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WEST: (California, Nevada, Hawaii, Alaska)

 The primary drugs of abuse present in California, Nevada, Hawaii and Alaska are Oxycodone and Hydrocodone, as well as Heroin. All states of the region have access to these drugs by the Mexican Border. Mexico has been the route of transmission of opium poppy for South America since the 1900’s with Heroin being the most common. The lower priced access to these drugs at border cities has also increased the U.S.-Mexican border security.

      Oxycodone and Hydrocodone are scheduled II controlled substance drugs that have a high risk for addiction. Both drugs currently have a medical use for prescription in combination with other medication that treat moderate to severe pain. Common brand names for Oxycodone include Oxycontin, Roxicodone, and Xtampza ER. Current street names are Oxy, Oxycottons, Hillbilly Heroin and O.C. Common brand names of Hydrocodone include Norco, Vicodin, and Lorcet. Common street names include Hydro, Vikes or Vics. It is illegal to posses the drug without a valid prescription in the West region consisting of California, Nevada, Hawaii and Alaska. All age-groups have been affected by availability and has increased among all ethnic and economic groups.

      Heroin is a schedule I drug that is used for its euphoric effects. It is illegal to possess Heroine for recreational purposes and currently has no medical use in the U.S. Common street names include Dope, Hero, and Black Tar. The Socioeconomic history of Heroin includes the lower class: poor individuals. This is because individuals have inadequate care for being treated for chronic pain at publicly funded medical clinics. Another factor include limited access to rehab facilities and programs when it comes to getting help with their addiction. These patients also often tend to be associated with stress and depression which will lead to self medication. These patients often also don't know much information about these drugs and the dangers that come with it. The demographic age-group of people affected from Heroin is from 18-25.

 All pharmacies have laws and regulations in place regarding the oversight of medication inventory including opioids. For example, section 1715.65 of California’s pharmacy law states that there must be a physical count of all schedule II class drugs with an inventory reconciliation report submitted every three months. Hawaii, Alaska, and Nevada also have precautions and regulations in place such as not offering any inventory information over the phone and requesting to see the prescription before any information is given.

 Oxycodone is an opioid agonist with activity on the mu, kappa, and delta receptors. Like other opiates, once the drug binds to the receptor, adenylyl cyclase is inhibited, the neurons are hyperpolarized and the excitability of neurons decrease. The adverse effects of this drug are dry mouth, stomach pain, drowsiness, flushing, headache, and mood changes. Hydrocodone is also an opioid agonist. It binds to and activates the mu-receptor in the central nervous system. The adverse effects of hydrocodone are stomach pain, dry mouth, tiredness, headache, back pain, muscle tightening, difficult, frequent or painful urination, ringing in the ears, difficulty falling asleep or staying asleep, and uncontrollable shaking of a part of the body. Both of these drugs is considered dangerous with a high potential for abuse but less potential of abuse than Schedule I drugs. Heroin is a Schedule I drug with an extreme potential for abuse. The positive effects that users feel after intra-venous injection of heroin takes 7 to 8 seconds. This drug crosses the blood brain barrier very quickly, is hydrolyzed into 6-acytel morphine, binds to the receptors, and creates a euphoric feeling in the user described as a warm orgasmic rush all over the body. Some of the short and long term adverse effects are inflammation of the gums and bad teeth, depression, loss of appetite, insomnia, loss of memory and intellectual performance, constipation, cold sweats, itching, weakening of the immune system, coma, respiratory illnesses, muscular weakness or paralysis, and reduced sexual capacity and long term impotence in men. These opioid agonist drugs also affect the peripheral nervous system which is responsible for their constipating effects.

 The effects of opioids in the West are widespread and a major cause of overdose related deaths. So much so that California has a project named the “Death Certificate Project” where doctors are receiving letters in the mail if a patient under their care has died within the last three years after being prescribed opioids by them. This project aims to stop the opioid crisis of accidental deaths from prescription opioid overdoses. According to the National Institute on Drug Abuse, opioid related overdose deaths have remained constant in California for the past 20 to 30 years at an average of5 opioid related deaths per 100,000 people per year with a significant decrease in 2001. The numbers are similar for Hawaii. Nevada has an average death-rate of 13 people per 100,000 people for the last 30 years with a rise in 2011. The numbers are similar in Alaska with a rise of 15 deaths per 100,000 people in 2009.

 The way in which the government has intervened in helping the medical community be more aware of this crisis is by passing laws in these states which require doctors to consult medical databases that include information about patient’s medication. This law has been passed on Oct 2, 2018 in California. This helps the medical professionals pick up suspicious patterns or accidental deathly “cocktails” of medications prescribed by different doctors for the same person. The way in which doctors are responding is by adhering to these laws and being more informed, educated and aware about the habits of people and the potential of addiction and abuse of these drugs. The media and community have been successful in raising awareness and responding to this issue in the West. For example, in California, the Alameda County passed and ordinance requiring drug companies to pay for collection and disposal of unwanted drugs in the community. This was a challenge for the pharmaceutical companies and so it was brought up to the US Supreme Court. The county was victorious with a favorable Supreme Court ruling on May 26, 2105. This would not have been possible without media exposure of community efforts to rally against an issue they needed to find a solution for to better their community.

 Part of the reason why over-dose stories in California are common is because many celebrities reside there. Demi Lovato, a long time actress and singer, recently was treated for a heroin over-dose after 6 years of sobriety. She has openly said that she struggles with addiction and drugs and is actively working to better herself everyday. She is just one of many famous people who struggle with addiction, partly because of the lifestyle and culture that come with fame. Last summer in July of 2018, Demi Lovato was rushed to Los Angeles Hospital when she was found unconscious in her home after a night out for a friend’s birthday. The Hollywood article states that she was treated with the overdose treatment called Narcan. For those who follow the lives of these actors, actresses, and singers closely, we read about the impact these incidents have on the families, significant others, and the fans of these individuals. Many family members were shocked that these people are dying from their drug intake and abuse. They learn to adjust to their new lives without the person they loved and transform their sadness into positive energy teaching others about the signs of people struggling with drugs and how to help. They become advocates for situations like this. Many of these celebrities themselves don’t understand and are not aware of the effects of mixing stimulants and depressants such as various drugs and alcohol can have on the body. One drink too many can be fatal. In Lovato’s case, she was saved before it was too late and her family was by her side every step of the way. She is now publicly talking about her struggles and aims to inform people on the seriousness and even the difficulty people like her are facing in their personal and daily lives. They are normal people like us struggling from depression, bi-polar disorder, and other systemic or psychological disorders. Personally I felt very sad when I heard about this story because I have grown up watching and admiring Demi Lovato. She was a part of Barney and Friends and later was one of my favorite actresses on Disney channel before she became a famous singer with a real talent for composing and writing songs. I believe a factor that affected her lifestyle is the route that her life has taken her being in the public eye as well as having fame and fortune. The fact that her incident was publicized can be a learning lesson for us all about the dangers of opioid and drug abuse. It was also a wake up call to her friends who struggle with various addictions.

 As a future dental professional, it is important that I am aware of substance abuse and how they present in my dental chair. If I practiced in a region where the patients are known to abuse drugs, I would take a very detailed medical history asking the patient to list all the drugs that they consume whether prescribed or not. I would remind them that all information is confidential and that it is extremely important that health care workers know exactly what is entering the system of our patients because it may affect treatment. If they don’t list any medications, I wouldn’t stop there: I would verify verbally and ask again whether they take any medications and whether it was prescribed from a doctor or not. I do not know exactly what these patients are going through but I will try my best to find it in my heart to help them to the best of my abilities. All communication will remain judgment free and far from condescending. If a patient is abusing drugs, they may present with specific signs that I should be aware of such as increased heart rate and increased blood pressure, increased anxiety and irritability, pupillary changes such as pinpoint pupils, xerostomia, and general decay. I would include it in my treatment plan to make sure fluoride treatment is used in order to help the general decay caused by the xerostomia all opioid users face. I would never feel as if a patient is too far deep into their addiction to change, every conversation matters. I would inform them and educate them about the harm that they are doing to their bodies, it may serve as a reminder. I would tell them that the body can shut down if one night they had a drink too many with their normal drug abuse routine. The opioid and drug epidemic is continuing to increase so as a future dental professional, I hope to stay on top of this crisis because I do feel that the dental community has a large role in helping these patients achieve a better life.

Link to the article I used for the impact story: https://www.cnn.com/2018/08/01/entertainment/demi-lovato-overdose/index.html

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