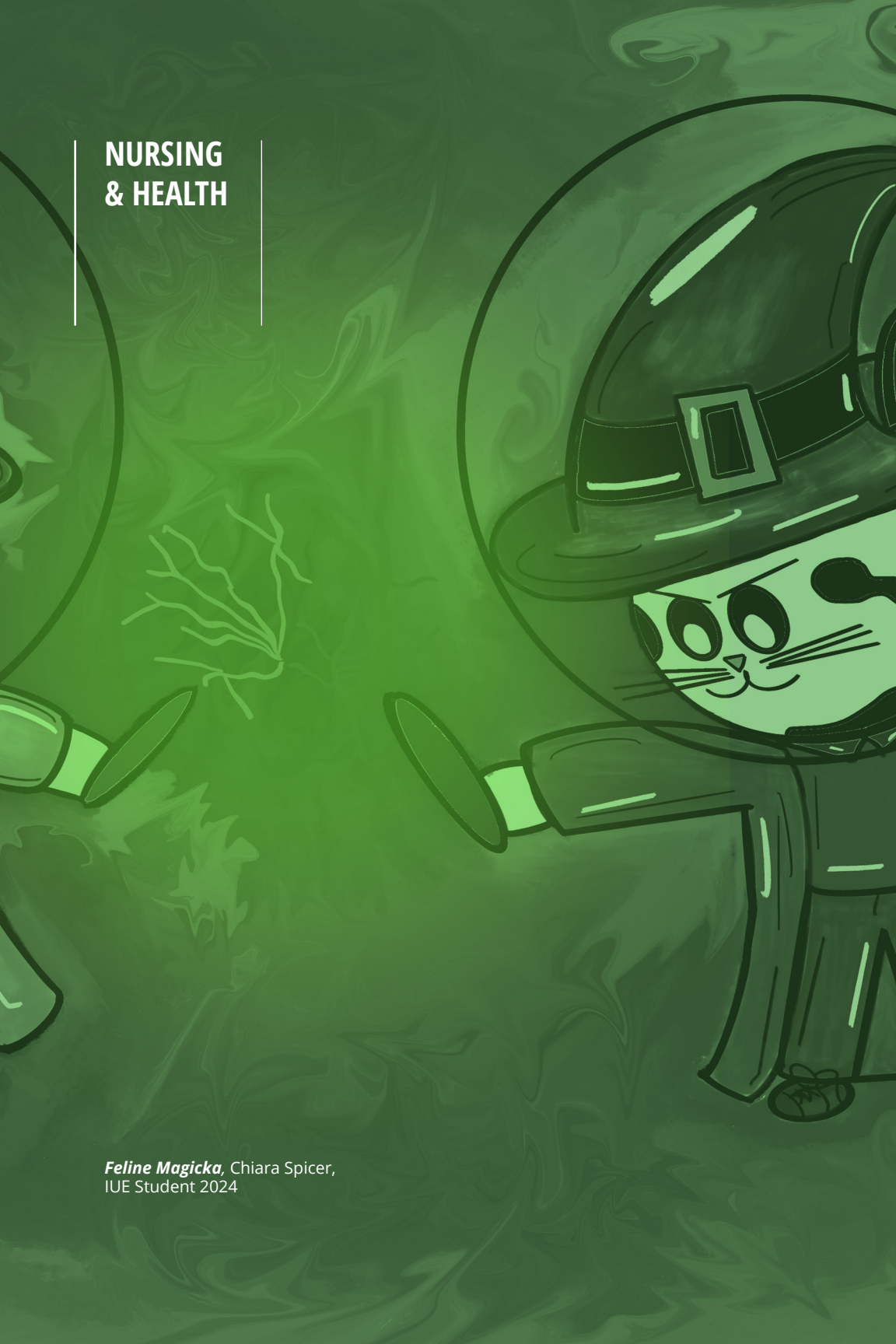


NURSING
& HEALTH



Feline Magicka, Chiara Spicer,
IUE Student 2024

INTRODUCTION: WHY DOES THE NURSING PROFESSION BASE OUR PRACTICE ON EVIDENCE?

Robin Brunk

Course faculty (for the following two articles)

Junior year nursing students in the R375 Nursing Research and evidence-based practice course developed skills in retrieving and appraising current evidence that is relevant for today's nursing research priorities. Students were challenged to apply their writing and research abilities into the development of a literature review. The literature review confirmed the nursing research priority, described the current evidence for practice and provided implications and recommendations based upon science and credible sources. The students demonstrated their scholarly abilities by tying current evidence to real world nursing issues, provided recommendations for changes to practice using sound clinical judgement with consideration to patient preferences. ■

OPIOID EPIDEMIC

**Randi Ferguson, Madison Hamiel, Olivia Heid, Janae Kirby,
Cheyenne Liette**

Abstract

Healthcare is constantly changing as new resources are coming around, people are finding new ways to utilize the resources. As the world continues to grow, there is an abundance of new information that is being learned about medications, particularly regarding controlled substances, such as opiates. As the world has evolved drugs have evolved with them. Opioids have been around for as long as the 1860s, and around the 1990s, the first wave of an opioid epidemic occurred (Rieder, 2020). The opioid epidemic has been brought about due to several different influences. Influences of the opioid epidemic could include overprescribing, the push from pharmaceutical companies, regulations, as well as the street side of opioid- like drugs which are indicative of synthetic drugs. There is a direct link between patient outcome and opioid use.

Keywords: opioid, opioid patients, opioid epidemic, undergraduate nursing research, literature review, course project, highly addictive, pain relief, fentanyl.

Opioid Epidemic Healthcare is constantly changing as new resources are coming around, people are finding new ways to utilize the resources. With all new resources and advances, there can be good and bad scenarios. As the world continues to grow, there is an abundance of new information that is being learned about medications, particularly regarding controlled substances, such as opiates. As the world has evolved drugs have evolved with them. Opioids have been widely available since the 1800s, and around the

1990s, the first wave of the current opioid epidemic occurred (Rieder, 2020). Opioids have been used for years to reduce pain and bring relief to people. Pain is not limited as it can affect everyone. Pain can be an acute or chronic issue, therefore there are all kinds of timelines people use opioid medications. Opioid medications are highly addictive, and the addicted individuals are classified in two categories: a person who is newly introduced to opioids, and someone with a repeat use of opioids (Biancuzzi, 2022). The opioid epidemic has been brought about due to several different influences. Influences of the opioid epidemic could include overprescribing, the push from pharmaceutical companies, regulations, as well as the street side of opioid-like drugs which are indicative of synthetic drugs like *heroin* and *fentanyl* (CDC, 2024). With increasing numbers of opioid use, there has been a direct impact on patient care and outcome.

There are numerous factors that contribute to the opioid epidemic. Factors include, but are not limited to lack of education, self-medicating, and taking more doses for a greater amount of time than prescribed. As stated earlier, opioids are used to treat pain and bring relief to people. With this in mind, it is important to understand that “over one in five adults in the United States and around the world are estimated to live with chronic pain” (Barton & McCarty, 2023, p. 179). Attending to a patient’s pain can be done in several ways. There are many ways to treat pain including non-pharmacological therapies and pharmacological therapies. Instead of going straight to prescribing opioids for pain relief, there are other options that should be explored such as acupuncture, herbal medications, massage, meditation, music, and a variety of other ideas. There are also pharmacological therapies that include nonopioid medications, for example, a common non opioid analgesic medication is Acetaminophen, or going by the more commonly known name Tylenol. “The Centers for Disease Control and Prevention (CDC) reported that the leading factor in the increase of opioid abuse, addiction, and related deaths is the uptick in prescribing opioids as a pain management method” (Coppage, 2020). Chronic and acute pain can be caused in many ways. As healthcare workers are

taught, they assess patients' pain by having them rate it on a scale of one to ten (Barton & McCarty). Pain is subjective, so as healthcare providers, we must listen to the patient and understand that each patient's rating may be different from others while experiencing the same event.

In healthcare, the main priority for caregivers is patient safety and promoting their highest wellbeing and health. "With opioids as the recommended treatment for conditions like cancer and chronic pain, prescribers must balance the benefit to the patient with the risk of OUD when opioid refills are no longer available" (Coppage, 2020). This is where lack of training and education amongst healthcare providers weighs in. Not only should providers be educated on the risks of prescribing opioids, but also patients. Lack of education on pain management and opioid use places patients at risk for worse pain control, addiction, and poor compliance.

"Pushback on stricter opioid regulation is typically rooted in the need for doctors to have discretion when making a professional judgment between writing a prescription for patients to have access to the pharmaceuticals that they need to manage legitimate health problems and avoiding the risk of addiction altogether" (Coppage, 2020).

With medication administration, sometimes it comes down to risk versus benefit. All patients should be educated enough by their healthcare providers on their medications to make their own decisions. With, health care professionals need to also acknowledge that prescribing opioid medications comes with a severe risk for addiction and abuse.

The opioid epidemic is also at large due to easy access and greater accessibility to opioid substances. "The FDA has made other efforts to address the opioid epidemic, including efforts to decrease access to illegitimately obtained opioids by targeting illegal marketing practices and online sales of unapproved and unregulated opioids" (Coppage, 2020). Not only does this increase the risks of opioid

addiction, but it increases a person's risk for an overdose when buying pills from any source that is not a licensed pharmacy. "Some of the people who began misusing opioids with prescriptions would go on to switch to the much cheaper heroin that became even easier to find" (Rieder, 2020). There comes a time for the user when a healthcare provider will no longer prescribe the medications. The patient is now going to take matters into their own hands and find a way to manage their pain the way they did before. "Prescription opioids can be misused and can cause addiction and overdose, but many of us take them for good reasons—namely, because they provide pain relief" (Rieder, 2020). Opioids not only provide pain relief, but they also offer a sedative and euphoric feeling that can aid in dull psychic and traumatic pain. Therefore, not only are opioids being used to treat physical pain, but also emotional pain bringing us to an example of where an alternative method of treatment should be offered. Healthcare workers need to be trained in resources to provide to their patients.

The opioid epidemic is not a new issue in the healthcare world. "In a Canadian multicentre study of opioid-related hospitalizations thirty-four percent to fifty-two percent of 2599 patients had an active prescription for opioids; the most common were hydromorphone, 5 codeine, oxycodone and methadone" (Makhinson, 2021). With that being said our pharmaceutical companies are not fighting against the epidemic, if anything they are adding more fuel to the fire. Within the pharmaceutical industry "Purdue Pharma falsely and aggressively marketed oxycodone as a long-acting effective oral opioid with low addiction risk" (Makhinson, 2021). When the Federal Drug Administration approved oxycodone they failed to independently appraise evidence to support what Purdue Pharma released (Makhinson, 2021). This, as well as other factors led to the oxycodone crisis. Big pharmaceutical companies are so driven by money that they will disregard the research that needs to be done to safely allow administration of opioid medications. The more people suffering from addiction and the higher demand for the medication the more money the pharmaceutical companies are receiving.

Synthetic drug use is the new and improved drug of choice for different diseases and conditions. They are marketed as beneficial and improving drugs and in the beginning, they are but their long-lasting side effects can be detrimental. "Synthetic drug use can increase activation of the dopamine, norepinephrine, and serotonin systems, which can produce rewarding effects... but long-term synthetic drug use can not only do harms to health like traditional drugs, but also result in schizophrenia-like symptoms including paranoia, hallucinations, delusions, and mood disturbance, which have been found to increase the likelihood of self-harm, aggressive behaviors, and violence by drug users" (Makhinson, 2021). This is why synthetic drugs use is a problem. People become addicted to the feeling of increased dopamine, norepinephrine, and serotonin and continue to use their drug of choice. After the addiction process is in motion, the negative effects of the synthetic drugs set in and the addiction is more severe, leading to the negative effects.

The opioid epidemic has increased drastically and has come in waves throughout the years. Individuals in this wave have been using opioids more due to the tripling of prescription rates (Ciccarone, 2019, p. 2). According to Ciccarone (2019), "this increase in prescriptions has been correlated to rising adverse consequences, particularly opioid overdose" (p. 2). The creation of extended release long acting (ERLA) opioids was designed to allow higher longer lasting doses in an individual pill. This use was short circuited by individuals crushing, snorting, or injecting these pills which led to another increase in how these opioids were misused. The second wave involved the use of heroin which was more readily available and cost less which contributed to the increase in utilization. It was noted in this time the highest group of overdose admission in this era were individuals ages twenty to thirty-four (Ciccarone, 2019, p. 3). In this period, there was an increased number of heroin users transitioning from those who had taken opioid pills and also by younger people who began their drug use with heroin from the starting gate. It is also noted that supplies seemed to be more refined and emerged from Mexico as the main source. In

the third wave, drugs that were responsible for opioid use overdose mortality were synthetic opioids in the heroin supply and chiefly illicitly produced fentanyl (Ciccarone, 2019, p. 4). The main drug in this wave is fentanyl which can be fentanyl-adulterated and/or fentanyl-substituted heroin. Fentanyl is the main chemical in this but has an increasing family of chemical analogues (Ciccarone, 2019, p. 4). This family of analogues comes in various potencies which led to many unintended overdoses. Fentanyl-adulterated and or fentanyl-substituted heroin is responsible for the opioids currently.

Once developing an addiction to an opioid and the person has used them for a period, they will develop a tolerance. This makes it so they need to ingest more of the drug to feel the euphoric feeling. Taking more than the prescribed dose or more frequently than prescribed creates a potential for overdose and death. "Drug overdose deaths from 67,367 in 2018 to more than 107,000 in 2021. Opioids were involved in approximately 75% of overdose deaths" (Rawy, 2024). Opioids are prescribed less due to the tighter laws about prescribing. Physicians have seen the past opioid death rates and are prescribing less as a result (Rawy, 2024). The physicians are aware of the goal to reduce the number of narcotic prescriptions to patients. They have been educated on the effects of opioids, addiction, and the deaths due to overprescribing opioids. Thus, fewer prescriptions of these drugs are written and fewer are available in the general population.

Medicine and healthcare practices will continue to advance, and opioids will continue to be used. With a growing number of uses in opioids, there are ways to decrease the addiction and death rates that are associated with it. Healthcare professionals need to continue to educate and consider risk versus benefit factors when prescribing these medications. As nurses, it is highly important to ensure that patients are educated on the addictiveness and side effects of all medications, especially opioids. While there are many factors that are influencing the opioid epidemic, nurses can do their part to educate patients and prevent the epidemic from worsening. ■

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