

THE COLONIAL LEGACY OF OPIOIDS

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Opioids are one of the biggest health concerns worldwide. Millions of people struggle with addiction and overdoses claim countless lives each year, Native Americans are the most disproportionately affected group. This high prevalence can partly be explained by the impact colonialism has had in the present. This problem in Native American populations should be taken seriously, while acknowledging the role of colonialism in it.

Opioids have not always carried the negative reputation they have today. Derived from the poppy plant, opium is produced when the plant's pod matures and fills with a morphine-rich sap which can be extracted. Throughout history, the poppy plant has been used for multiple purposes, including medicinal uses or association with deities. However, in 1729 China banned the use of opium for the first time. Even though the ban was put in place to reduce opium intake it had no such effect. It even led to the British taking notice and deciding to exploit the demands for opium. This led to a multitude of wars between the British and the Chinese. With a swift victory of the British, resulting in the emperor of China succumbing to their wants and lifting the ban on opium¹.

The British opium trade devastated China, and its effects can still be seen today on a worldwide level, aggressive marketing and poor oversight of pharmaceutical opioids have led to a severe addiction epidemic, with the highest rates being in the United States.

Research has shown that prevalence of opioid overdose is higher among indigenous populations. In 2017, there were 4,000 opioid-related deaths in Canada. Even though indigenous people represent just 2,6% of the population, they account for 10% of opioid overdose deaths. The mortality rate among people who have taken opioids was five times higher in indigenous people². The Centres for Disease Control reported that indigenous populations had the highest overdoses death rates in North America in 2020, with 42.5 deaths per 100,000³.

Firstly, we must explain how opioids can become so addictive. Opioid drugs bind receptors of the endogenous opioid system. Endogenous opioids regulate multiple physiological functions, such as pain relief, stress resilience and euphoria inductions. Occasional use of opioid drugs can transition into an opioid addiction (or opioid use disorder) by neuroadaptation in the endogenous opioid system, as well as other systems⁴.

At first, the usage of opioid drugs mostly affects the reward-circuitry in the basal ganglia. Opioids binding endogenous opioid receptors stimulate the release of dopamine from the ventral tegmental area to the nucleus accumbens, which gives a pleasurable feeling. Consistent use of opioid drugs also causes tolerance of opioid receptors, making it harder to reach the same euphoria and making the user less sensitive to natural reinforcements, such as sex or food. Neuroadaptations in the extended amygdala cause the user to experience more stress in absence of opioids. The user will experience negative feelings and physical symptoms in absence of the opioids, and the ability of opioids to remove these negative feelings becomes a strong motivator to consume opioids again. Eventually, neuroadaptations in the prefrontal cortex cause a decrease in executive functioning, which leads to more impulsive and compulsive behavior⁴.

The previously described neuroadaptations in the brain persist even after the user has stopped taking opioids, making the prevention of relapse hard. Opioid use disorder is now recognized as a chronic mental disorder, described in the DSM-5⁴. Therefore, we should see it as such, and take the high prevalence of opioid addiction in indigenous populations very seriously.

Secondly, we also must address the impact of opioids on society. The current opioid crisis has deep roots which can be linked to overprescription of prescription opioids and other opioid-based medicines over the past several decades. Contributing factors also include the illegal drug trade, as well as multiple socioeconomic issues. Despite the rise of opioid-related deaths worldwide, the US has the highest rate of opioid consumption per capita, and the highest number of opioid-related deaths. The high prevalence in Native Americans communities is due to historical trauma, poverty and social isolation. Historical trauma refers to the cumulative emotional and psychological wounding over generations resulting from massive

group trauma. For Native Americans, this includes centuries of colonization, forced relocation, and cultural suppression, to relief stress psychologically a lot of these community members turn to misuse of opioids⁵.

Socioeconomical status also plays a big role; those with limited access to quality healthcare are less likely to receive proper treatment for pain and addiction, which leads to higher rate of opioids misuse. Chronic pain resulting from physically demanding jobs in lower socioeconomic situations as well as fewer economic opportunities can drive individuals to seek relief through opioids. A lack of access to treatment facilities and mental health resources in rural areas, further contribute to higher opioid misuse rates⁵.

The social impact of opioids is extensive, leading to financial strain, disrupted employment, increased crime, child welfare issues, as well as putting a strain on emergency services and healthcare system. Beyond these immediate consequences, the social cost of opioids usually extends over future generations as well, since children who grow up in homes affected by addiction may be more susceptible to substance abuse themselves⁵.

The opioid crisis disproportionately impacts Native Americans; however, it doesn't stop there. Other minorities are victims of the opioids crisis as well. African Americans, for instance, are deeply influenced by the legacy of slavery, segregation, and systemic racism, which contributes to ongoing socioeconomic disadvantages directly linked to higher rates of opioids misuse. Similarly, Hispanic communities, which historically had lower rates of opioid abuse than other ethnicities, have recently experience a sharp rise in opioid-related deaths. This increase is exacerbated by challenges in accessing early intervention and treatment, along with other contextual factors such as cultural and linguistic barriers.

Despite all these challenges, various social movements are being implemented to address these issues, such as support groups, harm reduction programs, education and awareness campaigns, and the implementation of prescription drug monitoring programs (PDMPs). All these measures are playing crucial roles in combating the opioid crisis, and while curtailing prescription is a very important factor, we also need to ensure there are legal mandates that bring support to healthcare providers while protecting communities⁵.

To sum it all up, opium is a drug with significant biological and social impact. Historically, the British fought and won the Opium Wars against China in the 19th century over opium trade. Biologically, opioid use disorder (OUD) causes the dysregulation of the endogenous opioid system which is responsible for pain reliever, stress resilience and euphoria induction. Socially, this crisis has been fuelled by prescription and overprescription of opioids and the illegal drug trade. OUD prevalence is skewed among certain ethnicities, particularly affecting Native Americans, but also African Americans and Hispanic communities. And it's more common in lower socioeconomic classes which could be caused by limited access to healthcare. The impact of opioid use disorder on society its vast, leading to financial issues, higher crime rates, and children at a higher risk of developing OUD later in life.

The rise of opioid use has devastating consequences, not just for those struggling with addiction, but also for families and communities that surround them. However, there is hope. Multiple groups are actively working on harm reduction, support groups, awareness campaigns and education initiatives. By working together on these fronts there is a greater chance of effectively addressing the high prevalence in indigenous populations, as well as global opioid crisis.

Sources:

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