Mitigating the Opioid Crisis for the Podiatric Physician

Remember the "MORPHINE" acronym.

BY ROBERT G. SMITH, DPM, MSC, RPH

Opioids are an effective form of analgesia for pain treatment, but over-prescribing of opioids has become a serious crisis in the United States. One of the most difficult challenges is to balance the potential benefits versus the potential risks of opioid prescribing. An inter-professional team approach is needed to curtail the opioid crisis. The utilization of an opioid stewardship program (OSP) provides the necessary framework to identify gaps in quality, development, and implementation to change the long-standing opioid culture and practice.[1-3]

Sandbrink and Uppal1 assert in their commentary[1] the need for an opioid stewardship model as presented and detailed by Weiner, et al.[3] First, the program should encourage the use of non-opioids as first-line treatment programs.[2] Then, these programs should provide pathways to safer opioid use when opioids are indicated.[2] Lastly, these programs need to identify and engage patients with opioid use disorders into treatment.[2]

These programs address opioid prescribing, treatment for opioid use disorder, educational initiatives, and the use of information technology. The podiatric physician can appreciate that the concept of opioid stewardship has its origins and principles in current established antimicrobial stewardship.

Fundamental Actions

Seven fundamental actions support the practice of opioid stewardship within the inter-professional healthcare arena: 1) Promotion by leadership to commit to change in current culture, 2) Implementing organizational polices, 3) Advancement of clinical knowledge, expertise, and practice, 4) Enhancement of patient and family caregiver education, 5) Tracking, monitoring, and reporting performance data, 6) Establishment of accountability, 7) Supporting a network with community collaboration.[4]

There are clinical literature reports that link legitimate opioid prescriptions with opioid misuse, abuse, and opioid diversion. Any surgical intervention procedure represents a potential gateway to opioid dependence, and lower extremity clinicians must recognize and develop methods as they embrace their role as stewards of safe opioid use. Given that opioid overdoses have increased over the last decade, it is imperative that podiatric physicians take ownership of their role in curtailing opioid misuse and abuse.

A few acronyms have been created to assist providers to guide them when prescribing opioids.[5,6] The purpose of this article is the central theme of responsible opioid pain management. It will introduce and define the acronym **"MORPHINE"** to assist during opioid prescribing to treat pain. Each letter of the MORPHINE acronym stands for an essential principle of opioid stewardship. Clinical-based evidence will be presented to defend the use of the MORPHINE acronym by providing an argument highlighting current ethical prescribing standards and legal regulations in the context of opioid stewardship principles aimed at alleviating the widespread opioid crisis that podiatric providers face daily.

Each letter of the MORPHINE acronym stands for an essential principle of opioid stewardship.

M

"M" is for multimodal analgesic strategies. A multimodal analgesic approach is likely to produce superior analgesia over the use of an opioid-based approach because multimodal analgesic agents target a variety of pain pathways.[1-3] Published clinical-based

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evidence has described the effects of employing local anesthetic products to reduce post-operative pain and reduce the need for opioid analgesics. Kohring and Orgain declare that local anesthesia techniques provide excellent pain relief without adverse events.[7]

Multimodal analgesia for lower extremity surgery is now widely practiced as a means to reduce opioids and opioid-related side-effects. A multimodal approach is likely to produce analgesia superior to an opioid-based approach because multimodal analgesic agents target a variety of pain pathways. Many non-opioid multimodal agents are inexpensive and benefit patients by resulting in lower consumption of opioids.

Examples of drugs with differing mechanisms of actions that target pain pathways in additive and/or synergistic effects include: acetaminophen, alpha 2 agonists, dexamethasone, duloxetine, gabapentinoids, N-methyl-D-aspartate receptor antagonist, non-steroidal anti-inflammatory agents, and COX-2 inhibitors.[8]

O

"O" is for the development of an opioid formulary. An OSP can limit opioid initiation by creating prescribing guidelines.[2,3] The lower extremity specialist can create a personal opioid formulary by rigorously and regularly using one or two drugs for each clinical condition they commonly encounter. First, clinicians should use primary literature sources to include peer-reviewed randomized, double-blind clinical trials that compare medications. The use of secondary literature sources should include "Drug Facts and Comparisons" and "The Medical Letter on Drugs and Therapeutics" as well as review articles in peer-reviewed journals comparing drug classes and offering recommendations about drug choice. Important considerations for objective opioid selection include drug efficiency, safety, patient acceptability, and cost.

No single opioid analgesic may be perfect and no single agent can treat all types of pain. The underlying rationale for combination strategies involves the availability of individual agents that induce analgesia through separate or overlapping mechanisms or that have separate adverse effects. The basic goal of a combination strategy is to amplify the desired effects while decreasing, or at least not increasing, the undesired effects in the individual agents. Important considerations for objective opioid selection include drug efficiency, safety, patient acceptability, and cost.

R

"R" is for recognize and reduce risks for opioid harm. Therapeutic success depends on proper candidate selection, assessment before administration of opioid therapy, as well as close patient monitoring.[2-5] While substance abuse tools assess whether a patient was or is involved in alcohol or drug abuse, risk assessment tools measure additional factors involving a patient's overall level of risk of developing abuse or addiction.[9,10]

Sometimes, dangerous drug combinations are indeed prescribed for legitimate reasons without recognition of the possible dangerous effects.

Beyond taking a good medical history via an effective patient interview, there are several risk assessment tools to help further evaluate how likely it is that patients will have difficulty using opioid analgesics as prescribed. Screening for risk factors is ideally done on the patient's first visit or before prescribing opioids, although even patients who have been taking opioids for long periods of time should be routinely screened.[10]

P

"P" is for the pharmacokinetics and pharmacodynamics of opioids. Providers must be aware of dangerous combinations of medications, OTC products, and herbal supplements to avoid deadly drug-drug interactions. Sometimes, dangerous drug combinations are indeed prescribed for legitimate reasons without recognition of the possible dangerous effects. Further, diseases of a patient's organ system may affect or be affected by opioid treatments. Liver disease may make using acetaminophen difficult, while renal disease often prevents the use of non-steroidal anti-inflammatory medications.[2]

Guo, et al. relates that oral morphine has traditionally been widely used for treating patients with moderate or severe pain.[11] They identified no remarkable difference in analgesic efficacy or in tolerability of oxycodone and morphine as the first-line therapy in patients with moderate to severe cancer pain.[11]

H

"H" is for help. Seek a pain specialist when needed. Pain management specialists can empower a patient's ability to function and improve their quality of life.[2,3] Patients with substance use disorders with medically legitimate pain sufficient to justify opioids must be closely monitored.[2] Lower extremity clinicians can play an important role in patient selection and referral for chronic pain management and provide ongoing collaborative care to include monitoring for efficacy and adverse events and facilitating communication with the treating specialist. Becker, et al.[12] report the most important reasons to refer a patient to a specialist include: Abusive medication use, such as early and consistent refill requests or positive drugs screens; Excessive alcohol use; Unwillingness to try other pain treatments or medication options; Concurrent prescription for opioids and sedatives; Mental health symptoms; Opioid use disorder being treated with methadone or buprenorphine/naloxone with patients experiencing persistent, impairing pain.[12]

I

"I" is for use of information technology. The ability to use information technology resources is critical to

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provide benchmarking of opioid use and the collection of metrics to create clinical decision support tools to build best practice models.[2] The use of the electronic health record can prioritize non-opioid and non-pharmacologic pain management options and redirect clinicians who have historically been trained to practice using opioids as a first-line pain relief option.[2] Opioid stewardship programs can leverage electronic health records to develop dashboards of opioid-use patterns by departments and with the goal of reducing variability as a marker of quality care.[2]

Further, these stewardship programs can provide oversight of regulatory changes and evolving state laws that influence prescribing, mandatory prescription drug monitoring program queries, consent for minors for opioid use, and prompts for the initiation of control substance agreements.[2]

Finally, the information technology arm of the opioid stewardship program will assist with legal compliance at both the state and national levels.[2,3]

N

"N" is for the number of opioid doses. Ideally, OSP can assist for lower doses being prescribed to patients by using data collected by information technology.[2,3] Overton, et al. report that procedure-specific prescribing recommendations may help provide guidance to clinicians who may currently overprescribe opioids after surgery.[13]

Ideally, opioid analgesics are prescribed by balancing the beneficial and adverse effects. The appropriate combination of agents, including opioids and adjunctive medications, may be seen as "rational pharmacotherapy" and provide a stable therapeutic platform from which to base treatment changes.

Clinical literature findings suggest that 20 doses of an opioid agent may be sufficient to manage post-surgical pain after lower extremity surgical intervention. Finally, podiatric physicians are encouraged to educate and enlighten their patients re: drug take-back programs in the event that excessive opioid doses are indeed prescribed to their patients.

E

"E" is for education for multidisciplinary medical professionals, patients, and patient caregivers. It is paramount that an open dialog can be fostered so that expectations of opioid therapy can be appreciated by all parties.[1-5] It is paramount how important it is for patients to understand that the goal of post-operative pain management as asserted by Varley and Zuckerbraun is not to be pain-free but to make the pain manageable in the context of a patient's daily activities during their recovery.[6]

Opioid stewardship programs promote and enhance patient and family caregiver education and engagement. One tool to assist in enhancing patient education is control substance agreements, because such agreements promote communication between patients and providers, thus creating an open and honest dialog as to each individual's expectations of a treatment plan.

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Conclusion

Podiatrists need to acknowledge the potential harm that prescribing opioids may cause to their patients. It is essential for podiatric practice management to evaluate opioid prescribing, monitoring, and patient education initiatives to mitigate the current opioid crisis. Opioid stewardship principles should become a priority in podiatric management and podiatric surgery. **PM**

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Dr. Smith is in private practice in Ormond Beach, FL.