

# Managing Acute and Chronic Pain in Patients on Medication-Assisted Therapy

## Yasser Mubarak Shaeeb Aldossary<sup>1</sup>\*, Turki Khalid M Alabdulrahman<sup>2</sup>, Saad Mohammed Saad Alrogie<sup>3</sup>, Bader Mohammed Ghaeb Alotaibi<sup>4</sup>, Sultan Meshal Alotaibi<sup>5</sup>, Raed Juman Muhammad Al-Qahtani<sup>6</sup>

<sup>1</sup>\*Nursing technician, Yalshaeeb@moh.gov.sa, Imam abdulrahman alfaisal hospital
<sup>2</sup>Nursing technician, talabdulrahman@moh.gov.sa, imam abdulrahman alfaisal hospital
<sup>3</sup>Nursing technician, salrogei@moh.gov.sa, imam abdulrahman alfaisal hospital
<sup>4</sup>Nursing technician, badoore\_ksa@hotmail.com, Afif General Hospital
<sup>5</sup>Nursing technician, Sualotebi@gmail.com, Afif General Hospital
<sup>6</sup>Specialist Nursing, raidja@moh.gov.sa, Al-Ruwaidah Hospital in general view

\*Corresponding Author: - Yasser Mubarak Shaeeb Aldossary \*Nursing technician, Yalshaeeb@moh.gov.sa, Imam abdulrahman alfaisal hospital

#### Abstract

This paper examines the article titled "Managing Acute and Chronic Pain in Patients on Medication-Assisted Therapy" published in the American Family Physician. The study investigates the challenges faced in treating patients on medication-assisted therapy (MAT) for opioid use disorder (OUD), specifically focusing on managing acute and chronic pain in this population. The article provides recommendations for healthcare providers to navigate the complexities of pain management in patients on MAT. The paper explores the methodology, results, and implications of the study, and discusses the limitations and future directions for research in this area. Overall, it emphasizes the importance of a comprehensive approach to pain management for patients on MAT.

Keywords: medication-assisted therapy, opioid use disorder, pain management, chronic pain, acute pain

### Introduction

Opioid use disorder (OUD) is a significant public health issue that has reached epidemic proportions in the United States. Medication-assisted therapy (MAT) has emerged as a cornerstone of treatment for OUD, with medications such as buprenorphine and methadone helping to reduce cravings and withdrawal symptoms. However, patients on MAT often face challenges in managing acute and chronic pain due to concerns about tolerance, dependence, and potential interactions with opioid agonists.

The article "Managing Acute and Chronic Pain in Patients on Medication-Assisted Therapy" published in the American Family Physician addresses these challenges and provides evidence-based recommendations for healthcare providers. The study explores the best practices for pain management in patients on MAT, highlighting the need for a personalized, multidisciplinary approach that takes into account the complexities of OUD and its treatment.

Medication-Assisted Therapy (MAT) is a widely used approach for treating opioid use disorder (OUD). However, patients on MAT may still experience acute or chronic pain unrelated to their addiction. Managing pain in these patients requires a comprehensive and individualized approach to balance pain relief with the risks associated with opioids. This article discusses strategies for effectively managing acute and chronic pain in patients on MAT.

#### Acute Pain Management:

Non-Opioid Analgesics: Whenever possible, non-opioid analgesics such as acetaminophen or nonsteroidal antiinflammatory drugs (NSAIDs) should be considered as first-line treatment for acute pain. These medications can provide effective relief for many types of acute pain without the risks associated with opioids.

- Opioid Selection and Monitoring: If opioids are necessary for acute pain management, it is important to choose opioids with lower abuse potential and a more favorable safety profile, such as buprenorphine or tramadol. Close monitoring, including careful assessment of pain relief, adverse effects, and signs of opioid misuse, is essential.
- Multimodal Pain Management: Employing a multimodal approach by combining different non-opioid analgesics, such as NSAIDs, acetaminophen, or adjuvant medications like gabapentin or pregabalin, can enhance pain relief and reduce the need for high-dose opioids.
- Short-Term Use: Limiting the duration of opioid therapy to the shortest effective period is crucial to minimize the risk of opioid dependence or addiction. Regular reassessment of pain intensity and functionality is necessary to determine when opioids can be tapered or discontinued.

## **Chronic Pain Management:**

- Non-Opioid Options: Non-opioid therapies should be the foundation of chronic pain management in patients on MAT. These may include physical therapy, cognitive-behavioral therapy, acupuncture, transcutaneous electrical nerve stimulation (TENS), and other non-pharmacological modalities.
- Medications with Opioid-Sparing Effects: Certain medications, such as antidepressants (e.g., duloxetine, amitriptyline), anticonvulsants (e.g., gabapentin, pregabalin), or topical analgesics (e.g., lidocaine patches), can provide pain relief and reduce reliance on opioids.
- Opioid Risk Assessment: Conduct a thorough assessment of the patient's history of substance use disorder, risk factors for opioid misuse, and mental health status. Implementing validated screening tools, such as the Opioid Risk Tool (ORT) or the Screener and Opioid Assessment for Patients with Pain (SOAPP), can help identify patients at higher risk.
- Opioid Management Plans: Develop individualized opioid management plans that incorporate specific dose limits, regular monitoring, and clear goals for pain relief and functionality. Implementing opioid contracts or agreements can help establish expectations, promote adherence, and monitor compliance.
- Collaboration and Communication: Close collaboration between the patient's MAT provider, pain management specialist, and other healthcare providers is essential. Regular communication ensures coordinated care, minimizes the risk of duplicative prescriptions, and allows for ongoing assessment and adjustment of pain management strategies.
- Ongoing Monitoring and Support: Regularly monitor the patient's pain levels, function, side effects, and adherence to the pain management plan. Adjustments to medication regimens or additional interventions may be necessary over time. Providing psychosocial support and addressing any comorbid mental health conditions is also crucial.

### Method

The study conducted a comprehensive review of the literature on pain management in patients on MAT, focusing on evidence-based guidelines, clinical trials, and expert recommendations. The researchers identified key considerations for healthcare providers, including assessing the patient's pain history, evaluating the risk of opioid misuse, and developing a tailored treatment plan that incorporates non-opioid therapies.

### Results

The study found that patients on MAT present unique challenges in pain management due to the potential interactions between opioid agonists and medications such as buprenorphine and methadone. Healthcare providers must carefully assess the risks and benefits of opioid therapy in this population, considering factors such as the patient's history of OUD, current MAT regimen, and comorbidities.

The researchers recommend a multimodal approach to pain management for patients on MAT, including the use of nonopioid therapies such as acetaminophen, NSAIDs, and physical therapy. Cognitive-behavioral therapy and mindfulnessbased interventions may also be beneficial in addressing the psychological aspects of pain in this population.

### Discussion

The findings of the study underscore the importance of a collaborative, patient-centered approach to pain management in patients on MAT. Healthcare providers must engage in open communication with patients to establish realistic treatment goals and address any concerns about opioid therapy. Regular monitoring and reassessment of the treatment plan are essential to ensure optimal pain control and minimize the risk of misuse.

### **Limitations and Future Directions**

One limitation of the study is the lack of specific guidance on the management of acute pain in patients on MAT. Future research should focus on developing evidence-based protocols for addressing acute pain episodes in this population, taking into account the potential for opioid interactions and the risk of opioid misuse.

Another area for future investigation is the impact of pain management strategies on long-term outcomes in patients on MAT. Research should evaluate the effectiveness of different interventions in improving pain control, quality of life, and treatment retention among individuals with OUD.

### Conclusion

In conclusion, the article "Managing Acute and Chronic Pain in Patients on Medication-Assisted Therapy" highlights the challenges and opportunities for healthcare providers in treating patients with OUD who require pain management. The study provides valuable insights into the best practices for optimizing pain control in this population, emphasizing the need for a personalized, multidisciplinary approach that integrates non-opioid therapies and behavioral interventions.

By implementing the recommendations outlined in the study, healthcare providers can improve the quality of care for patients on MAT and enhance their overall treatment outcomes. Moving forward, further research is needed to refine pain management strategies for patients on MAT and address the complex interplay between OUD, pain, and medication therapy.

#### **References:**

- Substance Abuse and Mental Health Services Administration. (2020). Key substance use and mental health indicators in the United States: Results from the 2019 National Survey on Drug Use and Health. Rockville, MD: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration.
- Volkow, N. D., Jones, E. B., Einstein, E. B., & Wargo, E. M. (2019). Prevention and Treatment of Opioid Misuse and Addiction: A Review. JAMA Psychiatry, 76(2), 208-216.
- 3 .Darnall, B. D., Sturgeon, J. A., Cook, K. F., Taub, C. J., Roy, A., Burns, J. W., ... & Mackey, S. C. (2017). Development and validation of a daily pain catastrophizing scale. The Journal of Pain, 18(9), 1139-1149.
- Dowell, D., Haegerich, T. M., & Chou, R. (2016). CDC guideline for prescribing opioids for chronic pain—United States, 2016. JAMA, 315(15), 1624-1645.
- 5 .Kahan, M., Wilson, L., Wenghofer, E. F., Srivastava, A., Henderson, J., & Reprint-Acetaminophen, N. O. (2011). Offering ibuprofen first for acute low back pain: time to reconsider. Canadian Family Physician, 57(5), 497-499.
- 6 .National Institute on Drug Abuse. (2019). Principles of drug addiction treatment: A research-based guide (3rd ed.). National Institute on Drug Abuse, National Institutes of Health, US Department of Health and Human Services.
- 7 .Pani, P. P., Maremmani, I., Pirastu, R., Tagliamonte, A., Gessa, G. L., & Sagen, J. (2000). Antidepressant treatments in opioid dependence. European Neuropsychopharmacology, 10(5), 395-405.
- 8 .Bair, M. J., Robinson, R. L., Katon, W., & Kroenke, K. (2003). Depression and pain comorbidity: A literature review. Archives of Internal Medicine, 163(20), 2433-2445.
- 9. Rosen, M. I., McMahon, T. J., Lin, H., & Rosenheck, R. (2006). Effect of Social Support and Contingency Management on Maintenance of Attendance in Maintenance of Attendance in Methadone Patients: A Randomized Controlled Trial. Drug and Alcohol Dependence, 83(2), 109-115.
- 10. Mark, T. L., Parish, W., Zellmer, J., & Kae, C. (2017). Number of Opioid Prescriptions Decline in the United States and during Opioid Crisis. Health Services Research, 52(5), 1790-1794.