

## Pharmacy Ethics And The Opioid Crisis

<sup>1</sup>-Dr.Bodour Mofarh Alseraihi , <sup>2</sup>-Wael Abdu Ibrahim Bakkari ,  
<sup>3</sup>-Faisal Sair Mohamed Almutairi , <sup>4</sup>-Saleh Awad Alshamrani ,  
<sup>5</sup>-AMER FAQIH HASSAN ALRIBI , <sup>6</sup>-Manal Abdulaziz Alsharif ,  
<sup>7</sup>-Riydh Mohammed Matar Alzahrani , <sup>8</sup>-Saeed Abdullah  
Alzahrani , <sup>9</sup>-Fawaz Ahmad Saeed Alomari , <sup>10</sup>-Mohammed  
Ali Abo Aleid , <sup>11</sup>-Areej Omar Basunaid , <sup>12</sup>-Razan Khalid  
Rambo

<sup>1</sup>Pharmacist Althager Hospital.

<sup>2</sup>Pharmacy technician Al-Thagerr Hospital.

<sup>3</sup>Pharmacist technician Althagar Hospital.

<sup>4</sup>Pharmacy technician Althager Hospital.

<sup>5</sup>Pharmacist technician Althagar Hospital.

<sup>6</sup>Pharmacy technician Althager hospital.

<sup>7</sup>Pharmacist technician Althagar hospital.

<sup>8</sup>Pharmacist. Eradah and mental health complex - mental health services.

<sup>9</sup>Pharmacist technician Eradah complex and mental health-mental health services.

<sup>10</sup>Pharmacy Technician Eradah and mental health complex - mental health services.

<sup>11</sup>Pharmacist King Abdulaziz Medical City- Jeddah.

<sup>12</sup>Pharmacist King Abdulaziz medical city.

### Abstract

The opioid crisis, which is still taking lives at a never-before-seen rate and causing a devastating array of avoidable morbidity, is one of the worst failings of our contemporary healthcare system. This issue has developed over several decades, even if the availability of extremely powerful synthetic opioids has increased the crisis's urgency for both patients and communities. Because of their wide accessibility, in-depth medication knowledge, and integration into a variety of healthcare settings, chemists are in a position to provide numerous viable answers. Pharmacists

have the ability to combat the opioid issue with purposeful and effective actions. While some chemists may start by carefully considering the language they use when speaking to and discussing patients with substance use disorders, others may be in a position to introduce novel and extensive pharmacist-led therapeutic services. In order to maximize patient results, it is imperative to tackle the ineffectual laws, regulations, and policies that adversely affect pain and addiction treatment. This will enable the widespread dissemination of evidence-based treatments. It is imperative that chemists take a strong stance in favor of eliminating regulations that hinder advanced clinical treatment or that support patient abuse and desertion. In order to deploy resources effectively, there should be support for ongoing research on pain and opioid use disorder treatments and services, as well as the effects of harm reduction techniques and pharmacist-led clinical services.

**Key words:** pharmacist, pharmacy, opioid, overdose, pharmacy practice.

### **Introduction**

The study of morality and immorality is known as ethics. When a difficult decision between conflicting moral needs to be taken, an ethical dilemma occurs. This post aims to discuss some ethical issues surrounding the present prescription opioid usage crisis. Specifically, it addresses the moral conundrum of how to treat chronic non-cancer pain in patients effectively without running the risk of contributing to opioid pill addiction [1].

There have been few thorough studies on the efficaciousness of opioid treatment for pain lasting longer than three months, yet opioids were implicated in approximately two thirds of these deaths. Overdoses on opioids have been linked to both economic downturns and health inequities in rural areas. Nevertheless, the current opioid problem is also a result of additional ethical considerations [1].

Many prescribers lack sufficient knowledge about when to use opioids appropriately to manage pain. Opioids were mostly prescribed by surgeons before 1980 to address pain associated with cancer or to manage acute postoperative pain. However, in the 1980s, "thought leader" in pain management Russell Portnoy, M.D., started giving seminars advocating for a greater use of opioid painkillers in the treatment of chronic non-cancer pain, claiming that there was no dosage of opioids that was too high. In support of his claim that this case series demonstrated the efficacy of opioids in treating chronic pain, Portnoy also referenced his own retrospective analysis of 38 cases in which patients' non-cancer chronic pain was managed with the drug [1].

When opioids act on the mu opioid receptor, respiration slows down to the point where the brain and other essential organs are not getting enough oxygen. This is known as an opioid overdose. If left untreated, this hypoxic state can be devastating and result in permanent cell death in a matter of minutes. The Food and Drug Administration (FDA) originally approved naloxone in 1971, and it can be used to reverse an opioid overdose. Naloxone reverses the effects of opioids by quickly displacing them from the brain's mu receptors, allowing for the restoration of regular breathing [2].

The vast majority of pharmacists questioned indicated that they firmly believed in the gravity of the opioid issue and the possible role that pharmacists should play in providing naloxone and patient education. This is significant because chemists in a variety of practice settings can play a wide range of roles in mitigating the opioid crisis. These include, but are not limited to, naloxone dispensing, syringe sales and exchange, providing medically assisted treatment, prescription assessment and monitoring, and working in conjunction with prescribers to lower the number of opioid prescriptions [2].

Beyond the sheer quantity of overdose deaths, there is a greater problem with opioid usage and a more complex set of effects. At its peak in 2012, doctors prescribed 259 million opioid painkillers in the US, or one for each adult citizen. This was the number of opioid prescriptions written in the US. Retail pharmacies dispensed

“just” 215 million opioid prescriptions by the year 2016. 91.5 million Americans are reportedly using opioids like OxyContin and Vicodin, according to the National Institute on Drug Abuse. With prescription opioids, at least 2 million individuals suffer from an opioid use disorder (OUD) [3].

The greater societal challenges of economic development, income inequality, educational opportunities, environmental conditions, and access to social and health services must be taken into consideration while developing long-term solutions to the opioid crisis. Then and only then will drug misuse prevention and treatment plans have a genuine possibility of working [3].

In order to decrease opioid-related death and morbidity, it is imperative that opioid stewardship programs incorporate harm reduction techniques in addition to supply reduction efforts. Harm reduction strategies focus more on minimizing the negative impacts of a risky behavior—such as consuming illegal drugs—than on trying to force abstinence from it. Patients who use illegal substances and injectable drugs, either recently or currently, are among the most vulnerable to the negative effects of substance use and are frequently the target of these therapies. Pharmacists should become vocal supporters of harm reduction efforts and understand the unexpected consequences of applying supply reduction measures in isolation [4].

#### **Literature review**

Since the "fifth vital sign" pain was being treated, prescription pill overdoses have increased, contributing to the opioid crisis, which started in 1990. 2010 saw an upsurge in the epidemic as more people died from heroin usage. Manufactured fentanyl started to cause a considerable number of overdose deaths in 2013. Increasing access to resources for rehabilitation and treatment is one of the objectives of the National Institute of Health and the US Department of Health and Human Services, yet many patients still face barriers to therapy when seeking care [5].

In order to address the opioid epidemic, more providers treating drug use disorders are required. Access to medicine for opioid use

disorder (MOUD) remains a significant barrier to care. Forty to sixty percent of patients with opioid use disorder who successfully complete treatment may relapse, therefore access to ongoing care is essential to avoiding hospital stays and further problems [5].

Methadone, buprenorphine, and naltrexone are among the medication-assisted treatment (MAT) alternatives available to patients with opioid use disorder (OUD). Naloxone and nonpharmacological therapy like counselling can be used to stop or reverse an opioid overdose. Methadone and buprenorphine have the potential to 50% reduce opioid overdose-related mortality. Access is a major obstacle to care, even though MOUD is crucial for enhancing survival and lowering the chance of relapse. Patients with an opioid use problem are limited to receiving methadone at an opioid treatment program (OTP) [5].

### **Opioid**

In actuality, opioids are frequently used to treat postoperative pain and are rarely discontinued unless clearly harmful, potentially fatal side effects are detected, the patient's recuperation is being hampered, or both [6].

Alternative pathways and pharmaceuticals have been found to enhance postoperative pain management treatment options. One such medication is gabapentinoid agents, which are developed as adjuvant therapies to lessen the requirement for large postoperative doses of pain medication. Due to this, there are now less opioids in the body and fewer side effects as a result. This allows for lower analgesic dosages with shorter dosing intervals and a decreased risk of contributing to long-term opioid dependence. The recent state-level changes that have restricted the quantity and number of opioid prescriptions written in the context of acute pain management in the days following surgery are fantastic, realistic tactics to address some of the current components of our opioid epidemic [6].

### **Opioid Crisis**

The opioid crisis of the present day ranks among the worst in US public health history. Its shifting nature, diversity in geography and population, range of underlying reasons, and severity of the negative consequences linked to opioid use and opioid use disorder (OUD) have made it challenging to provide an effective solution. In addition, when taken appropriately, opioid analgesics—which are largely responsible for the opioid epidemic—have therapeutic benefits. Because they cannot be outlawed, unlike illegal narcotics, this makes it more difficult to regulate their supply [7].

Rising rates of opioid prescriptions coincided with the recognition in the 1990s of undertreatment of pain as a significant clinical issue and the false assumption, predicated on anecdotal evidence, that those experiencing pain did not have a higher chance of developing opioid use disorder (OUD). While less than 10% of people who receive an opioid prescription go on to acquire OUD, significant increases in the number of opioid prescriptions written unavoidably exposed more people to opioids, which in turn increased the prevalence of OUD [7].



Figure 1. opioid use disorder (OUD) [17].

Opioids have both negative (avoid pain) and positive (increase reward) reinforcing effects. These interactions cause the drug to

be associated with certain events, leading to conditioning. Opioid administration on a regular basis simultaneously causes physiological changes that lead to tolerance and physical dependency. When opioids are abused, their potency must be increased or switched to more stronger opioids, such fentanyl, in order to reap the rewarding benefits. This means that raising the dose of opioids is necessary to maintain the same levels of analgesia [7].

### **How to decrease Opioid Crisis**

Opioid prescription practices can be improved by a number of actions. Teaching patients and physicians is the first step. It's critical to manage patients' expectations, such as informing them that some pain is normal following surgery, and to discuss with them objectives other than pain management, such enhancing functional status. Changes in pain treatment reimbursement regulations are necessary because insurers frequently provide insufficient coverage for nonpharmacologic pain treatments like physical therapy. Additionally, as many patients with opioid use disorder also have chronic pain, there is a need to effectively integrate addiction medicine with pain care. If doctors who manage pain fail to treat patients who show symptoms of opioid dependence, that is the worst possibility. On the other hand, doctors are required to either treat dependence (for example, by administering buprenorphine) or establish a direct connection to specialized treatment [8].

Reducing fatality rates has been linked to efforts to modify opioid-overdose regulations in several jurisdictions, such as Good Samaritan laws and expanded access to naloxone. Nonetheless, restrictive laws pertaining to the distribution and use of opioids are still commonplace, which exacerbates the issue of their illicit sale on the black market. Because of the negative legal ramifications of opiate usage during pregnancy, which discourage women from seeking treatment and harm patient-physician interactions, the criminalization of opioids contributes to a severe stigma against specific societal groups, including pregnant women. Even though prescription rates are lower in poorer regions, the devastating societal impact of opioids directly impacts underprivileged families since opioid-related mortality are connected with poverty [9].

### **Ethical Consequences of Opioid Regulation**

Aiming to do good, nonmaleficence (do not inflict damage), autonomy (self-determination), and fairness (ensuring acts are a fair use of societal resources) are the four main foundations of ethics. Utilitarianism is a corollary principle that helps us assess if a particular activity is beneficial to the majority of society. The main regulatory concerns surrounding the prescription of opioids are discussed here, along with a methodology for analysis. Since we are unable to handle every attempt to address this situation, we concentrate on specific policies that have an impact on prescribers [10].

Nonmaleficence, or the duty to cause no harm, is another moral obligation. When it comes to the prescribing of opioids, there are two sides to the no maleficent argument. First off, a patient's healing and ability to function may be hampered by a physician who fails to appropriately manage postoperative pain. Opioids are sometimes required to alleviate pain, even when multimodal treatment techniques can also help. On the other hand, a doctor has harmed a patient if a painkiller prescription results in addiction, drug abuse, or even death. As such, using general laws to restrict the quantity and frequency of opioid prescriptions can make it challenging to achieve nonmaleficence [10].

### **Role of pharmacy in opioid crises**

The chemist's actions, according to prescribers, saved a significant amount of time, enabling them to handle more difficult and urgent cases. The cost savings associated with adding a chemist to prescriber units may be partially offset by this efficiency improvement. As a result of improved adherence to guidelines and individualized treatment programs that helped to better manage patients' expectations and lessen stigmatizing behavior towards patients and anxiety towards opioid prescribing, the other professionals involved reported feeling more confident about the treatment plans. The authors also pointed out that decreasing the number of prescriptions for needless opioids may help lower the percentage of medications left over after surgery or discharge. This is significant since the risk of opioid abuse is increased by huge amounts of leftover dosages [11].



In a variety of settings and procedures, the inclusion of chemists in interdisciplinary teams has proven beneficial. These include treating patients who are deemed more vulnerable or who have a history of addiction or misuse, as well as participating in physical, mental, and dental health interactions. The follow-up care of patients for many chronic health disorders is currently shared by chemists. The use of shared care by several clinicians has been shown to improve patient safety and effectiveness of therapies, as well as access to necessary services [11].

In several of the trials that were analyzed, chemists had previously received additional training on structured interview procedures and recommended practices for treating pain. One potential obstacle to putting the outlined models of care into practice in the real world is a lack of expertise in pain and opioid management. Low scores in several areas of pain management, such as patient communication, have been observed by a number of publications evaluating chemists' expertise [11].

Because of the risk of spreading the disease, people with opioid use disorder (OUD) who were hesitant to attend a clinic during the epidemic may have visited pharmacies more frequently than regular treatment facilities. Community pharmacy practice can be expanded through possibilities such as OUD screening, education, and treatment referrals. Pharmacy students can discuss OUD risk and treatment with their peers. OUD education and screening have advantages for better provider-community engagement, even if they are not currently covered by insurance and may add to a chemist's burden. Pharmacy technicians, student pharmacists, and/or trainees may be used as care extenders by pharmacists, even though they haven't been discussed in the literature yet [12].

Given that a person's decision to seek and continue treatment for OUD is influenced by a number of circumstances, chemists can utilize motivational interviewing techniques to find chances for intervention and care. To improve patient communication, chemists can benefit from resources and training on motivational interviewing, Screening, Brief Intervention, and Referral to

Treatment (SBIRT) methods that are particular to OUD. It is critical to establish connections between patients with OUD and medical and behavioral care resources within the community or health system, as these patients may have intricate and urgent concerns that fall outside the purview of a chemist's practice [12].

### **Prescription drug monitoring programs (PDMP)**

Prescription drug monitoring programs (PDMPs) are a useful tool used by chemists to identify inadvertent prescriptions, prevent opioid diversion, and track down indications of opioid abuse. To monitor the prescription and dispensing of prohibited substances, prescribers and chemists use the PDMP, a state-based electronic database. Details such as the prohibited medications prescribed, their dosage, the recipient, and the prescriber are gathered from the pharmacy. By teaching patients about the dangers of opioid use, appropriate pharmaceutical storage and disposal, and the repercussions of sharing prescriptions with someone else, chemists can go beyond their usual patient counselling duties [13]. Furthermore, a lot of chemists are able to provide naloxone, an opioid antagonist that is useful in treating respiratory depression brought on by opiate usage. This can help a friend, family member, or prospective bystander avoid dying from an opioid overdose [14].

Expertise-trained and certified chemists create, execute, oversee, and adjust evidence-based, pharmacotherapy-focused outpatient drug use (OUD) care plans within fully integrated interdisciplinary care teams. A number of state-based collaborative practice agreements have the capacity to assign chemists the direct management of opioid use disorder (MOUD) drug regimens. Ideally, waiver training—which is now limited to physicians, physician assistants, and nurse specialists—and the option to become independent OUD practitioners through provider status should be championed by chemists. Studies have demonstrated that chemists can successfully interact with OUD patients to enhance their results. Patients have also expressed satisfaction with the inclusion of a chemist in their OUD therapy regimen [15].

Pharmacists are faced with a challenging task of maintaining public safety from opioid diversion while also ensuring that those who require these drugs for acute or chronic pain management can obtain them without difficulty and are not labelled as "addicts" or subjected to stigma. Distinguishing between compulsive drug seeking, which is a characteristic of behavioral dysregulation of addiction, and physical dependence on opioids, which refers to the tolerance and withdrawal observed in almost all chronic opioid use, can be challenging [16].

Despite the fact that pharmacists have not traditionally been associated with intervention, there is no reason why they shouldn't offer information about available treatment options and encourage customers to take advantage of them. Similar to this, the U.S. Department of Health and Human Services is pushing a wider spectrum of medical professionals and public safety officers to connect individuals with treatment or at the very least suggest treatment when the chance arises, including following the administration of naloxone to reverse overdose [16].

### **Conclusion**

In various practice contexts, chemists must constantly decide how to manage a patient's chronic pain in a way that is both appropriate and ethically acceptable while also avoiding accidentally encouraging the development of opiate addiction. It is crucial for chemists to go above and beyond in order to maintain open lines of communication with prescribers and patients throughout the treatment process, in an effort to curb the current opioid abuse crisis. If we are to find answers to this epidemic, chemists, prescribers, and other healthcare professionals need to address the ethical aspects of the opioid abuse crisis. Throughout the spectrum of care, chemists can support continued efforts in opioid stewardship, harm reduction, and the treatment of opioid use disorder (OUD). While efforts to repair the harm that prescription opioids have caused are justified, focusing solely on this part of the problem is naive. In addition, initiatives to lessen the negative effects of ongoing opioid use—both medical and nonmedical—as well as the availability of evidence-based and easily accessible OUD

treatment are required. In actuality, treatment success and quality of life can be impacted by the terminology we choose to describe our patients and their conditions.

## References

1. Stratton TP, Palombi L, Blue H, Schneiderhan ME. Ethical dimensions of the prescription opioid abuse crisis. *American Journal of Health-System Pharmacy*. 2018 Aug 1;75(15):1145–50. doi:10.2146/ajhp170704
2. Blue H, Hawthorne AN, Melgaard K, Dahly A, Lunos S, Palombi L. Pharmacist involvement in combating the opioid crisis: A mixed-methods approach revealing conflicting perceptions. *JACCP: JOURNAL OF THE AMERICAN COLLEGE OF CLINICAL PHARMACY*. 2019 May 21;3(1):21–9. doi:10.1002/jac5.1124
3. Rothstein MA. Ethical responsibilities of physicians in the opioid crisis. *Journal of Law, Medicine & Ethics*. 2017;45(4):682–7. doi:10.1177/1073110517750606
4. Coon SA, Hill LG, Hutchison RW, Arnold LM, Jarrett JB, Ottney AR, et al. Mobilizing pharmacists to address the opioid crisis: A joint opinion of the ambulatory care and adult medicine practice and research networks of the American College of Clinical Pharmacy. *JACCP: JOURNAL OF THE AMERICAN COLLEGE OF CLINICAL PHARMACY*. 2020 Oct 6;3(8):1493–513. doi:10.1002/jac5.1331
5. Kosobuski L, O'Donnell C, Koh-Knox Sharp CP, Chen N, Palombi L. The role of the pharmacist in combating the opioid crisis: An update. *Substance Abuse and Rehabilitation*. 2022 Dec;Volume 13:127–38. doi:10.2147/sar.s351096
6. Vadivelu N, Kai AM, Kodumudi V, Sramcik J, Kaye AD. The opioid crisis: A comprehensive overview. *Current Pain and Headache Reports*. 2018 Feb 23;22(3). doi:10.1007/s11916-018-0670-z
7. Volkow ND, Blanco C. The Changing Opioid Crisis: Development, challenges and opportunities. *Molecular Psychiatry*. 2020 Feb 4;26(1):218–33. doi:10.1038/s41380-020-0661-4
8. Saloner B, McGinty EE, Beletsky L, Bluthenthal R, Beyrer C, Botticelli M, et al. A public health strategy for the opioid crisis. *Public Health Reports*. 2018 Nov;133(1\_suppl). doi:10.1177/0033354918793627
9. Stoicea N, Costa A, Periel L, Uribe A, Weaver T, Bergese SD. Current perspectives on the opioid crisis in the US Healthcare System. *Medicine*. 2019 May;98(20). doi:10.1097/md.0000000000015425

Special Issue On Multidisciplinary Research

10. Lajam CM, Cename J, Hutzler LH, Bosco JA. Ethics of Opioid Prescriber Regulations. *Journal of Bone and Joint Surgery*. 2019 Oct 9;101(23). doi:10.2106/jbjs.19.00437
11. Samaha N-T, Vanier M-C, David P-M. Pharmaceutical practices before and throughout the opioid crisis: A scoping review. *Journal of the American Pharmacists Association*. 2020 Nov;60(6). doi:10.1016/j.japh.2020.03.026
12. Mohammad I, Berri D, Tutag Lehr V. Pharmacists and opioid use disorder care during covid-19: Call for action. *JACCP: JOURNAL OF THE AMERICAN COLLEGE OF CLINICAL PHARMACY*. 2021 Nov 8;5(2):203–13. doi:10.1002/jac5.1556
13. Thakur T, Frey M, Chewning B. Pharmacist services in the opioid crisis: Current practices and scope in the United States. *Pharmacy*. 2019 Jun 13;7(2):60. doi:10.3390/pharmacy7020060
14. Adams AJ, Weaver KK. The continuum of Pharmacist Prescriptive Authority. *Annals of Pharmacotherapy*. 2016 Jul 20;50(9):778–84. doi:10.1177/1060028016653608
15. Bratberg JP, Smothers ZP, Collins K, Erstad B, Ruiz Veve J, Muzyk AJ. Pharmacists and the opioid crisis: A narrative review of Pharmacists' practice roles. *JACCP: JOURNAL OF THE AMERICAN COLLEGE OF CLINICAL PHARMACY*. 2019 Aug 16;3(2):478–84. doi:10.1002/jac5.1171
16. Compton WM, Jones CM, Stein JB, Wargo EM. Promising roles for pharmacists in addressing the U.S. opioid crisis. *Research in Social and Administrative Pharmacy*. 2019 Aug;15(8):910–6. doi:10.1016/j.sapharm.2017.12.009
17. The opioid crisis: Policy Solutions that could make an impact [Internet]. [cited 2024 Mar 6]. Available from: <https://knowledge.wharton.upenn.edu/article/opioid-crisis-policy-solutions/>