurses in particular, partially due to the overwhelming scope of the issue. Nurse C also alluded to the necessity of education in healthcare and said that implementation of any new strategy to address the opioid epidemic brings with it a complicated matter of deciding who to educate and how best to do it. Regardless of the barriers to implementation, however, these nurses agree that education is part of the solution.

Implementation of Behavioral Motivational Interviewing Techniques in the ED

Nurse D also suggested the addition of someone trained in motivational interviewing (an SBIRT method) in the ED, saying:

[Behavioral motivational interviewing] was something that, like, we were sort of trained on in nursing school...So somebody who is, like, really trained in motivational interviewing who could get somebody from, like, ‘I don't really know if I want to stop this,’ to, like, actually, ‘I can see that this is having a negative impact on my life, and I would like to try to stop.’ I think that person would be huge. And so, yeah, like someone trained in motivational interviewing and then somebody who knew those resources would be, like, an invaluable resource if they could, like, when somebody came in after having OD’d...if we flag someone as potentially drug-seeking, if we could then have a person who could assess that and, like, talk them through what their, you know, what their plan would be, I think that would be, like, a huge, a hugely valuable resource.

Nurse D described the impact that a resource like this would have on her experiences working as an ED nurse by saying:

I would say, like, if you did have, like, any time you had a patient like that, that you had a resource that you felt like was in it with you and, like, helping you sort of

navigate it, like, that really, yeah. Like, I, you know, I do think that that would make a big difference.

Nurse D also elaborated on why someone in the ED trained in motivational interviewing would be so beneficial, saying:

I think if you could allow nurses to, kind of, stay in it with those people to be like, ‘no, I’ve got this backup that can, kind of, figure out what I’m supposed to do with them. Like, you know what, the best way to, like, help, to help them basically.’ It would kind of free you up to stay a little bit more emotionally close to their situation. But when you just get thrown in it and you kind of feel like you’re out there alone with them, like, it really does, that’s when you do start to need to sort of wall yourself off from their situation.

ED Infrastructure Improvements

In addition to promoting educational resources and implementing use of SBIRT methods in the ED, nurses from Hospital 1 offered an array of infrastructure-related suggestions. These ranged from strategies aimed at directly decreasing nurse stress levels to ideas designed to improve the care of opioid users. For instance, Nurses A and C cited a lack of available beds in substance treatment facilities or psychiatric hospitals, respectively. Nurse C feels strongly about the need to fortify treatment protocol for patients with psychiatric needs specifically, and spoke about the possibility of dedicating ED nurses to specialize in working for that unit (as opposed to floating between all ED units, as nurses generally do). She identified the psychiatric patient population as “a high source of burnout” for many nurses but clarified that some ED nurses find it to be the most fulfilling and exciting aspect of their work. Nurse C therefore suggested dedicating a few nurses who enjoy Psych work to that unit permanently, as opposed to having all nurses rotate through it.

Other various suggestions to improve ED work environments may not have been cited by more than one participant, but still warrant mention as each relates back to factors described as stressful for nurses. For example, Nurse B from Hospital 1 mentioned the upcoming shift in

staffing ratios, where nurses will be responsible for treating three patients at a time instead of the previous policy of four patients per nurse. Nurse B also briefly touched on the formation of a resilience committee, as an attempt to identify and address the stress experienced by nursing staff. In relation to patients, Nurse A spoke about the possibility of implementing a zero-tolerance policy regarding verbal abuse. She addressed the impact this could have on work environments saying:

Like, how much patients can just, like, get away with saying to us and yelling at us, and I think it's not just this patient population. They definitely, you know, play a part in that but, um, I think something more along those lines would be interesting to see if that did help us, you know, with our work stress and kind of just, like, how safe we felt at work.

Finally, participants from Hospital 1 also briefly addressed the idea of automatically supplying people with Narcan (emergency medication to treat an overdose) at discharge if the patient is known to struggle with opioid use disorder. Nurses A and C each mentioned this possibility, though Nurse A acknowledged the divisive nature of the policy, saying:

I know this is a very hot topic and people have very different opinions on it. Um, but that, [sic] that she's looking into, like, you know, because as an ED we're very, like, accessible, to people and it's something that we could easily do. Just, like, get Narcan in their hands so, you know, if they did happen to overdose, you know, then they're not necessarily having to come here.

Both participants expressed the potential value of this program but were also skeptical of its efficacy. Their hesitancy primarily stems from the controversial nature of the program, as well as the need to educate people on how to administer Narcan during an emergency.

Hospital 2

Increase Basic Health Education for General Population

Similar to the nurses from Hospital 1, Nurse E cited a massive gap in educational resources related to the opioid epidemic. However, she focused more on education of the general population, as opposed to ED nurses themselves. Nurse E identified multiple categories in which education is lacking, starting with a deficit of basic healthcare literacy. She said she spends much of her day combatting this, and also described how people are often unaware of even the most elementary healthcare topics, saying:

[People do not know] like, it's okay to take ibuprofen for a headache, or so. Like just very basic health knowledge and primary care knowledge that is just not present. I feel like it starts in schools, you know, health classes should be telling people.

Nurse E emphasized the value in proactive education, and said she wants SBIRT program coordinators from Hospital 2 to go into schools and speak with students about the realities of drug use:

I feel like [this program] should even be brought into high schools so that they could speak to people. Or at least have a program similar, because you have to start telling kids about this in eighth grade now. I feel like middle school, high school, let's start talking about what could happen to you, and being brutal and realistic about [drug use].

Logistical Improvements in the ED

In addition to educational development related to the epidemic, Nurse E suggested logistical improvements to supplement the quality of patient care as a way of indirectly supporting nurses as well. Some ideas were as simple as hiring more housekeeping staff or increasing the number of certified nursing assistants, though others require a more fundamental shift in patient care pathways. For example, Nurse E highlighted primary care as “the biggest support we could have.” She spoke about how increased access to primary care has the potential

to alleviate some strain on EDs by reducing unnecessary patient volume. Relating back to her previous point about the lack of basic healthcare knowledge, Nurse E mentioned the tremendous number of patients who misuse ED resources. This is often the result of patients not realizing that their situation is non-emergent, or patients who are unable to access healthcare through alternative means. Increased primary care is one way to combat the trend of unwarranted ED utilization.

Self-Reflection within the Nursing Community

When speaking about ED nurse burnout specifically, Nurse E described a need for “self-reflection as well in the nursing community.” Her comments related to the concept of peer burnout previously described by participants, and she feels that nurses need to be held accountable for assessing their own emotional state in relation to work. She said:

...prevent[ing] nurse burnout is to know when to leave, too. And it doesn't mean you're quitting, or it's just not a good fit for you, you know? Even looking [at] my position in the Emergency Room, and I don't think I can do this for the rest of my life. Maybe ten years, maybe fifteen, but it's a lot of emotional stress and it's a lot of high pace, and it's fast and, you know, there's gonna come a time where I don't want to do that every day, or I don't want to do that for three days a week. But right now I can and I'm fine and I'm happy. So, I think it's a lot of self-reflection of knowing when you're being pushed and when to leave and walk away.

Nurse E also described the obligation that ED nurses have to maintain awareness and watch out for negative behaviors or interactions between other nurses and patients. She said that this trend must emerge internally from within the nursing community, as people tend to be “more responsive to coalitions of people who are like minded and experience the same things...Like people are much more likely to listen to a thirty-year nurse veteran than to a social worker four years out of school.” It is important to note that she drew a distinction between stereotypes of nurse on nurse bullying versus scenarios in which nurses encourage each other to be reflective about their work and mental state. Nurse E outlined self-reflection as a way to emphasize the

benefits of working as an ED nurse, while also holding individuals accountable to identify their own burnout and subsequent risk of inefficacy at work.

General Suggestions

Finally, Nurse E spoke about the value of the supervised injection site that recently opened on her hospital's campus.¹³ These are spaces in which drug users can administer substances to themselves under the supervision of medical personnel, allowing for quick intervention if something goes wrong. These measures are often controversial due to a perception that they normalize or protect drug use, but Nurse E said the following:

I think we just recently opened up an area in the hospital where people can shoot up and be safe because there's a nurse present and there's a doctor present. And a lot of people were against it, but, you know, it doesn't mean that it attracts more addicts. The acts are still there, it just gives them a safe space. And it's better than finding someone on the street in a back alley and it's too late. So, I'm a hundred percent for having programs in the hospital because that's where they come anyways when things go poorly. So, why pretend it's not there? Why try to push it away?

Though a hotly debated measure, Nurse E views this facility as a practical method through which to reduce overdose-related deaths. The concept of a safe injection site played a much smaller role in the conversation than some of the aforementioned topics, such as education or increased primary care. This demonstrates that Nurse E was less focused on this as a solution to the epidemic but was still compelled to mention it briefly.

¹³ I was not able to verify that the hospital did recently open up a safe injection site. I included Nurse E's comments about this topic as I think she represents an important perspective, but it must be made clear that I was unable to independently confirm the opening of this facility.

DISCUSSION OF RESULTS

The findings from this research reflect much of the information presented in the Literature Review, but also introduce concepts that had not been discussed prior to conducting interviews. In first determining whether the opioid epidemic has a discernably negative impact on ED nurse working conditions, three primary themes emerged: this epidemic has increased the volume of challenging patient cases, contributed to a perceived loss of control at work, and intensified the degree of unpredictability in the ED. Based on the accounts of these five participants, it appears that the opioid epidemic has directly exacerbated many of the factors that already foster a stressful ED work environment. The implications of these stress factors, as well as the various strategies suggested by nurses to combat workplace stress, are discussed below.

Contributors to ED Nurse Stress

The Opioid Epidemic has Intensified Logistical Challenges and Stressful Nature of ED Work

As discussed previously, patients struggling with opioid use disorder may exhibit challenging symptoms or behaviors such as confusion, frustration, aggression, anxiety, or violence. All five participants mentioned aggression, agitation, or violence at some point during discussions about treating opioid users. Each nurse also highlighted the manners in which these behaviors make ED work more difficult. Nurse A from Hospital 1 recounted her experience with an “agitated and angry” opioid-using patient, describing how the patient is regularly escorted off hospital property. Similarly, Nurse E described substance users who also display signs of mental illness as feeling like she is treating “...a cat in a bag, but then the bag is on fire.” These instances indicate the high degree of difficulty and unpredictability associated with patient care in these cases. Nurse E also recalled an instance in which the heightened anxiety level of an

opioid-using patient resulted in a spike in her own stress levels, primarily the result of difficulty she experienced while administering treatment to a nervous and confused patient. Although EDs are already familiar with patients who present challenges such as these, a nationwide crisis like the opioid epidemic has fed a rise in the volume of such cases. As evidenced by the nurses' often harrowing reports of personal experiences, it is likely that a sharp rise in opioid-using patients (and subsequent increase in high-maintenance patients) results in higher stress levels in ED work. ¹⁴

Throughout interviews, participants also addressed the loss of control associated with ED nursing. One concrete manifestation of this concept was revealed through nurses' descriptions of managing patients who exhibit potential drug-seeking behavior. Multiple participants spoke about the difficulty they experience in determining whether or not a patient's medical condition warrants opioid use, and the challenge that comes with weighing the pros and cons of administering the medication. As described by the participants, EDs are designed to cycle patients through as quickly as possible, often due to resource limitations. Because of this, the time required to assess whether or not opioids are justified in a given situation likely imposes strain upon the nurses and aggravates stress.

However, time is not the only factor in these cases; nurses must also contend with the emotional strain of working with drug-seeking patients. Participants spoke about the fear and anxiety that some patients exhibit about getting their next dose of opioids, and nurses are aware that if they deny someone their "fix," that patient may enter withdrawal – a condition that the short-term treatment cycle of the ED is generally unequipped to manage. Further, some

¹⁴ To reiterate: nurses qualified their comments about treating patients with opioid use disorder by stating that substance using patients are not the only patient populations who exhibit these behaviors. Further, they clarified that not all substance using patients present these challenging symptoms.

participants are acutely aware of – and stressed by – their role in an epidemic of this proportion. Nurse D demonstrated this inner conflict effectively when she described both her appreciation for opioids, as well as the stress she feels about properly utilizing them. She spoke about the importance of being able to reduce someone’s pain after an incident like a car accident, but also cited the ethical dilemma she experiences in trying to ensure that her actions do not further aggravate the epidemic. Based on this account, the gravity of the epidemic and its implications places strain upon nurses who regularly face the reality of improper opioid use. As a result, the epidemic appears to have made most participants’ experiences with ED nursing – an already stressful profession – even more demanding. Although this research does not quantify results, it is possible that there has been a subsequent rise in burnout rates and compassion fatigue experienced among ED nurses as a result of this trend.

In addition to the difficult patients and loss of control induced by the epidemic, ED nurses also addressed the irregularity associated with their work, and how it is impacted by opioid users. Nurses acknowledged the wide variety of patient conditions and rotational ward assignments as fundamental roots of unpredictability at work. While some participants expressed an appreciation for these exciting aspects of their work, others identified them as a source of pressure. Further, multiple nurses cited the higher degree of stress they experience on days they happen to be staffed in the Psychiatric unit. As discussed previously, substance use disorders are often presented in conjunction with mental illness, making this a uniquely challenging class of patients. Even participants who enjoy the unpredictable nature of the ED were able to identify work assignments that increase their stress levels, and the Psychiatric unit was a commonly-recognized cause of strain. Nurse C, who identified the Psychiatric unit as the highest source of ED burnout, suggested permanently assigning staff who enjoy that setting to work there, instead

of rotating all nurses through. It is clear from these accounts that psychiatric patient cases exert strong pressure on the resources of an ED. Further, with the distinct spike in opioid use throughout the epidemic, it is possible that increased numbers of agitated and anxious ED patients (emotions often aggravated by substance use) have contributed to nurse stress.

Inability to Provide Comprehensive Patient Care Elicits ED Nurse Stress

After establishing that the epidemic has likely intensified factors that contribute to ED nurse stress (and potentially burnout), I analyzed data to identify insights about stress-inducing patterns and solution strategies. One prominent finding from this perspective is that for most participants, ensuring higher quality care for patients is in direct alignment with the goal of stress reduction. Many of the anecdotes nurses shared about feeling stressed or inadequate at work dealt with scenarios in which they were unable to direct patients to helpful resources. As stated in the Literature Review, Gillespie et al. found that ED nurses perceive a loss of control when they “cannot resolve inherent difficulties in their daily work” (2003). This powerlessness is linked to higher rates of burnout. Throughout interviews, some participants described a recurring inability to fully provide care to opioid-using patients. For example, Nurse B recounted the helplessness she felt when a patient asked for advice about opioid recovery resources and she was unable to provide information. She also described regularly feeling discouraged when she is unable to assist patients with longer-term options, particularly when she sees the same patients back in the ED later for the same substance-related issues. Similarly, Nurse E expressed that she regularly grapples with questions like “Is this meaningless?” or “What are we doing wrong?”¹⁵ This fundamental inability to address the needs of opioid users appears to generate guilt and

¹⁵ It is important to note that Nurse E did specifically voice appreciation for her hospital’s SBIRT program and its efforts to reduce the number of patients who leave the ED only to repeat the same cycle of substance use. This is discussed further below.

frustration in some nurses. Considering the relationship between these emotions and compassion fatigue (linked to burnout), it is important to confront these issues head on through policies that allow nurses to provide high quality care.

The satisfaction of providing high quality care is not only beneficial to nurses, but also often serves as the fundamental motivation behind their work. Nurse C spoke about how making a difference for at least one patient each day inspires her to go to work, and for Nurse E, the patients are the best part of the job. She specifically described the fulfilment she experiences after helping a patient understand the healthcare system or improve their own health status. These personal accounts demonstrate the strong link between providing quality patient care and feeling satisfied at work. This result reinforces the concept that focusing attention on programs and resources that allow ED staff to deliver higher quality care is a worthwhile investment. Considering the notion that more satisfied nurses tend to deliver better care to patients, the effects of supplemental ED programs are twofold: they improve patient outcomes and reduce the burnout or stress that nurses may experience as a result of work.

Insight into Potential Solutions to Alleviate ED Nurse Stress

Participants View Education as a Partial Solution to Multiple Facets of Opioid Epidemic

Shifting to the discussion about potential solution strategies considered during these interviews, participants suggested a range of ideas for local improvements as well as more fundamental healthcare shifts. Education emerged as a widely promoted solution to addressing the epidemic. Nurses from both hospitals mentioned the need to bolster education in some capacity, ranging from improvements in basic health literacy, to drug education for students, to increased education about treating opioid users for ED nurses. One of the most informative

findings from this research is that these ED nurses often feel a severe lack of knowledge about the epidemic themselves. Multiple participants cited feeling stressed by their dearth of information about best practices when treating patients with opioid use disorder, their minimal knowledge regarding the context of the opioid epidemic, and few details about substance use treatment resources for patients beyond the ED. Coupled with the previous finding that the nurses experience work-related strain when they perceive an inability to fully provide care for their patients, it is possible that this gap in education contributes to feelings of burnout or compassion fatigue in this population. Subsequently, there is a demonstrated need to provide nurses with resources to educate themselves about this topic, both during the initial onboarding process and on an ongoing basis.

Resources with Treatment Information and SBIRT Methods are Valuable in an ED Setting

Related to the notion that nurses feel underinformed about the epidemic in general, interviews revealed that these participants place great value upon ED resources that provide patients with information about treatment options. Multiple nurses described feeling too busy and overwhelmed to add this responsibility to their other duties. Subsequently, all five participants expressed feelings of appreciation when they are able to connect patients with knowledgeable individuals, including social workers or SBIRT program coordinators. Some nurses specifically mentioned experiencing relief and support when individuals from these resources interact with patients. Even participants who felt frustrated by a lack of ED resources in place to supplement the treatment of opioid users often acknowledged the value that programs like Social Work offer. This indicates that when these programs are provided with sufficient

resources to operate effectively, there is significant potential for them to reduce the stress or burnout experienced by ED nurses.

Further, Nurse E (from Hospital 2 with the SBIRT program) displayed the most enthusiastic support and gratitude for the supplemental resources in her ED, particularly the SBIRT program. While this could be due to her personal style of expression, it appears that the presence of SBIRT program coordinators does reduce work-related stress in the case of Nurse E.¹⁶ The reported success of the SBIRT program at Hospital 2, in conjunction with Nurse D's specific recommendation to implement SBIRT methods in her hospital, demonstrates that this strategy should be further explored as a useful tool in an ED context. Additionally, the guilt expressed by multiple nurses over their lack of time to fully address patient care needs demonstrates the potential value in hiring a separate, non-clinician staff member to perform these SBIRT duties, as indicated in the Literature Review. Aside from SBIRT, however, it is clear that any source of treatment information provides significant value to both patients and staff. As such, it is necessary to invest resources to fortify existing programs, such as Social Work. It may also be beneficial to consider establishing new initiatives (perhaps including SBIRT methods) to augment the knowledge and accessibility surrounding recovery options in an ED setting.

Strategies to Address ED Nurse Burnout are Necessary Both Internally and Externally

Other strategies suggested by nurses reflected the need for internal ED policies to place greater emphasis on the importance of nurses' mental and emotional states. Options such as resilience committees, encouragement of self-reflection in nurses, and protective measures like a zero-tolerance verbal abuse policy were suggested by participants. These proposals demonstrate

¹⁶ There is not enough evidence here to assert this claim in any generalizable fashion.

the nurses' desire to feel supported by the hospital, as well as an awareness that they have some responsibility to maintain a healthy emotional state about work.

In addition to improving resources within the ED to provide better care and reduce the strain on nurses, many participants also cited the need to build up substance treatment facilities beyond the ED. The link between mental health conditions and substance use was highlighted by multiple nurses, and most participants described the severe lack of beds in treatment facilities. They identified this as a factor that simultaneously increases strain on the ED overall and creates stress for individual staff members. Nurse C described it as “draining” when there are no placement options for psychiatric patients struggling with substance use. Nurse A listed increasing the number of beds in withdrawal facilities as the most important infrastructure shift necessary, particularly because the ED is unequipped to handle that stage of treatment. Some participants spoke about feeling powerless to change this reality, indicating that the onus is on healthcare policy makers to recognize this treatment gap and work to rectify it.

Some of the more controversial measures mentioned by nurses – including discharging patients with Narcan or establishing safe injection sites – are hotly debated. These nurses, however, expressed an appreciation for policies that recognize the reality of drug use and consequently make resources readily available to at-risk populations. Nurse A spoke about the destigmatizing nature of providing Narcan at discharge and lauded the value of empowering patients with resources for care. There is no definitive answer to whether measures such as this will effectively staunch the flow of opioid overdoses and deaths. However, nurses from this small sample size appear to be in support of practical solutions based on the context of the problem, despite their often controversial nature.

CONCLUSION

Ultimately, it is impossible to disentangle all of the factors that contribute to ED nurse stress and burnout rates. Quantifying the impact of the opioid epidemic on burnout specifically is a complicated task and would require a far greater sample size than included here. However, this research provides insight into the aspects of daily ED work that these five nurses find challenging. It also documents the perceived value of existing resources to assist medical staff in caring for opioid users, and indicates the value that EDs place on non-clinicians who are knowledgeable about long-term treatment options. Further, while social workers play a huge role in the ED, the utilization of SBIRT methods should be considered as another beneficial tool. A separate program focused on this technique holds the potential to reduce the stress and frustration experienced by nurses by reassuring them that opioid-using patients are provided with longer-term options following their stay in the ED. In addition to suggesting a need to fortify ED programs such as these, these interviews demonstrated the lack of resources dedicated to educational programming or substance use treatment facilities outside of the ED.

Considering the severe, negative implications of burnout in ED nurses (i.e. loss of the ability to nurture patients, inferior patient outcomes), investing in strategies that reduce stress and improve patient care is a valuable endeavor. Increased emphasis on social workers, SBIRT methodology, and exploration of other solutions has the capacity to reduce costs associated with the epidemic, both by increasing longevity of the healthcare workers and cutting down on repeat ED patients. Subsequently, it is imperative to explore the suggestions brought up by participants in this research as they provide firsthand accounts of the relevant stressors in an ED environment.

LIMITATIONS AND FUTURE RESEARCH

My ability to recruit interview participants was limited by the demanding schedules of ED nurses, particularly in the case of Hospital 2. Due to the necessity of anonymity between participants and hospital management, I had to wait for participants to reach out to me following general announcements from ED managers to staff. Future research should focus on incorporating a larger range of perspectives. Additionally, all participants were female, and future research should seek to include perspectives from all genders. Further, the range of experience in participants was limited – nurses spanned from six months to five years of time working as an ED nurse. This could be due to a variety of factors that might relate to this research; it is possible that veteran nurses experience higher rates of burnout and would be unlikely to participate in an extra task related to their work. Regardless, future studies should seek a more diverse pool of nurses.

The two participating hospitals also operate in differing contexts and therefore have limited comparability. For example, Hospital 2 is located in the South Side of a large U.S. city in New England, while Hospital 1 lies on the campus of an affluent university in the Southeastern U.S. It is likely that factors aside from the presence of an SBIRT program differ between the respective EDs, including patient demographics, funding, patient volume, and physical environment. Future research should attempt to control for confounding factors between institutions. Finally, all interviews were conducted over Skype, limiting my ability to clearly read body language and facial expression throughout questioning. Future studies should conduct in-person interviews.

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APPENDICES:

APPENDIX A

SEMI-STRUCTURED INTERVIEW QUESTIONS (FOR NURSES AT HOSPITAL 1)

1. How old are you? What pronouns do you prefer I use throughout this interview?
2. Tell me about how you ended up working as an Emergency Department nurse for [Hospital 1]. How long have you been working in the ED here?
3. Could you tell me about how you generally feel about your work? What makes you come to work in the morning, and what does this career mean to you long term?
4. Tell me about the patient population you treat. What are typical patients like, and what is the range that you see? Do patients tend to have certain qualities or characteristics? Could you describe the types of patients (if any) that you find particularly difficult to treat?
5. Can you tell me about your experiences with treating patients who struggle with opioid use disorder?
6. I'm particularly curious about resources that the hospital provides to help combat an issue like the opioid epidemic. Could you describe any programs, either for patients struggling with opioid use disorder or for staff who treat these patients, that you're aware of? Could you discuss some of your experiences with these programs, if they exist?
7. What do you think about the value of these programs? If you were to design a program, what would you want to do the same as the programs that may already exist? What would you want to do differently?
8. I'm also curious about how you feel about how programs to combat opioid use relate to you and other nurses' experiences of the overall work environment. In your opinion, what is the impact of programs like this on the work environments for nurses, and what is their impact on the stress/burnout rates that may be experienced by nurses? Why?
 - a. What kinds of processes or resources surrounding the treatment of patients who use opioids would be helpful to help protect nurses from experiencing work-related stress? What about other factors in the workplace — what kinds of things do you think are most important in terms of protecting against workplace stress and fatigue?
9. Are there any further resources that you think would benefit nurses at [Hospital 1] working to address patients who struggle with opioid use disorder?
10. Are there any other thoughts you'd like to express before we finish? Do you have any questions for me?

Appendix B

SEMI-STRUCTURED INTERVIEW QUESTIONS (FOR NURSES AT HOSPITAL 2)

1. How old are you? What pronouns do you prefer I use throughout this interview?
2. Tell me about how you ended up working as an Emergency Department nurse for [Hospital 2]. How long have you been working in the ED here?
3. Could you tell me about how you generally feel about your work? What makes you come to work in the morning, and what does this career mean to you long term?
4. Tell me about the patient population you treat. What are typical patients like, and what is the range that you see? Do patients tend to have certain qualities or characteristics? Could you describe the types of patients (if any) that you find particularly difficult to treat?
5. Can you tell me about your experiences with treating patients who struggle with opioid use disorder?
6. I'm particularly curious about [the ED SBIRT program], as programs such as this are often presented as a partial solution to issues like the opioid epidemic. Could you describe this program to me, and also discuss some of your experiences with it?
7. What do you think about the value of programs such as [this ED SBIRT program]? If you were to design a program, what would you want to be done that is the same as [the ED SBIRT program], and what would you want to be done differently?
8. I'm also curious about how you feel about how [the ED SBIRT program] relates to you and other nurses' experiences of the overall work environment. Do you find the presence of programs like this to make the work environment better for nurses? Do you think the program does or does not protect nurses from feeling stressed or burned out from work? If so, how? If not, why not? What kinds of processes or resources surrounding the treatment of patients who use opioids would be helpful to help protect nurses from experiencing work-related stress? What about other factors in the workplace — what kinds of things do you think are most important in terms of protecting against workplace stress and fatigue?
9. Are there any further resources that you think would benefit nurses at [Hospital 2] working to address patients who struggle with opioid use disorder?
10. Are there any other thoughts you'd like to express before we finish? Do you have any questions for me?