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Opioid Crisis Position Paper

One of the world's most dangerous epidemics, also known as the opioid crisis, takes the lives of millions of Americans. Most people get addicted to the opioids they were prescribed following surgery or other straining medical procedures. For example, in a book called Heroine, a girl Mickey gets into a severe car accident that requires major knee surgery. Following the surgery, she gets prescribed Oxycontin, which is a severely addictive opioid. It is also known as the little brother of heroin since it has the same chemical compounds. She wanted to recover as soon as possible to be able to play softball, therefore abusing the prescribed drugs to heal faster. She then becomes dependent on them. After the doctor refuses to give her a refill, she starts looking for a fix elsewhere. When she runs out of money she turns to heroin and becomes a heroin addict. Her physicians did not prescribe any alternative medications, nor did they notice her addiction when she came for a second refill. Nobody knew she became an addict until it was too late. The ultimate goal is to reduce this kind of medication being used incorrectly. The most important question to ask is: How can this epidemic be stopped? There are many ways to ameliorate this opioid epidemic, such as providing alternative therapies and treatment methods, providing education on how to effectively tolerate chronic pain, performing risk analysis pre-procedure, monitoring patient's progress post-procedure, and learning what is the most effective strategy to reduce opioid addiction. In the big picture, opioids are impossible to prevent completely. There are major surgeries that cause too much pain for patients, causing the need for strong painkillers. But, there needs to be a system in which meds are managed and consumed correctly.

One of the most powerful ways to avoid addiction is to find other non-opioid solutions to chronic pain. If the medication given is not addictive, there is exactly a zero percent chance of the patient developing dependence. In the article, "Postoperative opioid prescribing: Getting it RIGHTT", the authors say that the plan to manage pain after operating starts with medical professionals educating themselves about the patient's history of experiencing pain. To reduce the number of opioids prescribed and speed up recovery, they feel that it is important to provide therapies to assist patients with managing their pain. With patients knowing about these therapies, it will reduce their anxiety about post-operative pain. In recent studies, there is evidence to suggest that in certain cases, non-opioid drugs can effectively replace opioids after surgical procedures. (Yorkgitis et al) This is a very important strategy to consider when trying to help the opioid crisis. The more opioids become limited, the less chance they have of creating more problems such as addiction and bad behavior. Most patients develop addictions because they are mentally drawn to the feeling of not having pain. With therapy and consciously knowing that they are not taking opioids, they will not have the urge to develop psychosomatic symptoms and convince themselves they need to take more pills. The other important factor to consider is that doctors should evaluate a patient's medical history to see if they have had any bad experiences recovering from prior procedures with the use of opioids. Likewise, they should also look for signs of mental disorders, such as substance abuse and alcoholism, since the risk of addiction to opioids is much higher. Performing risk analysis and substituting opioids with non-addictive drugs, will increase patient care as well as reduce the temptation to mask physiological pain with drugs during recovery.

Similarly, studies had to be done to prove that this is the correct form of action. To have patients able to tolerate these alternative treatments, they also need to be provided with an education on how to responsibly manage them. To prove that non-opioid drugs should be replaced with proper education, in some cases, an experimental trial had to be conducted. Some surgeries, like knee and hip replacements and rotator cuff repairs, are almost impossible to recover from without the use of strong drugs to help with post-operative pain. In the article, "An integrated educational and multimodal approach to achieving an opioid-free postoperative course after arthroscopic rotator cuff repair", the authors write how sixty patients were divided into two groups and underwent rotator cuff repair. Every participant was given many forms of pain management as well as an interscalene nerve block. One group received prior education on what to expect in terms of pain, pain protocols that did not involve opioids, alternative therapies to reduce pain, and specific instructions for after surgery. After two days, fifteen percent of this group reported that they used rescue opioids after surgery, compared to one-hundred percent of the control group who reported using them. No patients reported using opioids within the next two weeks, compared to ninety percent who reported using them. (Sabasen 1) It turns out that both groups successfully recovered. This means that with the proper pre and post-operative education on pain management, along with new and advanced alternative therapies, the need for opioids can be successfully replaced. This revolutionary statistical evidence is so crucial to achieving the main goal: to ameliorate the opioid crisis. This study was most likely a double-blind randomized experiment, which provides the most effective evidence of a hypothesis in clinical trials. In a clinical trial, the p-value needs to be below 0.05, or five percent, for the data and result to be considered accurate. With a p-value of 0.196, the hypothesis that opioids

can be eliminated is correct. With this discovery, opioids can be reduced from the equation and therefore fewer patients have the chance to become addicted to them.

One other factor to consider when creating strategies to reduce the number of opioids is performing a risk analysis of every patient who requires strong pain relief. This is critical because looking for warning signs of potential misuse of strong drugs, can severely reduce the number of addicts prescription drugs create. In the article "Societal Costs of Prescription Opioid Abuse, Dependence, and Misuse in the United States" the authors say "Furthermore, the Food and Drug Administration (FDA) has recently required certain opioid manufacturers to develop a Risk Evaluation and Mitigation Strategy (REMS) to manage potentially risky prescription drugs and ensure that their benefits outweigh their risks (Birnbaum et al) This will enforce doctors to assess the risk for each patient they see, develop a treatment plan based on their diagnosis, search for physical indicators of substance misuse, and consider the patient's medical history. In certain cases, a patient's medical history may not be enough to suggest that they are not fit to receive opioids. According to the staff at Mayo Clinic, "A number of additional factors — genetic, psychological and environmental — play a role in addiction". (Mayo Clinic 4) A doctor needs to ask patients about these factors because then they will provide more resources to assure that their patients recover well. Mayo Clinic also writes that unemployment, having a criminal record, using tobacco/nicotine, having depression/ anxiety, and stress, are all red flags that need to be considered when prescribing medication to a patient (Mayo Clinic 5). Addiction and substance abuse are mental diseases, it's indeed extremely challenging for doctors to be able to recognize the indicators. Without thorough evaluations of the patient's physical and mental health, clinicians may decide to give a high-risk patient an addicting opioid. This condition affects about 16% of Americans, making them more susceptible to the side effects of prescription drugs.

Doctors should maintain accurate and detailed records of every medication prescribed, every operation performed, and every patient visit. Additionally, they should provide referrals to trained specialists, counselors, and other professionals who can help prevent the start of the addiction process. Not only would this improve medical care, but it will also prevent innocent people from developing a terrible habit over which they have no physical control.

There are a lot of cases where opioids are the only option strong enough to help a patient from excruciating pain. This can be anywhere from hip and knee replacements, brain surgery, cancer, etc. But monitoring progress is very, if not the most important key to ameliorating the opioid crisis. For example, my grandmother had knee replacement surgery in July of 2022. She was prescribed many different medications, including oxycontin, which was only for when the pain became unmanageable. At first, I was a bit concerned because I know how addictive it could be. But, the surgeon prescribed a very low dose. There was also both a nurse and a physical therapist who came to our house to monitor her progress. They kept track of her pills and told her when to stop taking them. This is a perfect example of why patients, who are prescribed strong opioids, do not get addicted to them with careful monitoring. Therefore, after obtaining an opioid prescription, a simple doctor's visit or drug test can ensure that the patient is on track with their recovery and exhibiting no signs of misusing the drugs. In the worst-case scenario, if the patient does show signs of addiction, doctors can become aware of it. These individuals now have the chance to receive treatment before their addiction worsens. Some people do not think they need follow-up care. They think they are strong enough to deal with the pain. In some cases, this can lead to catastrophe. They are more likely to abuse the medication because nobody is watching and nobody will know. Therefore, follow-up appointments and care should be mandatory, even if the patient insists that they will be fine.

There is also roughly fifteen percent of the population that is terrified of doctors, hospitals, and appointments. It's called iatrophobia. According to the Cleveland Clinic, twelve percent of adults and nineteen percent of children have this condition. (Cleveland Clinic 2) People with this fear are more likely to develop addictions because they dread seeing a doctor for a follow-up appointment. They would rather take more pills to avoid another doctor's visit. This is another reason follow-up appointments need to be mandatory. In addition to basic post-operative care, one of the most effective nationwide strategies was created to monitor patients' progress. By 2019, "All states except Missouri now have functioning prescription drug monitoring programs (PDMPs) that collect data from pharmacies on all dispensed controlled substances. These statewide databases have many potential uses: they can help prescribers identify patients who are "doctor-shopping" or who might need substance use disorder treatment; they can help government agencies and medical licensure boards monitor prescribing practices and identify unusual prescribing patterns; and they can inform community-based prevention strategies. (Weiner et al) This is a very successful program that helps eliminate fraud and prevents addictive high-value opioids from getting into the wrong hands. Not only does it monitor what patients get prescribed, but it also monitors how many drugs pharmacies, hospitals, rehab clinics, etc receive and distribute. This program will alert the authorities if the math doesn't add up, which means some opioids became missing or were stolen. Doctors need to keep a tab on how many drugs they prescribe to every patient. They are required to count the number of pills in every cart and drawer in every hospital, every day. This keeps the drugs safe and stored for the actual purpose. As for the results of this program, "One study found that oxycodone-caused mortality abruptly declined (by 25 percent) in the month after Florida implemented its PDMP" (Weiner et al) This

shows that the PDMP is an effective tool for monitoring the distribution of drugs, as well as each individual's consumption.

In the past, doctors prescribed opioids left and right. This is why the opioid epidemic became an epidemic. Chris Sweeney, author of "R For an Epidemic" uses the research of Micheal Barnett, assistant professor of health policy and management at Harvard University, to convince his audience of physicians to understand that they are causing an "epidemic" even though they are not realizing it by prescribing opioids without proper procedure. He claims "But there were also countless well-intentioned physicians who, following their medical training, prescribed opioids for patients because they were taught that it was the best way to manage unabated pain". (Sweeney 3) The reason so many people were overdosing was because of the overprescription of these illicit opioids. In past years, there were not as many alternative options, monitoring programs, therapies, and very little education on risk management. Prescribing opioids in larger quantities was basically the only thing doctors could do. Now, things are very different. According to the CDC, "The overall national opioid dispensing rate declined from 2012 to 2020, and in 2020, the dispensing rate had fallen to the lowest in the 15 years, for which we have data at 43.3 prescriptions per 100 persons "(CDC 1) This shows that the prescription process has changed dramatically in the last twenty years due to fewer opioids being prescribed. With all of these strategies and protocols, the opioid epidemic can be ameliorated.

Work Cited

Yorkgitis, Brian K., and Gabriel A. Brat. "Postoperative Opioid Prescribing: Getting It Rightt." *The American Journal of Surgery*, Elsevier, 6 Feb. 2018, https://www.sciencedirect.com/science/article/abs/pii/S0002961017314794.

Sabesan, Vani J. "An Integrated Educational and Multimodal Approach to Achieving an Opioid-Free Postoperative Course after Arthroscopic Rotator Cuff Repair." *Science DIrect*, JSES International, Sept. 2021,

https://www.sciencedirect.com/science/article/pii/S2666638321000591.

Birnbaum, Howard G., et al. "Societal Costs of Prescription Opioid Abuse, Dependence, and Misuse in the United States." *OUP Academic*, Oxford University Press, 15 Apr. 2011, https://academic.oup.com/painmedicine/article/12/4/657/1869828.

"Iatrophobia (Fear of Doctors): Symptoms, Causes & Treatment." *Cleveland Clinic*, https://my.clevelandclinic.org/health/diseases/22191-iatrophobia-fear-of-doctors.

"Prescription Drug Abuse." *Mayo Clinic*, Mayo Foundation for Medical Education and Research, 19 Oct. 2018,

https://www.mayoclinic.org/diseases-conditions/prescription-drug-abuse/symptoms-causes/syc-20376813.

Prescription Drug Monitoring Programs: Evolution and Evidence. https://ldi.upenn.edu/our-work/research-updates/prescription-drug-monitoring-programs-evolution-and-evidence/.

"U.S. Opioid Dispensing Rate Maps." *Centers for Disease Control and Prevention*, Centers for Disease Control and Prevention, 10 Nov. 2021, https://www.cdc.gov/drugoverdose/rxrate-maps/index.html.

Chris Sweeney. "R For an Epidemic." *Harvard Public Health Magazine*, 24 Mar. 2020, https://www.hsph.harvard.edu/magazine/magazine_article/rx-for-an-epidemic/.