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ASPS Summary on America's Addiction to Opioids

Opioids play a unique role in healthcare. They are considered among the most effective drugs for the relief of pain and suffering. Their use in the management of acute pain and chronic pain has become the standard of care in the US, and in most of the world. This has led to misuse, abuse, addiction, overdose, and death.

What exactly are opioids? They are a class of analgesic agents that include prescription pain relievers such as oxycodone, hydrocodone, and fentanyl; illegal drugs such as heroin, and products of the poppy plant (opium, morphine, codeine), are also included in this classification. Generally, prescription opioid treatment is safe when used correctly for short periods of time, however, regular use, even as instructed by a physician, can create a dependency. When misused or abused, opioids can be extremely dangerous and lead to death. The Centers for Disease Control and Prevention (CDC) recently reported that the incidence of opioid related overdoses has increased by 200% since 2000. In August 2016, the Surgeon General initiated the #TurnTheTideRx campaign to raise awareness about opioid addiction and call for an end to the opioid crisis.

How do opioids work? Opioids interact with receptors on nerve cells in the brain and nervous system. Opioid drugs reach these receptors by traveling through the bloodstream. Once there, the feelings of euphoria, tranquility, and sedation are produced. These pleasurable feelings may lead the patient to continue to take these drugs despite the development of serious side effects which can include dysphoria, somnolence, nausea and vomiting, respiratory depression, urinary retention and constipation, and an increased risk of falls and accidents.

The abuse of and addiction to opioids is a serious widespread issue that affects the health as well as social and economic welfare of all societies. A 2014 World Health Organization report estimated that 69,000 million people worldwide die from opioid overdose each year. The CDC reports that, from 1999 to 2016, the number of deaths involving opioids has nearly quadrupled. US Department of Health and Human Services' statistics show that, on average, 116 Americans died every day from a prescription opioid-related overdose in 2016. Several key factors have impacted the current state of misuse, including the growing number of prescriptions written, increasing acceptability among the population, and marketing to make the use of opioid pain medications more mainstream.

Physicians with good intentions may actually unknowingly be contributing to a problem that is often undetected until it's too late. They have a tool, their prescription pad, that can more aggressively treat patients' pain. Over time, this well-intended treatment can become dangerous. To make physicians aware of the issue with opioids, the CDC has issued a guideline on pain management that offers advice on how to safely and confidently prescribe opioids, how to use the non-opioid therapies, how to detect abuse or emerging addiction, and how to appropriately discuss these issues with patients.

Physicians are not alone in this unintentional epidemic. Individuals seeking pills often divert drugs from friends and family who have old or unused prescriptions in the medicine cabinet. When legally or diverted pills become too difficult or expensive to obtain, people turn to heroin because it is cheaper and sometimes easier to obtain. The average daily dose of heroin is now approximately \$4/ day.

Prescription opioids are selling on the street at an all-time high with oxycodone going for 1\$ per milligram. A CNN article titled, "Doctors must lead us out of our opioid abuse epidemic" states that 80% of new heroin users start off using pain pills. As such, the CDC encourages safe disposal of unused, old or expired prescriptions to prevent future misuse.

Addressing the abuse requires more than one strategy. A tool that is being used with moderate success in the US is the use of Prescription Drug Monitoring Programs (PDMP). PDMPs collect, monitor, and analyze electronically transmitted prescribing and dispensing data submitted by pharmacies and dispensing practitioners. These programs can vary by state but have the same goal in mind and are utilized by government officials for reducing prescription drug abuse and diversion. Prior to prescribing pain medications, physicians check the databases to confirm if any other pain medication prescriptions have recently been written for the same patient. This helps prevent "doctor shopping," which is the practice of visiting multiple physicians to obtain multiple prescriptions for drugs. Patients with this type of history are at high risk for addiction and overdose and may even be selling drugs illegally. While PDMPs are a good place to start, slow reporting times have limited the effectiveness of these programs in many states.

Some states have also mandated the restriction of narcotic prescriptions to a specific dose strength or to a set number of days for any patient. While policies such as this have the potential to decrease the potency and quantity of pills in the patient's home, they do little to address the management of chronic pain.

Patients with a chronic pain disorder on opioids as a form of long-term therapy usually have a Pain Therapist. The management of the chronic pain patient has now become a specialty unto itself. Before any procedure, a surgeon should consult the Pain Therapist for assisting in recommendations to address pre-operative pain management, management of break-through pain and interventions when the chronic pain patient appears to be out of control with pain management postoperatively.

Another helpful approach to curbing opioid prescribing is notifying physicians of their drug-dispensing habits. Aetna, one of the largest health insurance companies in the United States, is now actively contacting doctors whose prescribing behaviors are outside the norm. Aetna has begun collecting data supplied by pharmacies to run reports on the top opioid prescribers. Subsequently, the payer alerts physicians in the hopes that their ordering and opioid prescription refill habits will change once they see that they are the most frequent prescribers within their specialty.

Other Alternatives

If opioid pain medication is not an option for a patient, Physicianpractice.com suggests other treatment alternatives to opioids including: prescribing small quantities of the drug, access to naloxone (an antidote for opioid-related overdose), medical provider training, counseling and cognitive behavioral therapy, physical therapy, diet and lifestyle changes including exercising regularly, nerve blocks and electrical stimulation among others. Of note, when a prescription for opioids is written, the CDC is now recommending it should be for the lowest effective dose and for the shortest amount of time. Surgeons

have also found local anesthetic agents, regional blocks or oral-non-narcotic pain relievers extremely helpful in post-operative pain management.

The AMA has also weighed in, developing a short list of steps every physician can do to prevent opioid abuse, including educating yourself on managing pain and promoting safe, responsible opioid prescribing. They stress the importance of engaging patients in a conversation regarding their treatment options for chronic pain and discussion of the alternatives to opioids. If a prescription is the correct course of treatment, then an open dialogue about the benefits and risks must occur, and warnings regarding the potential for addiction should occur as well.

References:

1. http://www.who.int/substance_abuse/information-sheet/en/
2. <https://www.hhs.gov/opioids/about-the-epidemic/>
3. <https://www.drugabuse.gov/related-topics/trends-statistics/overdose-death-rates>
4. <https://www.cdc.gov/drugoverdose/data/overdose.html>
5. <https://www.cdc.gov/drugoverdose/index.html>
6. <https://www.ama-assn.org/delivering-care/reversing-opioid-epidemic>
7. <https://www.cdc.gov/drugoverdose/prescribing/guideline.html>
8. https://journals.lww.com/plasreconsurg/Fulltext/2017/10000/Managing_Opioid_Addiction_Risk_in_Plastic_Surgery.42.aspx