Annotated Bibliography

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HMSV 440W: Program Development, Implementation, and Funding

Dr. Silverberg

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**Role:** Evaluator

**Audience:** Stakeholders

**Format:** Annotated Bibliography

**Task:** Develop an annotated bibliography that included references and 1-2 paragraph descriptions

**Peer Reviewed Journal Articles**

Cantor, J., Powell, D., Kofner, A., & Stein, B. (2021). Population-based estimates of geographic accessibility of medication for opioid use disorder by substance use disorder treatment facilities from 2014 to 2020. *Drug and Alcohol Dependence* , Vol 229.

Medication for opioid use disorder is an approach to opioid use treatment that combines th euse of medication with, often FDA-approved illicit drugs, with counseling for people who have been dignoised with opioid use disorder. The issue is whether individuals have geographical accessibilty to medicated asscoiated treatment facilities. Statistics show 45% of countries have facilites offering medication for opioid use disorder, 9% of countries have facilities offering all forms of medication for opioid use disorder, and 83% of individuals are at least 10 miles or more from a facility that offers any form of medication for opioid use disorder. A common limitation of studies about accessibilty is that states or county-level authorities may obscure variations in geographic accessibility. Medication for opioid use disorder should be more accessible across all geographic locations to avoid measures, such as overdose, illiegal dosing, and other complications. Providing a more sufficent access to care can contribute to the opioid crisis epidemic in the world.

Chang, D., Kilmas, J., Wood, E., & Fairbairn, N. (2018). Medication-assisted treatment for youth with opioid use disorder: Current dilemmas and remaining questions. *The American Journal of Drug and Alcohol Abuse*, 143-146.

Opioid use and opioid use disorder continue to rise amongst youth in America. “According to the Centers for Disease Control and Prevention, heroin use has more than doubled among 18–25-year-olds in the past decade”. (Chang, Kilmas, Wood, & Fairbairn, 2018). Due to the rise of the opioid crisis, overdose rates are also on the rise, primarily in young adults between the ages of 18-25 years. Due to this rise and growing harms, a number of agencies have supported medicated-associated therapies to aid in healing or alleviating symptoms concerning conditions and use disorder, which has been proven effective in adults and a few studies are examining the efficacy amongst youth. In addition to improving treatment outcomes, medicated-associated treatment proves to be a cost-effective treatment for youth opioid use disorder. With increasing numbers of opioid overdoses, there are significant barriers to care for youth with opioid use disorder, there is an urgent need to expand medicated-associated based treatment for opioid use disorder.

Crist, R., Li, J., Doyle, G., Gilbert, A., Dechairo, B., & Berrettini, W. (2018). Pharmacogenetic analysis of opioid dependence treatment dose and dropout rate. *The American Journal of Drug and Alcohol Abuse,* 431-440.

Opioid dependency has been an ongoing health crisis in many parts of the world, including the United States. Currently, millions of individuals are using prescription opioid pain medication for non-medical and non-treatment related reasons. Due to this discovery, opioid related overdose deaths have increased dramatically over the last decade. “Data across a large number of studies reveal that many patients with opioid dependence continue illicit opioid use despite being enrolled in a methadone or buprenorphine treatment programs” (Crist, et al., 2018). Additionally, a subsequent number of patients drop out of medicated assisted treatment outpatient facilities and likely relapse as well. This raises a question of if in fact medicated associated treatment facilities are aiding in addictive behaviors or are they effective in assisting patients in recovery and abstinence. Pharmacological treatment for substance abuse disorder, including opioid use, can produce higher failure rates resulting in significant costs to both patients, the community and society.

Fairley, M., Humphreys, K., Joyce, V., Bounthavong, M., Trafton, J., Combs, A., . . . Owens, D. (2021). Cost-effectiveness of treatments for opioid use disorder. *JAMA Psychiatry*, 767-777.

Although opioid use disorder is a significant cause of morality in the United States, many individuals with opioid use disorder do not receive treatment. A research study is conducted to assess the cost-effectiveness of medicated assisted treatment and treatment add-ons for opioid use disorder treatments. This model-based analysis included the United States population who suffers from opioid use disorder. Lack of widespread medicated associated treatment facilities and availability limits access to medical interventions, therefore it is essential to understand the cost-effectiveness and to explore alternative forms of medicated associated treatments to treat opioid use disorder. Funding for medicated assisted treatment aims to decrease opioid misuse and opioid-related overdose deaths. Resources are offered to expand and enhance access to medications for opioid use disorder, but are these resources cost effective or cost deficient. The studies resulted in expanded access to methadone maintenance and proves to be more cost-effective than most widely used medical therapies.

Heikkinen, M., Taipale, H., Tanskanen, A., Mittendorfer‐Rutz, E., Lähteenvuo, M., & Tiihonen, J. (2022). Real‐world effectiveness of pharmacological treatments of opioid use disorder in a national cohort. *Addiction*, 1683-1691.

Opioid use disorder, also known as OUD, is an increasing cause of morality in the world. Opioid use disorder is associated with health consequences, HIV infections, cirrhosis, cancer, overdose, and even premature death. A nation-wide study, including participants of the age that ranges from 16-64 years, was conducted to investigate real-world effectiveness of pharmacological treatment in opioid use disorder patients. The prognosis of opioid use disorder without treatment is very slim. Unlike many other drug use disorders, there are several medications for the treatment of opioid use disorder. In fact, methadone is the primary evidenced-based treatment for opioid use disorder and has been proven to improve physical and mental wellbeing as it reduces mortality. Research shows that methadone, along with other narcotics significantly lower the risk of hospitalization and death, when compared to non-use. In fact, buprenorphine and methadone were associated with lower risk of opioid use disorder hospitalization, compared to the time frame when the same individuals did not use opioid use disorder medicated treatment.

Herlinger, K., & Lingford-Hughes, A. (2022). Opioid use disorder and the brain: A clinical perspective. *Addiction,* 495-505.

Opioid use disorder is a medical condition that is defined by behaviors of not being able to abstain from opioid use to the extent in which the uses interfere with daily life. While opioids themselves are not exclusively neurotoxic, the relapse and the remitting nature of the opioid use causes exposure on the brain. Reviewed at a clinical level, individuals that present with compulsive opioid use disorder prioritize the use of opioids to the expense of other activities and responsibilities. The psychological dependence on opioids manifested at an increased tolerance has increase publicity and concern recently. The relevance of this article allows the audience to understand what opioid use disorder is and the affects it has on an addicts psychological and cognitive developments. Opioid use is widely distributed and affected in the brain, moderately and severely, and plays important roles in several functions and daily tasks, including mood, impulsivity, pain, and reward.

Kalk, N. (2019). Harm reduction in opioid treatment: an established idea under threat. *Addiction.*, 20-21.

It has been argued that the treatment for substance use disorder focuses on abstinence rather than reduction. Harm reduction practices are a set of strategies aimed towards reducing negative consequences associated with drug use, rather than abstaining completely. Harm reduction guides opioid treatment, and in fact, a majority of clinical trials support the use of methadone associated treatment and embraces harm reduction strategies in order to expand access to medicated associated treatment to further improve patients’ quality of life. Harm reduction approaches for treatment of substance use disorder is cost effective and yields to better results than detention and abstinence. Individuals who participate in harm reduction programs may receive referrals to social service organizations, including job training, employment programs, housing programs, and more. With the help of harm reduction programs, like the Behavioral Health Group, a medicated associated treatment facility, overdose and disease transmission is less likely, and patients can focus on getting their lives in order before any consequences of opioid use comes into play.

McCarty, D., Chan, B., Bougatsos, C., Grusing, S., & Chou, R. (2021). Interim methadone – Effective but underutilized: A scoping review. *Drug and Alcohol Dependence*, Vol 225.

Interim methadone is a substance abuse treatment approach for patients who are transitioning and are wating to be placed in medicated assocaited treatment programs. The initial need of interim services occurred in response to the spread of HIV infection in people who inject drugs with the opening of an “Interim Clinic”, then later spread to methadone treatment. Interim methadone maintence provides a safe way for patients to engage with the community, curb cravings, and prevent opioid withdrawl symptoms. Medicated associated treatment programs may provide interim methadone services for up to 120 days wihtout counseling, within regulatory requirements. The Behavioral Health Group provides methadone, and sometimes burenorphine and naloxone, to patients who are in the contemplation or even preparation stage of change. Interim methadone seems to be effective and safe and provide similar outcomes to standard services. These services however, are underutilized although they are proven to be associated with reduction in waitlist and decreased illicit drug useage. If more medicated associate treatment facilities or even primary care physician utilized interim methadone, the affects of drug depencey could significantly lessen.

Santaella-Tenorio, J., Martins, S., Cerdá, M., Olfson, M., & Keyes, K. (2022). Suicidal ideation and attempts following nonmedical use of prescription opioids and related disorder. *Psychological Medicine*, 372-378.

Nonmedical use of prescription medication is the use of precritpion drugs, most likely obtained from prescriptions of another source other than whom the drug was prescribed to. “Since 1999, the rate of fatal prescription opioid overdoses and of suicides has dramatically increased in the USA” (Santaella-Tenorio, Martins, Cerdá, Olfson, & Keyes, 2022). Due to these illiagel exchanges, suicidal ideations and attempts have significantly increased. Medicated assisted treatment facilities could potentially eliminate or greatly reduce the number of suicides throughout the United States. Studies show associations between nonmedical use of prescription opioid use disorder and suicidal ideations are related. This could prove that these treatment centers, prove for safe and effective options to patients who suffer from opioid use disorder. The study concludes that heavy and frequent opioid use and related disorders are associated with relevant suicide attempts. Nonmedical use of prescriptions and other entites, such as laced prescriptions have caused a rise in sucidial ideations and medicated assisted treatment facilities provide safe spaces for clients looking to abstain from substance use disorder.

Wu, L.‐T., John, W., Morse, E., Adkins, S., Pippin, J., Brooner, R., & Schwartz, R. (2022). Opioid treatment program and community pharmacy collaboration for methadone maintenance treatment: Results from a feasibility clinical trial. *Addiction*, 444-456.

With intentions to decrease overdosing and accidental deaths caused by opioid use disorder, pharmacy administration and medicated associated treatment facilities investigate feasible and acceptable options of dispensing methadone for methadone maintenance treatment (MTT). The trail conducted in this article includes a physician, two pharmacist, and twenty methadone maintenance treatment patients who received between six to thirteen take home methadone doses. The purpose of the study conducted was to determine if in fact patients benefit from methadone maintenance treatment, even if not administered within a medicated associated treatment facility and the outcome was medication adherence. Research trials has found pharmacy administration and dispensing of physician-prescribed methadone for methadone maintenance treatment to be feasible and acceptable. Pharmacy based methadone treatment is one of the most understudied treatments within the United States, however it can expand treatment access for opioid use disorder. As a result of this study, collaborative care and cooperation are evidence that opioid treatment programs as well as community-based pharmacies are effective in opioid use disorder.