



# Occupational Therapy and the Opioid Epidemic: Recognizing the Need to Address Mental Health Comorbidities in Resolving Opioid Substance Abuse

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## Abstract

The incidence of opioid abuse internationally, and notably in the United States, has reached an admitted crisis level. While meaningful attempts have been made across all healthcare disciplines to address this tragedy, the primary emphasis within these attempts has been limited to the management and treatment of pain as an underlying causal agent. Unfortunately, attention toward the identification and treatment of associated mental health syndromes, specifically those acknowledged to have a concomitant connection with opioid abuse/addiction, has been severely lacking. Occupational Therapy, however, is one profession uniquely prepared to respond to this crisis through the acceptance of a co-morbidity treatment model stemming from its foundational roots in mental health, its contemporaneous philosophy, and its current treatment stratagems.

**Keywords:** Opioid Epidemic; Pain; Opioid Drugs; Comorbidities

## Introduction

The incidence of opioid abuse internationally, and notably within the United States, has reached epidemic levels over the course of the past three or so decades, impacting all segments of society [1-3]. In the US, this crisis arose in three relatively distinct waves [2]. The first wave began in the early to mid-1990's with the advancement of pain as the "fifth vital sign", along with that of body temperature, blood pressure, pulse, and respiratory rate. Consequently, the need to assess and treat or manage pain quickly rose in importance among healthcare practitioners whereby the detection of any atypical level of pain was readily accepted as confirmation of an existing symptomatic condition that in many cases required urgent treatment response. At the same time, an assortment of opioid-based medicinal analgesics was aggressively marketed across the nation. Though initially promoted for treatment of cancer-related pain, by

the year 2000 the majority of people using these medications were doing so for a wide range of non-cancer related health conditions. The result was an expansive overreliance on these opioid drugs, compounded by wide-spread abuse and addiction [4,5].

The second wave started around 2010 with an escalation in the use of heroin as a relatively accessible and frequently less costly, though recognizably illegal, alternative to opioid-based prescription medications [2]. A third wave of opioid substance abuse began shortly afterwards with the manufacture of and comparatively easy access to a variety of new and highly potent synthetic opioids, such as fentanyl and the ultra-potent carfentanyl [2]. The result of both waves was an escalation in the number of deaths stemming from uncontrolled abuse of these street drugs.

Unfortunately, given the experiential trauma arising

from the physiological and psychological distress among those abusing opioid substances, the prospect of an overdose scenario exists. Those with highest risk for overdose include individuals with toxic opioid dependence, particularly those who consume prescription opioids in high doses and/or in combination with other sedating substances [6]. Specifically, one out of three substance overdoses across the US has been shown to involve the use of some form of an opioid [7]. Government figures place the national opioid overdose death toll in 2017 at 47,600, or slightly over 130 deaths per day [8]. Overdose fatalities that same year from fentanyl and fentanyl analogs (other synthetic narcotics) were estimated at 28,400 [9]. Additional figures show nearly 494,000 individuals had used heroin in 2017, resulting in 81,326 emergency department visits stemming from its use [10].

This national crisis has been viewed primarily as a result of the overprescribing of opioid medications for “pain management” triggering widespread addiction, coupled with intensification for those individuals abusing these substances to selectively “self-medicate” and heighten the addiction through ready access to those opioid-based street drugs mentioned as above. Consequently, the primary emphasis in the treatment of opioid addiction has been a restricted focus on managing pain without an over-reliance on the use of highly addictive opioids [11-15]. Yet, while this focus on pain and pain management, including concern over the use of opioid-based medications as tenable yet problematic pain controlling substances, is essential, address of the issue of opioid abuse is significantly more complex than this singular minded attentiveness toward pain – it necessitates address of acknowledged “comorbidities.”

### Opioid Abuse and Mental Health Comorbidities

Comorbidity “...describes two or more disorders or illnesses occurring in the same person. They can occur at the same time or one after the other. Comorbidity also implies interactions between the illnesses that can worsen the course of both” [16]. However, this combination does not suggest the unpretentious existence of two disparate syndromes. On the contrary, the interactive nature of two or more (comorbid) syndromes tends to create a more unique disorder-one that likely presents with an increase in the number and complexity of symptoms while demonstrating an increased resistance to standard treatment protocols [17]. As a result, comorbidities have the tendency to become chronic or long-term in duration. Moreover, because of the limited focus of most healthcare evaluation protocols, one of a client’s comorbid conditions is likely to be ignored or go undetected and not fully addressed.

Research on opioid use, opioid substance abuse, and opioid addiction has demonstrated a robust relationship

between those behavioral engagements and a diverse assortment of analogous mental health syndromes, i.e., mental health comorbidities. For example, Davis, et al. [18] found that over half of all opioid prescriptions are consumed by those adults with mental health disorders, even though they represent only one-sixth of the US population.

Mood and anxiety disorders have repeatedly been shown to coincide with opioid dependence/addiction disorders [19-22]. Utilizing a process incorporating negative binomial generalized estimating equations, Foley, et al. [23] confirmed an association between percent of state populations reporting depression diagnoses and number of opioid analgesic-related deaths. Specifically, they found that “A one percent point increase in state-level depression diagnoses was associated with a twenty-six percent increase in opioid analgesic-related deaths.” Likewise, Seal, et al. [20] found that among US veterans of military campaigns in Iraq and Afghanistan, those veterans with aberrant pain diagnoses and with specific mental health diagnoses, e.g., depression, anxiety, or PTSD, were significantly more likely to receive opioids, present with high-risk opioid use, and experience adverse clinical outcomes than those with no mental health diagnoses. In addition, those veterans with PTSD were more likely to receive higher-dose opioids, use two or more opioids concurrently, and readily obtain early opioid refills [20].

Desai, et al. [24] determined that among elderly breast cancer survivors using adjuvant endocrine therapy (AET) regimens, opioid use was significantly higher for those women diagnosed with mental health comorbidity, especially those presenting with depression and anxiety. Similarly, Brooks, et al. [25] found that older adults with severe depressive symptoms were considerably more likely to be taking high-potency opioid medications than those older adults not presenting with such symptoms.

A comorbid relationship between mental health disorders and opioid abuse has also been found among adolescents. Quinn, et al. [26] for example, found that: “Adolescents with a range of prior mental health conditions and treatments had substantially higher rates of transitioning from initial opioid receipt to long-term opioid therapy...Long-term opioid therapy rates were low among commercially insured adolescent opioid recipients overall but were substantially higher among those with preexisting mental health conditions and treatments” [26].

Consequently, response to and treatment of opioid abuse patently requires more than the historically singular approach focusing on pain management; it requires focus on and address of acknowledged comorbidities, particularly mental health syndromes and disorders [27-29]. Unfortunately, such comorbidities, while greatly impacting opioid substance use

and abuse, tend to be overlooked and/or not attended to. As Sartorius, et al. [17] realistically asserts: "Specialists in disciplines other than psychiatry and general practitioners avoid making a diagnosis of mental illness – partly because of their uncertainty about the diagnosis and treatment of psychiatric disorders and partly because they would like to avoid the perceived stigmatization of their patients that occurs when they are labeled as 'mentally ill'"

### **Occupational Therapy, Opioid Substance Abuse, and Mental Health Comorbidities**

The roots of occupational therapy lie in mental health as do the profession's early practice models [30-32]. Moreover, given national accreditation standards in the United States requiring occupational therapy and occupational therapy assistant educational programs to provide instruction specific to an understanding of mental and cognitive functioning as well as training in responsive therapeutic intervention strategies, graduating practitioners possess a foundational background in these key opioid "comorbid areas".

Occupational Therapy's importance in the treatment of opioid abuse and addiction is highlighted in its inclusion in the 2018 "Substance Use-Disorder Prevention that Promotes Opioid Recovery and Treatment for Patients and Communities Act" passed by the US Congress [33]. Sadly, this act tends to over-emphasize the management of pain by healthcare professionals as the primary treatment regimen in the care of those suffering from opioid substance abuse. An occupational therapy approach to substance abuse, on the other hand, is one that would include a focus on pain management when applicable, but one which by professional definition more expectantly examines routines, habits and behaviors, especially those which in some way involve the abuse behavior as well as the perceived or admitted physical and psychological desire for the addictive substance, along with the incorporation of a unique client-centered approach [34,35]. Moreover, an occupational therapy approach is one that assists in filling any "void" that results if the addictive substance is removed immediately or slowly reduced in amount, concentration, and/or frequency thereby creating a void or vacuum in the individual's life. However, in mounting an effective response to the basic substance abuse, it is critical for occupational therapy practitioners to take into consideration all components germane to the addiction: the initial reason(s) for use of the substance; current access to targeted opioid substances; determination of any on-going motives promoting the abuse; the physical addiction itself; existence of pain and need for pain management; and, importantly, the prospective co-diagnosis of any mental health disorder(s). Moreover, because of the documented association between opioid abuse and mental health disorders, occupational therapy clients known to be or

suspected of abusing opioids should be concurrently screened for presence of such disorders, principally for symptoms of depression, anxiety, and/or other mood disorders [18,20].

An occupational therapy approach should be one that in addition to the aforementioned components does include an enhanced focus on address and treatment of any mental health co-morbidities given the profession's foundational roots in that area as well as the extensive array of research evidence confirming co-symptomatology of substance abuse/addiction disorders and assorted mental health syndromes. Yet, while such occupational therapy approaches do exist and have received significant support in the professional literature, practicing therapists, including those in mental health practice settings, tend not to regularly adopt such approaches [36]. Therapists all too often fail to provide equal weight of focus toward address of mental health comorbidities as they do toward the management of pain and/or other more traditional or contemporary occupational therapy physical/bodily directives.

Sadly, when choosing to concentrate primarily or exclusively on pain management and/or other non-mental health function areas, occupational therapists and occupational therapy assistants not only demonstrate regression from their historic and professional roots in mental health, but blatantly disregard complete utilization of any/all occupational therapy treatment stratagems which hold the potential to more effectively resolve a client's opioid abuse disorder by co-addressing physical and mental health comorbidities. This is especially the case given that those individuals abusing opioid substances tend to disproportionately present with recognizable mental health disorders [22].

Occupational therapists, particularly those practicing in acute care and rehabilitation hospitals, subacute facilities, outpatient, and/or mental health settings, are not only likely to have a fifty percent or greater probability of having one or more clients who they know for certain are abusing opioids and/or who they strongly suspect of abusing opioids, but also have a one in five probability of having a client overdose on an opioid substance and likely to do so in their presence [37]. Tragically, clients abusing opioids are not regularly screened for suicidal ideation, even though opioid abuse has been demonstrated to account for an increased risk of committing suicide and demonstrated to be a likely causal agent in the suicidal action [38,39]. This relationship alone highlights the need to acknowledge and address the complex co-relationship between opioid substance abuse and associated mental health comorbidities in designing effective occupational therapy and non-occupational therapy treatment interventions.

## Conclusion

In providing treatment to those abusing or addicted to opioid substances, it is critical to focus on pain and pain management. However, it is of equal or perhaps greater importance to address underlying mental health comorbidities in designing individualized treatment protocols, with an understanding that not all individuals suffering from opioid substance abuse present with mental health disorders and that not all individuals with mental health disorders abuse opioids.

As Sartorius, et al. [17] suggests, "...all of us will have to accept the fact that comorbidity of various diseases and in particular the simultaneous occurrence of mental and physical disorders is the rule rather than an exception and that we have to approach all of our patients with this in mind. We must also make efforts to convince decision makers, educators, clinicians, and community members that comorbidity is one of the most urgent challenges to the quality of health care in the early decades of the twenty first century that must be recognized and dealt with without delay". This is certainly the case in developing an enhanced and collective multi-professional treatment response to opioid substance abuse and addiction where the primary emphasis has been limited to a singular address of pain and pain management.

Fortunately, one healthcare discipline is uniquely prepared to readily accept and incorporate the functional concept of co-morbidity into its treatment procedures, stemming from that profession's foundational roots in mental health, its contemporaneous philosophy, and its current treatment stratagems-that singularly distinctive discipline is "Occupational Therapy". Yet, while it is recognizably essential for Occupational Therapy to unreservedly accept and incorporate a co-morbidity model in designing its own opioid abuse therapy procedures, it is equally important for the profession to encourage utilization of this model by other healthcare professions in their creation of innovative evidence-based treatment protocols. Moreover, it is vital for Occupational Therapy through its promotion of this co-morbidity model to also promote establishment of unified inter-professional cooperative approaches toward the treatment and management of opioid substance abuse. It is only through such resolve can we as members of the healthcare community ever hope to determinedly bring about an end to this horrific international affliction.

## References

1. Wilkerson RG, Kim HK, Windsor TA, Mareiniss DP (2016) The opioid epidemic in the United States. *Emergency Medicine Clinics* 34(2): e1-e23.
2. Centers for Disease Control and Prevention (2018) Opioid overdose: Understanding the epidemic.
3. (2019) National Institute on Drug Abuse: Overdose Death Rates.
4. Jones MR, Viswanath O, Peck J, Kaye AD, Gill JS, et al. (2018) A brief history of the opioid epidemic and strategies for pain medicine. *Pain and Therapy* 7(1): 13-21.
5. Van Zee A (2009) The promotion and marketing of oxycontin: Commercial triumph, public health tragedy. *American Journal of Public Health* 99(2): 221-227.
6. (2018) Management of substance abuse: Information sheet on opioid overdose. World Health Organization (WHO).
7. Hedegaard H, Minino AM, Warner M (2018) Drug overdose deaths in the United States 1999-2017. National Center for Health Statistics.
8. (2017) Wide-ranging Online Data for Epidemiologic Research (WONDER) National Center for Health Statistics.
9. (2019) Opioid overdose crisis. National Institutes of Health, National Institute on Drug Abuse.
10. (2018) Heroin overdose data. Centers for Disease Control and Prevention (CDC).
11. Mehta V, Langford RM (2006) Acute pain management for opioid dependent patients. *Anaesthesia* 61(3): 269-276.
12. Schuckit MA (2016) Treatment of opioid-use disorders. *New England Journal of Medicine* 375(4): 357-368.
13. Volkow ND, McLellan, AT (2016) Opioid abuse in chronic pain- misconceptions and mitigation strategies. *New England Journal of Medicine* 374(13): 1253-1263.
14. Ling W (2017) Prescription opioid addiction and chronic pain: More than a feeling. *Drug and Alcohol Dependence* 173(S1): S73-S74.
15. Robinson L, Yu R, Patel S (2018) Chronic pain management and the development of opioid use disorder. *University of Western Ontario Medical Journal* 87(1): 55-57.
16. (2018) Comorbidity. National Institutes of Health (NIH) (2018) National Institute on Drug Abuse.
17. Sartorius N (2013) Comorbidity of mental and physical diseases: A main challenge for medicine of the 21st

- century. *Shanghai Archives of Psychiatry* 25(2): 68-70.
18. Davis MA, Lin LA, Liu H, Sites BD (2017) Prescription opioid use among adults with mental health disorders in the United States. *Journal of the American Board of Family Medicine* 30(4): 407-417.
  19. Edlund MJ, Martin BC, Devries A, Fan MY, Braden JB, et al. (2010) Trends in use of opioids for chronic noncancer pain among individuals with mental health and substance use disorders: The TROUP Study. *The Clinical Journal of Pain* 26(1): 1-8.
  20. Seal KH, Shi Y, Cohen G, Cohen BE, Maguen S, et al. (2012) Association of mental health disorders with prescription opioids and high-risk opioid use in US veterans of Iraq and Afghanistan. *JAMA* 307(9): 940-947.
  21. Gros DF, Milanak ME, Brady KT, Back SE (2013) Frequency and severity of comorbid mood and anxiety disorders in prescription opioid dependence. *The American Journal on Addictions* 22(3): 261-265.
  22. Halbert B, Davis R, Wee CC (2016) Disproportionate longer-term opioid use among US adults with mood disorders. *Pain* 157(11): 2452-2457.
  23. Foley M, Schwab-Reese LM (2019) Associations of state-level rates of depression and fatal opioid overdose in the United States, 2011-2015. *Social Psychiatry and Psychiatric Epidemiology* 54(1): 131-134.
  24. Desai R, Camacho F, Tan X, LeBaron V, Blackhall L (2019) Mental health comorbidities and elevated risk of opioid use in elderly breast cancer survivors using adjuvant endocrine treatments. *Journal of Oncology Practice* 15(9): e777-e786.
  25. Brooks JM, Petersen C, Kelly SM, Reid MC (2019) Likelihood of depressive symptoms in US older adults by prescribed opioid potency: National Health and Nutrition Examination Survey 2005-2013. *International Journal of Geriatric Psychiatry* 34(10): 1481-1489.
  26. Quinn PD, Hur K, Chang Z, Scott EL, Krebs EE, et al. (2018) Association of mental health conditions and treatments with long-term opioid analgesic receipt among adolescents. *JAMA Pediatrics* 172(5): 423-430.
  27. Rounsaville BJ, Weissman MM, Kleber H, Wilber C (1982) Heterogeneity of psychiatric diagnosis in treated opiate addicts. *Archives of General Psychiatry* 39(2): 161-166.
  28. Goesling J, Lin LA, Clauw DJ (2018) Psychiatry and pain management: At the intersection of chronic pain and mental health. *Current Psychiatry Reports* 20(2): 1-8.
  29. Krashin D, Murinova N, Sullivan M (2016) Challenges to treatment of chronic pain and addiction during the "opioid crisis". *Current Pain and Headache Reports* 20(12): 1-3.
  30. AOTA (2011) Occupational therapy's role in mental health recovery.
  31. Castaneda R, Olson LM, Radley LC (2013) Occupational Therapy's role in community mental health.
  32. Jackman M (2018) Psych Central: Occupational Therapy and Mental Health.
  33. US Congress (2018) H.R.6-Support for Patients and Communities Act.
  34. Chaudhuri JD (2018) The role of occupational therapy in the management of recovery from substance use disorders (SUDs). *Addiction Research and Medicine* 1(1): 1-2.
  35. Opp A (2007) Recovery with purpose: Occupational therapy and drug and alcohol abuse.
  36. Thompson K (2007) Occupational therapy and substance use disorders: Are practitioners addressing these disorders in practice?. *Occupational Therapy in Health Care* 21(3): 61-77.
  37. McCombie RP, Stirling J (2017) Opioid substance abuse among occupational therapy clients. *Occupational Therapy in Mental Health* 34(1): 49-60.
  38. Ilgen MA, Bohnert AS, Ganoczy D, Bair MJ, McCarthy JF, et al. (2016) Opioid dose and risk of suicide. *Pain* 157(5): 1079-1084.
  39. Braden JB, Edlund MJ, Sullivan MD (2017) Suicide deaths with opioid poisoning in the United States: 1999-2014. *American Journal of Public Health* 107(3): 421-426.

