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The Opioid Crisis: Implications for Western Michigan University

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Abstract

The opioid epidemic has become a national crisis in the United States of America. The area of study for this paper, is how university students ages 18-25 are affected by the opioid crisis. This thesis will include a review of current literature pertaining to the opioid epidemic. The main goal of this thesis is to educate Western Michigan University students and faculty about the nationwide opioid epidemic. A PowerPoint will be created using the structure of a professional poster. The PowerPoint will be presented in an online face-to-face browser. Commonalities in the findings are discussed throughout the presentation. These include prevalence of opioid abuse and the social impact of opioid abuse. The last part of the project will discuss creative ideas for Western Michigan University to improve opioid safety on campus.

The Opioid Crisis: Implications for Western Michigan University

Literature Review

Background of Opioid Epidemic

On October 26th, 2017- the Opioid Epidemic was declared a public health emergency by the president of the United States (US) (Miller, 2019). There is a long history of opioid use in pain management, dating back more than a hundred years (Jones, Viswanath, Peck, Kaye, Gill, & Simopolous, 2018). In 2000, the Joint Commission published strict standards for pain management and through this new policy, physicians were mandated to provide adequate pain control (Jones, et al., 2018). The hospitals that administered the most opioids, recorded the highest ratings due to their efficient pain control (Jones, et al., 2018). Increased pressure to manage all pain began the rise of the opioid epidemic (Jones, et al., 2018).

During the rise of the Opioid Epidemic, pharmaceutical companies began to introduce new medication variations, oxycodone being one of them (Jones, et al., 2018). Oxycodone had a presumed lower likelihood of abuse, but quickly the new drug on the market became heavily abused (Jones, et al., 2018). From 1997 to 2002, the number of oxycodone prescriptions went from 670,000 to 6.2 million (Jones, et al., 2018). In 2007, Purdue Pharma plead guilty to federal charges related to the misbranding of oxycodone, but by then the damage had already been done (Jones, et al., 2018).

Opioid consumption skyrocketed through the early 2000- going from 46,946 kg consumed in the year 2000 to 165,525 kg consumed in the year 2012 (Jones, et al., 2018). As of 2017, there have been over 600,000 opioid related deaths recorded to date in the United States (Gostin, Hodge, & Noe, 2017). In 2017 alone, the Centers for Disease Control and Prevention (CDC) reported 47,600 deaths that involved opioids. This makes up 12.6% of the total deaths to

date, in just one year (Centers for Disease Control and Prevention [CDC], 2020). The purpose of this research is to identify the impact of the Opioid Epidemic on college aged students and to create ideas to enhance the university's ability to fight back.

Types of Opioids

Opioids are the oldest and most potent pain medication and are used to treat severe pain (Stein, 2015). Opioids can be prescribed as regulated pain medication, also created and sold recreationally in nonregulated forms (The Christie Foundation, 2015). Prescription opioids are said to be one major contributor to the epidemic due to being legal and a history of being easily accessible (ACHA Guidelines, 2016). This includes Vicodin, Morphine, Codeine, OxyContin, Demerol, and other less commonly used pain medications (The Christie Foundation, 2015). Recreational opioids, including heroin and fentanyl, are perceived as more dangerous than prescription opioids by the public due to higher overdose rates (CDC, 2020).

Fentanyl is a synthetic opioid that is approved to treat severe pain (Jones, et al., 2018). Compared to morphine, it is 50 to 100 times more potent (Jones, et al., 2018). The greatest contributor to the increase in overdose rate is illegally manufactured fentanyl (Jones, et al., 2018). The low production cost causes people to mix it with the less potent heroin, making the overdose risk much higher (Frank & Pallack, 2017). Fentanyl rapidly depresses respirations causing deaths more quickly than other opioids (Frank & Pallack, 2017). Street-drug suppliers do not have the specialized equipment or the knowledge needed to create precise fentanyl, medically 50 micrograms per milliliter, so they are unable to know the actual dose of the product created (Frank & Pallack, 2017). This creates a high risk for overdose because the potency may vary each time it is created (Frank & Pallack, 2017).

Opioid Use in Young Adults

In people age 15-24, drug overdoses increased from 4,235 people to 5,376 people, this is a 28% increase between 2015 and 2016 (CDC, 2020). In the study done by Recovery Advocacy and the Christie Foundation including 1200 college aged people, 34% reported that opioid medications were easy to obtain (Blumenthal & Xiang, 2018). Specifically in state colleges, 31.1% said that they could access prescription opioids within four hours (The Christie Foundation, 2015). Easy access could be the root of the problem on campuses.

One in six college students reported use of prescription opioid pills not prescribed to them (The Christie Foundation, 2015). One in ten reported taking a prescription medication currently (The Christie Foundation, 2015). The greatest reasoning behind obtaining an opioid prescription, are surgeries or pain (The Christie Foundation, 2015). Other risk factors for opioid use include living in large metropolitan areas, age, and use of marijuana and alcohol (Daniels-Witt, Thompson, Glassman, Federman, & Bott, 2017).

The study done by the Christie Foundation (2015) focused on attitudes and usage of opioids. The study showed that opioids are easy to get and share, and nearly one-third of respondents know someone who has overdosed. The misuse reported came from a need to reduce anxiety or stress or to aid in sleep, rather than the stereotypical “getting high.” There is a lack in knowledge in riskiness, evidence by 59.9% reporting that prescription opioids are less risky than heroin, despite both containing the dangerous and addictive substances (The Christie Foundation, 2015).

When asked about opioids, 45.4% of young adults said they do not know what an opioid is (The Christie Foundation, 2015). This is concerning because of the risk-taking behavior young adults tend to get caught up in (“Survey,” 2015). The more educated people are, the less likely

they are to participate in harmful behavior (The Christie Foundation, 2015). The Hazelden Betty Foundation (2015) focused on educating the public regarding the dangers associated with opioids and the sources they are obtaining them from. Their goal is to have an immense increase in education regarding opioid use (“Survey,” 2015). The foundation created a seven-point action plan to increase education regarding opioid use (“Survey,” 2015). The seven-point action plan for college campuses includes: education, addiction-related curricula, prudent prescribing, student health centers promoting screening and interventions, sober housing, student recovery communities, and visible support by administration (“Survey,” 2015). This study enlightens readers about the need for education plans for college aged young adults (“Survey,” 2015).

According to American College Health Association (ACHA) Guidelines, a child prescribed opioids prior to high school graduation increases the risk of future misuse to 33% (ACHA Guidelines, 2016). This include prescriptions for sports injuries, surgeries, and other acute or chronic pain (ACHA Guidelines, 2016). Groups that have the highest percentages of prescription opioid use are males, graduate students, and those who participated in intercollegiate sports (The Christie Foundation, 2015). The use of holistic pain control and other non-addictive pain medications may be more beneficial in fighting addiction, especially in children and young adults (“College of Nursing,” 2016).

Recreational opioid use in the college aged group is estimated at 7-12% (ACHA Guidelines, 2016). The transfer from prescription opioid use to recreational use is estimated at 2-3% of people each year (ACHA Guidelines, 2016). This number is very concerning, and should be addressed when stressing the importance of stopping the epidemic quickly. Heroin is a major concern in college students (Daniels-Witt et. al., 2017). Heroin and fentanyl, can cause a respiratory arrest much faster than prescription opioids (Frank & Pallack, 2017). A very small

amount of heroin is needed to create respiratory depression, compared to the multiple pills needed in prescription opioids, such as Codeine and OxyContin (Frank & Pallack, 2017).

With nonmedical abuse on the rise, there is a major fear about the future of young people struggling with Opioid Use Disorder (OUD) (ACHA Guidelines, 2016). There is no regulation for ingredients in nonmedical opioids. Many people using recreational drugs do not know the substances in them (Frank & Pallack, 2017). A person with OUD is “chasing the high” leading them to use more of the specific substances to create that same feelings due to a chemical imbalance in their brain (Compton, Jones, & Baldwin, 2016). Neurologically, some of the same neuropathways are involved in both depression and addiction (Takahashi, 2018). The use of opioids for nonmedical reasons makes a person 3.1 times more likely to have depression (Takahashi, 2018). This creates a need for a more complex, long term treatment plan for both addiction and depression (Takahashi, 2018).

Education for Community

Opioid Use Disorder creates psychosocial changes in the user and loved ones (Daniels-Witt et. al., 2017). Many times, the burden on the person’s community of loved ones are not considered (Daniels-Witt et. al., 2017). A governor in Florida took the time to meet at a college with the first responders, faculty, and parents who have lost their children to opioid overdose on campus (Bennett, 2017). He describes this experience as stunning, because it opened a lot of real and harsh doors, such as memories of uncontrollable hurt and pain (Bennett, 2017). OUD is not an easy topic to discuss, it is raw and emotional for many, making it hard to express accurate internal feelings (Bennett, 2017). When a sophomore student was interviewed, she talked about how she personally has seen and felt the toll of the addiction via family and friends (Daniels-Witt et. al., 2017).

It is a myth that opioid abuse is easy to identify. There are no criteria that fits a person that has OUD. There is no specific race, gender, or socioeconomic status that this disorder does not affect. OUD is happening all around the nation, every day (Kennedy-Hendricks, Barry, Gollust, Ensminger, Chisolm, & McGinty, 2017). In a study done by Kennedy-Hendrick, et al (2017) findings showed there was a high level of stigma towards people who struggle with OUD. When people witnessed loved-ones struggling with OUD, the stigma was lower than towards someone with no personal connections to the person. This stigma may be the reason some people do not seek help. It is important to make known the structural factors in OUD and that the addiction is real. Treating every person equally, whether there is a personal connection or not, can help to end the negative stigma towards OUD.

Specifics to look for in someone suspected of using opioids are: drowsiness, losing interest in social activities that were once enjoyed, sudden mood swings, agitation and irritability, lowered motivation and abandoning responsibilities such as school, along with euphoria, being overly energetic, and talking fast (Miller, 2019). It is important that students, faculty, and anyone that could be a possible bystander are educated on signs of an overdose and what to do in an emergency overdose situation (Stover, Grogg, Patel, Thornton, & Dwibedi, 2019). Young adults should be educated on the adverse effects of opioids because of the availability of drugs around them (Stover, et al., 2019). Education may result in their ability to recognize an overdose and save a peer.

The antidote for opioids is naloxone (Narcan). Providing education and access to Narcan kits to people on campus could save lives (ACHA Guidelines, 2016). There is federal funding available to allow states to purchase, distribute, and train on how to use Narcan kits. A prescription of Narcan may also be considered when prescribing opioids, especially in chronic

use (ACHA Guidelines, 2016). Persons who identify and assist in treating someone who has overdosed need to be aware they should contact 911 because Narcan has a shorter half-life than the opioid. Ultimately the major goal of education on the community is to: provide prevention, education, and strengthen awareness, along with developing environmental management strategies (ACHA Guidelines, 2016).

Addiction recovery is possible. The use, sobriety, and relapse cycle of OUD deals with biological, psychological, and social aspects of a person (Kelly, Abry, & Fallah-Sohy, 2019). Narcotics Anonymous and SMART Recovery are professional, community based organizations that focus on all aspects of addiction (Kelly, Abry, & Fallah-Sohy, 2019). There is “Recovery Coaching” available, which is more formal, but still follows the idea of peer support (Kelly, Abry, & Fallah-Sohy, 2019). The main goal of these community programs is to show someone struggling with OUD that they are not alone and that together they can conquer their addiction (Kelly, Abry, & Fallah-Sohy, 2019). Long-term results show higher abstinence when counseling was added to someone’s medical based treatment plan (Weiss & Rao, 2016). It is important to determine why someone is struggling with addiction to create an individualized recovery plan (Kelly, Abry, & Fallah-Sohy, 2019). Topics to dive deeper into include history of abuse, where the addiction started, events leading up to opioid use, their personal feelings towards OUD, and other personal questions based on responses (Kelly, Abry, & Fallah-Sohy, 2019).

Solutions for Academic Institutions

Per Miller (2019), many students do not know where they can get help. By providing resources around campus with phone numbers and support group meeting times, both via posters and online on the university’s website, students will have access to obtain help. The more visible the help is for students, the more likely they are to reach out.

There should be multi-level prevention, intervention, and treatment strategies due to campuses being ethnically diverse with a broad spectrum of knowledge about opioid safety (ACHA Guidelines, 2016). Adding recovery communities on campus can be vital for the success of someone struggling with OUD or who has had a recent overdose (ACHA Guidelines, 2016). Creating a sense of community is important for someone who may feel they have nowhere to turn. Recovery communities are also beneficial for the people that have been indirectly impacted by OUD (ACHA Guidelines, 2016). Family, friends, and other loved ones are given a place to talk about their struggles and burdens with a group who may have felt similar feelings. These support groups should be flexible to adjust to what is best for the people who are using the resources (ACHA Guidelines, 2016). By personalizing the resources, there is a better adherence rate and more frequent participation (ACHA Guidelines, 2016).

The University of Mississippi created a drug lockbox program where students can pick up free personal lockboxes at the pharmacy on campus to store their prescription medications ("Lockboxes Available," 2019). The need for this came from a rise in recreation use of opioids and self-medicating peers ("Lockboxes Available," 2019). They were especially successful in shared dorm rooms ensuring personal medication was safe ("Lockboxes Available," 2019). The lockboxes create protection of opioids, and brings to attention the seriousness of the drugs due to their need to be locked up ("Lockboxes Available," 2019).

Another approach to fighting the epidemic was creating designated drug drop off stations around campus. Drug disposal boxes at the University of Minnesota collected over 30,000 pills in the first three months ("Editorial", 2018). They believe the success in the number of pills dropped off came from the students having pills they did not need anymore, but no place to drop

them off safely (“Editorial,” 2018). By giving students a convenient place to safely get rid of medications, many took advantage of fighting back against the epidemic (“Editorial,” 2018).

Education is the key to fighting the opioid epidemic. Albright College saw the need for education on the epidemic and created a minor for addiction studies (“Albright College,” 2017). The minor focused on how to help people who struggle with addiction (“Albright College,” 2017). Some nursing schools educate their students on alternate holistic remedies to pain such as acupuncture, muscle conditioning, and even counseling to avoid the need for opioid pain killers (“College of Nursing,” 2016). Focusing education on undergraduate and graduate level nursing students creates a greater variety of students on campus educated to identify signs and symptoms of overdose (2016). Erdly (2016) studied one University that trained students about opioid safety and overdose management. They were all equipped with naloxone kits in case it was needed in a situation where they recognized signs and symptoms of an overdose. Many educational facilities recognize the need for specific education for students attending their institution.

As a university, it is important to pay attention to the most up to date literature and logistics. According to ACHA Guidelines (2016), a college health center should consider: adding naloxone to emergency kits, ensuring all staff members are adequately educated on management of an airway and providing intravenous fluids (including the equipment), and having a planned emergency response protocol that is practiced frequently. By implementing this program, it makes the university equipped in case of an emergency (ACHA Guidelines, 2016).

Creative Ideas for WMU

Western Michigan University has several programs already implemented to help combat the opioid epidemic. The Bronson School of Nursing (BSON) is holistically focused, specifically on alternative pain remedies. Some alternate pain remedies taught to students are acupuncture,

acupuncture, aroma therapy, music therapy, journaling, meditation, massage, as well as others. BSN students were given the opportunity to attend a 2-hour opioid safety training. This educated them on the signs of an overdose and how to administer Narcan. Students could sign up for a Narcan kit after the training. Creating a training such as this for students of other colleges within the university would spread awareness and education to other areas of the university.

WMU offers a minor of addiction studies that can be completed entirely online (Undergraduate Minor, 2020). The university has recognized the epidemic and the importance of effectively interacting with someone struggling from abuse, both in the professional environment and personal areas (Undergraduate Minor, 2020). This minor educates students on how to expand their knowledge for potentially difficult situations they may encounter (Undergraduate Minor, 2020). Advertising this at orientation, especially to healthcare majors, may be beneficial. Getting started on minors early in your college career is important. Reaching freshman with this information is important.

Areas for improvement based on the reviewed literature are very simple additions that could make WMU even stronger in the fight against the opioid epidemic. Protocols such as the lockboxes in each student's dorm room to reduce access to medication that is not prescribed to the student. Lockboxes would prevent open access to medication of their own and their roommates during times when one student is alone in a shared dorm room.

WMU could offer medication disposal boxes conveniently located around campus to give students the availability to get rid of any unneeded drugs. Sindecuse Health Center may be a familiar, convenient place to start. Any unused and unneeded drugs that students have, could be dropped off at this location free of charge with no questions asked. The more drugs that are disposed of properly, the less there are to be abused.

Implementing opioid education in the nursing school curriculum would benefit the community of WMU, as well as the communities they may work in post-graduation. Focused education on opioid safety, abuse, and signs and symptoms of overdose could be beneficial both inside the hospital and out. Many of the students grew up in this epidemic, and almost all of them have been affected in some way by the opioid epidemic. Having a curriculum set to enhance the medical knowledge behind the opioid crisis could be very beneficial to the future of the nursing students.

As future nurses, an important skill to learn is education. Free training on opioid safety and administration of Narcan could be presented by the nursing students during the resident assistants training periods. This gives the nursing students a chance present and possibly get leadership credits, as well as, equipping the resident assistants with the skills to move forward in case of an emergency. Following the training, it is important to have a naloxone kit available in each residence hall that the resident assistant has access to. This could save the lives of students living on our University.

In addition, there could be monthly Narcan trainings with limited spots where students and faculty around the entire university could sign up for a time to be trained. Opioid abuse is all around, and there is no way to know when a student may run into an overdose situation. Having a Narcan Kit and being trained, increased the chance that faculty and students will be prepared to save a life. This could also be used to fulfill volunteer requirements of the students instructing the trainings.

Involving the community could change in addiction recovery at WMU. As advertised, WMU Broncos are family. If one or many of the students are struggling, there is always a helping hand to pick them back up. Creating a Narcan Anonymous group or other support groups

may be the deciding factor if someone attains long-term recovery. Since we offer free counseling to students by providing counselors are trained in opioid addiction. This could help with the understanding of a student struggling with OUD.

Another option would be to create a “We Support You” addiction day on campus. There could be posters with advertisements providing contacts that can help them. By the campus showing their support for OUD, it could give someone the strength they need to seek help. This could also be beneficial for students or faculty that are hurting from a loved one who has OUD. Students could gather and share stories and love with one another. Chalk could also be provided to write inspirational words around campus and raise awareness.

There is no doubt that the Opioid Epidemic has made a huge impact on college aged students. Whether they are struggling with OUD, a loved one, or someone they know, most students have been touched by opioid addiction in some way. WMU is an amazing university with endless resources for students. By implementing these specific opioid prevention interventions, it gives students the opportunity to fight the epidemic themselves. The students at WMU are strong and driven to make a difference. Equipping them with the tools to be the change is just another way to set WMU’s student leaders apart as they go out into the world.

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