# Effects of Unemployment on Opioid Use Treatment Trajectories

Impact of the COVID-19 Pandemic

Mercy Ngosa Mumba, PhD, RN, FAAN O Lori Davis, MD O Natalia Langer Smith, PhD(c) O Teairra Evans, PhD(c) O Rachael Castillo, BSN

### **Abstract**

Living with an opioid use disorder (OUD) can make finding and sustaining employment a significant challenge and is only expected to get worse in the COVID-19 environment. For most individuals in OUD treatment, being employed is an important part of their recovery journey. Employment has several benefits, including reductions in preoccupation with symptoms, social isolation, risk of suicide, hopelessness, and economic instability, which if not addressed often result in homelessness. Therefore, employment is an important social determinant of health, especially among those with OUD. Employment success and OUD, however, may vary based on race, age, gender, and socioeconomic status. Return to work support as states begin to reopen will be critically important to improve treatment outcomes for individuals with OUD in a post-COVID-19 environment, requiring utilizations of evidence-based interventions. Nurses, particularly psychiatric mental health and addiction nurses, should routinely screen for employment needs of their patients with OUD and connect them to the necessary support services. Finally, nurses should advocate for regulatory reform that allows for employment support services to be billable and integrated in psychiatric and behavioral health services just like other mental health services.

Keywords: COVID-19 Pandemic, Employment, Mental Health, Opioid Use Disorder, Social Determinants of Health, Substance Use

Mercy Ngosa Mumba, PhD, RN, Natalia Langer Smith, PhD(c), and Teairra Evans, PhD(c), University of Alabama Capstone College of Nursing, Tuscaloosa,

Lori Davis, MD, Tuscaloosa Veterans Affairs Medical Center, Alabama. Rachael Castillo, BSN, Duke University Medical Center, Durham, North Carolina.

The authors report no conflicts of interest. The authors alone are responsible for the content and writing of the article.

Correspondence related to content to: Mercy Ngosa Mumba, PhD, RN, University of Alabama Capstone College of Nursing, 650 University Blvd. East, Tuscaloosa, AL 35401.

E-mail: mgosa501@gmail.com

DOI: 10.1097/JAN.0000000000000480

### INTRODUCTION

The COVID-19 pandemic is now being referred to as a pandemic within an epidemic when trying to convey its grave implications on the U.S. opioid crisis (Slat et al., 2020). The negative impact of the COVID-19 pandemic on employment cannot be overemphasized. With unemployment rates drastically climbing for the last 6 months and reaching an all-time high of 13.3% in May 2020 (U.S. Bureau of Labor Statistics, 2020), individuals with substance use disorders (SUDs), and specifically those with opioid use disorders (OUDs), are facing serious difficulties in obtaining and retaining employment and, thus, are unable to afford treatment. The southern states have been particularly affected, with over 500,000 new unemployment claims being reported in Alabama alone since March 2020 (Chiwaya & Wu, 2020); this is astounding because Alabama only has 4.9 million people, with a labor force of approximately 2.2 million people. However, Alabama is not alone, and many states are feeling the economic impact of the COVID-19 pandemic. According to the U.S. Department of Labor (2020), 1.5 million initial unemployment claims were filed in June alone.

According to the World Health Organization (2020), employment is an important social determinant of health. Social determinants of health account for upwards of 50% of health outcomes. The National Academy of Medicine (NAM, 2017) estimates that social determinants of health can contribute up to 90% of health outcomes. In fact, employment and other social and economic determinants of health account for about 40% of all social determinants of health (NAM, 2017). This is because employment directly affects other social determinants of health such as income, education, and ability to access and afford care. This is especially problematic for individuals with OUD. The rising unemployment rates coupled with millions of unprocessed unemployment claims (Glowicki, 2020; Goldberg, 2020; Riley, 2020) are leaving people without insurance or financial support, which leads to inability to afford treatment and medications for OUD; notably, the average cost for methadone is \$126/week, buprenorphine is \$115/week, and naltrexone is \$1,176/month (National Institute on Drug Abuse, 2020), which is unaffordable for most individuals with OUD who are unemployed. Inability to afford treatment and medications worsens the trajectory of treatment outcomes for a significant number of individuals with OUD. As several

168

www.journalofaddictionsnursing.com

July/September 2022

states begin to open, individuals across the United States are returning to the job market and inevitably fighting for only a few available jobs, making it more complicated and difficult for individuals with substance use problems, particularly those with OUD, to gain and sustain meaningful employment.

# IMPACT OF UNEMPLOYMENT ON OUD TREATMENT TRAJECTORY

Living with an OUD can make finding and sustaining employment a significant challenge and is only expected to get worse in the COVID-19 environment. Unfortunately, adults who have a current OUD are significantly more likely to be unemployed and make less income compared with those with past OUD or those without lifetime OUD (Rhee & Rosenheck, 2019). This is true even after controlling for sociodemographic factors and behavioral health conditions (Chiwaya & Wu, 2020). In addition, people with OUD are significantly more likely to be unemployed compared with those with other SUDs, such as an alcohol use disorder (Chiwaya & Wu, 2020). This is related to increased stigma for OUD, especially among non-prescription opioid users compared with prescription opioid users or other types of SUD (Kolodny et al., 2015; Kulesza et al., 2013).

Most importantly, employers are more likely to employ individuals with other SUDs other than OUD, making this subset of individuals more susceptible to health and socioeconomic disparities and inequalities related to access and affordability of substance use treatment. This is true even for nurses with SUD; those with OUD have a much more difficult time returning to clinical practice and often experience more restrictions than nurses with other SUDs (Mumba, 2018). Thus, the higher likelihood of unemployment, lower income, and stigma against hiring individuals with OUD serve as a dire combination, particularly as related to treatment access and affordability especially in a COVID-19 environment. Therefore, decreasing stigma of OUD, providing employment and occupational support, and advocating for higher-paying jobs for individuals with OUD will be foundational in assisting individuals with OUD returning to work in a post-COVID-19 competitive job environment. According to the NAM (2017), screening for and addressing social determinants of health should be integrated into routine care because the providers' ability to address these factors can influence treatment trajectories and health outcomes of individuals and communities.

For most individuals in treatment for an OUD, being employed is an important part of their recovery journey. Employment has several benefits, including reductions in preoccupation with symptoms, social isolation, risk of suicide, hopelessness, and economic instability, which if not addressed often result in homelessness (Reeves et al., 2012). Because of disruptions in employment status for many individuals with OUD because of the COVID-19 pandemic, these risks have been exacerbated and cannot be overlooked. In addition, the resulting unemployment has led to interrupted access to medications for OUD, increasing risk for relapse and even fatal overdoses (Hallgren et al., 2017). For example, there have

been increased reports of drug overdose deaths and mental health crises since the COVID-19 pandemic begun (American Medical Association, 2020). Thus, prioritizing evidence-based intervention to mitigate the impact of social determinants of health is necessary to promote health and individuals and communities alike (NAM, 2017).

We already know that unemployment results in higher healthcare utilization costs, mainly because of overuse of emergency services by individuals who are underinsured or uninsured (Maeda et al., 2014). Because of the COVID-19 pandemic, this is expected to only get worse and may in fact affect financial viability of healthcare organizations, especially those serving rural communities and are already struggling to keep their doors open (American Hospital Association, 2020). For example, since 2010, there were 129 rural hospitals that closed mostly because of financial problems as the hospitals were not profitable (Sheps Center for Health Services Research, 2020); the southern states, which include Alabama, have the highest rates of opioid-related emergency room visits as well as opioid-related hospitalizations (Kay et al., 2018). With rising unemployment, this is expected to get worse, further crippling the finical viability of struggling hospitals, and the consequences are vast.

As rural hospitals continue to close or are overwhelmed by the pandemic, more substance use and mental health providers are moving out of these geographically and socioeconomically disadvantaged areas, exacerbating an already serious and urgent situation for individuals with OUD. Interestingly, a third of the estimated \$631 billion associated with OUD between 2015 and 2018 was directly attributed to excessive healthcare utilization costs (Managed Healthcare Executive, 2019). Notably, individuals with OUD who cannot access substance use and mental health services are more prone to poor mental health outcomes and use emergency rooms at higher rates. In addition, as resources become scarce and unaffordable, more providers may have to prioritize who receives care, which could inadvertently discriminate against individuals with OUD because of latent clinician stigma, thereby worsening outcomes for an already marginalized population (Slat et al., 2020).

The presence of OUD in unemployed individuals has a compounded negative effect on mental health and treatment trajectory and needs to be better understood and managed to prevent the risk of relapse, fatal overdoses, and poor psychosocial outcomes (Slat et al., 2020). This is especially important because studies have shown that unemployment has a negative effect on mental health. For instance, experiencing job loss results in a decline of quality of mental health, which is consistent regardless of country or global region (Cygan-Rehm et al., 2017). In addition, individuals with poor mental health, which is a risk factor for substance abuse, are at an even higher risk of becoming unemployed (National Alliance on Mental Illness, 2020). This is important to note because a significant number of people with SUDs have comorbid mental health problems. More importantly, the National Alliance on Mental Illness (2020) estimates that, nationally, about 60% of people who receive public assistance for mental health conditions want

to work but less than 2% are able to work because they do not receive the needed employment support to obtain and maintain meaningful employment. Nurses, particularly addiction and mental health nurses, are well positioned to incorporate screening for social determinants of health into their general practice and advocate for wraparound substance use and mental health services that promote whole health for individuals with OUD.

Employment success and OUD, however, may vary based on race, age, gender, socioeconomic status, and available treatment resources. For example, adults between the ages of 25 and 54 years have the highest rates of deaths because of drug overdose compared with younger and older groups (Hedegaard et al., 2018), but this age group also has the highest poverty and unemployment levels in the United States (Jones, 2017). The U.S. Department of Labor reports that, between 2001 and 2018, individuals ages 25-54 years filed most of the unemployment insurance claims (U.S. Department of Labor, 2019). Thus, it remains to be seen how the COVID-19 pandemic has affected employment status for this group and the implications for treatment outcomes, particularly for those with SUD because insurance companies minimally cover mental health services and individuals often have to pay out of pocket for substance use treatment services. This necessitates targeted employment interventions for middle-aged individuals with SUD to mitigate the negative effects of unemployment on treatment outcomes. Moreover, more research is needed to explore the intricacies of how unemployment disproportionately affects poor people and the working class (Blustein et al., 2020) and, more importantly, its influence on drug overdose rates in young adults and middle-aged individuals with OUD.

Interestingly, among working individuals, OUD occurs at a higher rate among African American young adults (Choi, 2020). A comprehensive examination of risk factors for various opioid uses revealed that factors such as being a male, receiving some form of government assistance, low socioeconomic status, involvement with the criminal justice system, low educational attainment, and polysubstance abuse significantly increase the likelihood of prescription opioid misuse (Nicholson & Ford, 2018), among both urban- and rural-dwelling African American adults (Rigg & Nicholson, 2019). Unfortunately, this is a segment of the population that is also most likely to have high unemployment rates and is subject to significant health and socioeconomic disparities and inequalities, particularly in the rural south. Therefore, more research is needed to delineate the susceptibility of African American young adults for adverse events related to OUD, particularly among those who are socioeconomically disadvantaged and are currently unemployed. In addition, more research is needed to examine the role of social determinants of health on OUD treatment trajectories for racial and ethnic minorities in the Deep South.

Return to work support as states have reopened will thus be critically important to improve treatment outcomes for individuals with OUD in a post-COVID-19 environment. Not only that, but government regulations also need to be revisited to advocate for policies that consider the plight of individuals with OUD who are being subjected to adverse outcomes because of their inability to pay for substance use treatment services as a consequence of unemployment. The NAM (2017) advocates for adoption of data-driven frameworks that integrate social determinants of health into routine care. In addition, substance use and mental health treatment facilities should seriously consider incorporation of supported employment specialists as integral parts of the treatment team to support and champion the employment needs of their clients. Although this may not seem to be cost effective in the interim, the long-term benefits are expected to outweigh the risk of relapse, mental and emotional distress, and even fatal overdoes that individuals with OUD will otherwise be susceptible to. Therefore, mental health nurses should familiarize themselves with employment resources available in their communities to provide appropriate referrals and support resources.

#### CONCLUSION

Meaningful employment that provides identity, structure, income, daily activity, and socialization is foundational in recovery among individuals with OUD. Given the devastating impact of the COVID-19 pandemic, deliberate and intentional effort needs to be made to support individuals with OUD who are unemployed and are looking for a meaningful competitive job. Nurses, particularly psychiatric mental health and addiction nurses, should routinely screen for the employment needs of their patients with OUD and connect them to the necessary support services.

#### REFERENCES

- American Hospital Association. (2020). Financial challenges facing hospitals and health systems as a result of COVID-19. https://www.aha.org/system/files/media/file/2020/04/fact-sheet-financial-challenges-facing-hospitals-and-health-systems-as-a-result-of-covid-19.pdf
- American Medical Association. (2020). Issue brief: Reports of increases in opioid related overdose and other concerns during COVID pandemic. https://www.ama-assn.org/system/files/2020-08/issue-brief-increases-in-opioid-related-overdose.pdf
- Blustein, D. L., Duffy, R., Ferreira, J. A., Cohen-Scali, V., Cinamon, R. G., & Allan, B. A. (2020). Unemployment in the time of COVID-19: A research agenda. *Journal of Vocational Behavior*, 119, 103436. https://doi.org/10.1016/j.jvb.2020.103436
- Chiwaya, N., & Wu, J. (2020). The coronavirus has destroyed the job market in every state. https://www.nbcnews.com/business/economy/ unemployment-claims-state-see-how-covid-19-has-destroyed-jobn1183686
- Choi, B. (2020). Opioid use disorder, job strain, and high physical job demands in US workers. *International Archives of Occupational and Environmental Health*, 93(5), 577–588. https://doi.org/10.1007/s00420-019-01514-4
- Cygan-Rehm, K., Kuehnle, D., & Oberfichtner, M. (2017). Bounding the causal effect of unemployment on mental health: Nonparametric evidence from four countries. *Health Economics*, 26(12), 1844–1861. https://doi.org/10.1002/hec.3510
- Glowicki, M. (2020). In-person unemployment help coming later this week or next, Beshear says. https://www.courier-journal.com/story/news/2020/06/22/beshear-more-person-unemployment-help-coming-soon/3239294001/
- Goldberg, J. (2020). Oregon has more than 70,000 unprocessed jobless claims from self-employed and contract workers. https://www.

- oregonlive.com/coronavirus/2020/06/oregon-has-more-than-70000-unprocessed-jobless-claims-from-self-employed-and-contract-workers.html
- Hallgren, K. A., Ries, R. K., Atkins, D. C., Bumgardner, K., & Roy-Byrne, P. (2017). Prediction of suicide ideation and attempt among substance-using patients in primary care. *Journal of the American Board of Family Medicine*, 30(2), 150–160. https://doi.org/10.3122/jabfm.2017.02.160264
- Hedegaard, H., Miniño, A. M., & Warner, M. (2018). Drug overdose deaths in the United States, 1999–2017. NCHS Data Brief, 329, 1–8.
- Jones, C. M. (2017). The paradox of decreasing nonmedical opioid analgesic use and increasing abuse or dependence—An assessment of demographic and substance use trends, United States, 2003–2014. Addictive Behaviors, 65, 229–235. https://doi.org/10.1016/j.addbeh.2016.08.027
- Kay, C., Bernstein, J., Fergestrom, N., & Jackson, J. L. (2018). Opioid-related emergency department visits and hospitalizations among commercially insured individuals, 2009–2015. *The Clinical Journal of Pain*, 34(12), 1121–1125. https://doi.org/10.1097/AJP.0000000000000643
- Kolodny, A., Courtwright, D. T., Hwang, C. S., Kreiner, P., Eadie, J. L., Clark, T. W., & Alexander, G. C. (2015). The prescription opioid and heroin crisis: A public health approach to an epidemic of addiction. *Annual Review of Public Health*, 36, 559–574. https://doi. org/10.1146/annurev-publhealth-031914-122957
- Kulesza, M., Larimer, M. E., & Rao, D. (2013). Substance use related stigma: What we know and the way forward. *Journal of Addictive Behaviors, Therapy & Rehabilitation*, 2(2), 782. https://doi.org/10.4172/2324-9005.1000106
- Maeda, J. L., Henke, R. M., Marder, W. D., Karaca, Z., Friedman, B. S., & Wong, H. S. (2014). Association between the unemployment rate and inpatient cost per discharge by payer in the United States, 2005–2010. BMC Health Services Research, 14, 378. https://doi.org/10.1186/1472-6963-14-378
- Managed Healthcare Executive. (2019). *The financial burden of the opioid epidemic*. https://www.managedhealthcareexecutive.com/article/financial-burden-opioid-epidemic
- Mumba, M. N. (2018). Employment implications for nurses going through a peer assistance program for substance use disorders. Archives of Psychiatric Nursing, 32, 561–567. 10.1016/j.apnu.2018.03.001
- National Academy of Medicine. (2017). Social determinants of health 101 for health care: Five plus five. https://nam.edu/social-determinants-of-health-101-for-health-care-five-plus-five/?gclid=Cj0KCQjwufn8BRC wARIsAKzP695nbCNUw-ody6gR83K2Om8vEVnKLm8Zo7gYWXi5z8JNhzUE7eq1rGMaAjQQEALw\_wcB

- National Alliance on Mental Health. (2020). Mental illness: NAMI report deplores 80 percent unemployment rate; state rates and ranks listed—Model legislation proposed. https://www.nami.org/Press-Media/Press-Releases/2014/Mental-Illness-NAMI-Report-Deplores-80-Percent-Un
- National Institute on Drug Abuse. (2020). How much does opioid treatment cost? https://www.drugabuse.gov/publications/research-reports/medications-to-treat-opioid-addiction/how-much-does-opioid-treatment-cost
- Nicholson, H. L., & Ford, J. A. (2018). Correlates of prescription opioid misuse among Black adults: Findings from the 2015 National Survey on Drug Use and Health. *Drug and Alcohol Dependence*, 186, 264–267. https://doi.org/10.1016/j.drugalcdep.2017.12.006
- Reeves, A., Stuckler, D., McKee, M., Gunnell, D., Chang, S. S., & Basu, S. (2012). Increase in state suicide rates in the USA during economic recession. *Lancet (London, England)*, 380(9856), 1813–1814. https://doi.org/10.1016/S0140-6736(12)61910-2
- Rhee, T. G., & Rosenheck, R. A. (2019). Association of current and past opioid use disorders with health-related quality of life and employment among US adults. *Drug and Alcohol Dependence*, 199, 122–128. https:// doi.org/10.1016/j.drugalcdep.2019.03.004
- Rigg, K. K., & Nicholson, H. L. (2019). Prescription opioid misuse among African-American adults: A rural–urban comparison of prevalence and risk. *Drug and Alcohol Dependence*, 197, 191–196. https://doi.org/10. 1016/j.drugalcdep.2019.01.023
- Riley, E. (2020). Thousands of unemployment claims remain unprocessed, unpaid. https://trone.house.gov/media/in-the-news/thousands-unemployment-claims-remain-unprocessed-unpaid
- Sheps Center for Health Services Research. (2020). Rural hospital closures: More information. https://www.shepscenter.unc.edu/programs-projects/rural-health/rural-hospital-closures/rural-hospital-closures/
- Slat, S., Thomas, J., & Lagisetty, P. (2020). Coronavirus disease 2019 and opioid use—A pandemic within an epidemic. *Journal of the American Medical Association Health Forum*. 2020;1(5), e200628. doi:10.1001/jamahealthforum.2020.0628
- U.S. Bureau of Labor Statistics. (2020). Labor force statistics from the current population survey. https://data.bls.gov/timeseries/LNS14000000
- U.S. Department of Labor. (2019). *Age of UI claimants 2001–2018*. https://oui.doleta.gov/unemploy/images/carousel/age\_of\_the\_insured\_unemployed.png
- U.S. Department of Labor. (2020). Unemployment insurance weekly claims. https://www.dol.gov/ui/data.pdf
- World Health Organization. (2020). Social determinants of health. https://www.who.int/health-topics/social-determinants-of-health#tab=tab\_1

Lori Davis ORCID ID:

https://orcid.org/0000-0002-6098-5986

Natalia Langner Smith ORCID ID: https://orchid.org/0000-0002-1317-3846

Rachael Castillo ORCID ID: https://orcid.org/0000-0002-2763-4973