Examination of the Opioid Crisis by Julie Denton & Sandra Wood- Part III

Treatment of those addicted

When identifying an opioid or other controlled substance use problem, the prescriber has a valuable tool available to them - the Prescription Drug Monitoring Program (PDMP). In Indiana, the PDMP is called INSPECT. The INSPECT report can yield the number and type of prescriptions filled, as well as who has prescribed the drugs. The report will give a summary of opiate equivalent, the number of prescriptions and the number of prescribers for that patient for up to three years of prescriptions.

While it is rare Psychiatric-Mental Health Nurse Practitioners (PMHNPs) prescribe opiates, we do prescribe benzodiazepines and stimulants. In 2019, it became a requirement to do an INSPECT report before prescribing any benzodiazepine in Indiana. This was implemented to address the issue of too many mind-altering drugs being prescribed to a patient without the knowledge of other prescribers. Even if only prescribing stimulants, it is wise to know what other substances the patient is prescribed. Websites such as INSPECT help the PMHNP discover correct dosages and history of use, and the names of prescribers when patients are less than forthcoming or unable to accurately provide their own histories.

In a healthcare system in which patient satisfaction is an important goal, there can be conflict keeping them engaged in treatment while practicing good medical care. The opiate epidemic has spread from prescription painkillers to heroin due to the lower cost and easier availability of heroin. There is also increased co-occurrence of benzodiazepine and methamphetamine abuse (Gudin, Mogali, Jones, & Comer, 2013). Alcohol use complicates the situation of those receiving controlled substance prescriptions. "Patients with chronic pain who use opioid analgesics along with benzodiazepines and/or alcohol are at higher risk for fatal/nonfatal overdose and have more aberrant behaviors" (Gudin et al., 2013, p.7) . In order to improve patient outcomes, it is necessary to utilize monitoring programs and drug screens to protect patients from potential life-threatening events. Gudin et al. (2013) state, "risk stratification, behavioral assessment, PDMPs, and baseline and unscheduled drug testing are currently the best available tools for tracking treatment adherence" (p. 7).

Monitoring programs have helped states identify "pill mills" and prescribers participating in those practices. PDMPs and "pill mill" laws were implemented to reduce opioid-related injuries/deaths. Some states, such as Florida, have found alarming prescribing trends: "We identified 1526 (4.0%) high-risk prescribers in Florida, accounting for 67% of total opioid volume and 40% of total opioid prescriptions" (Chang et al., 2016, p.2). While monitoring a patient's prescriptions from multiple providers is time consuming, it protects the patient and the provider's advanced practice licensure by ensuring assessment for substance abuse problems is completed. If unsure how to use the state monitoring system, contact your state's Board of Health for requirements and instructions. A national PDMP would provide even better tracking to address patients who cross state lines to obtain opioids (St Marie, Arnstein & Zimmer, 2018).

Treatment of opiates is multidimensional, often requiring more than one approach to treat the addicted person. Medication is an important part of treatment because of intense cravings and difficult physical withdrawal. Patients report the inability to tolerate withdrawal often drives them back to using. Once completely weaned from opiates, if unable to manage cravings or develop coping skills for their recovery, they are at great risk of overdose. During relapse, people often use the same amounts they were taking prior to withdrawal, yet tolerance has diminished and can result in overdose. Further, after withdrawal, patients may obtain street drugs in which the potency is greater than drugs previously taken, leading to overdose. For these reasons, medication assisted treatment (MAT) appears to be key to long term recovery.

The first step in treatment is detoxification (detox), which can be provided in a multitude of settings including specialty inpatient units, medical-surgical units, psychiatric wards, outpatient clinics, primary care settings and prisons (Lobmaier, Gossop, Waal, & Bramness, 2010). Detox is less likely to be completed in outpatient facilities but resources for inpatient treatment are limited by numbers of beds, cost of inpatient treatment and insurance coverage.

Buprenorphine (Subutex), buprenorphine-naloxone (Suboxone), methadone, and other medications are used for symptom relief during withdrawal and to decrease the chance of relapse. A non-opioid drug, Lofexidine, has been studied to control withdrawal symptoms and was approved by the Food and Drug Administration in 2018 for use in opioid withdrawal. Though used extensively in the United Kingdom, it is not yet in widespread use in the United States (Lowry, 2018). Clonidine (Tenex) is often used for goose fleshing, Bentyl for abdominal cramps, Imodium for diarrhea, and Robaxin for muscle aches to make the person more comfortable while detoxifying. If the patient is able to detox more comfortably, there is a greater chance the patient will complete the withdrawal process and enter treatment to stay clean and sober.

Methadone is a full agonist with a high affinity at the opioid receptors. "When taken orally it is almost completely absorbed and has high bioavailability" (Lobmaier et al., 2010, p. 539). "If taken once a day because of its long duration it eliminates opiate withdrawal symptoms for 24-36 hours" (Ward, Hall, & Mattick, 1999, p. 221). "Meta-analysis conclude that flexible, high dose strategies are most effective. The recommended dose range is 60-100 mg, sometimes up to 120 mg daily" (Lobmaier et al., 2010, p. 539). Methadone can only be prescribed by federally certified centers. There are risks to methadone use that include overdose, ingestion by family members, and diversion. "The model of Methadone Maintenance Treatment that has been effective in most studies has usually been clinic-base and has included counseling" (Ward et al., 1999, p. 223). For pregnant women it can protect the fetus from variations in opiate levels related to use of heroin. Infants born to methadone-maintained mothers will experience neonatal abstinence syndrome (NAS) and will require extra days in the neonatal intensive care unit (Smith, 2018).

Buprenorphine is a synthetic opioid that binds to u-opioid receptors. It will displace most other opioids and, if taken first, opiates cannot replace it at the receptor site. There is increased bioavailability with sublingual vs. oral ingestion. Special training is required for the waiver to prescribe, and there is a separate Drug Enforcement Agency (DEA) number assigned to prescribers of this drug. Unlike methadone, there is minimal neonatal withdrawal and no

teratogenic effects have been shown (Ward et al., 1999). Barriers to such treatment include difficulty finding a provider, cost, and need for ongoing monitoring. There is also a street value for Suboxone. In prison settings, it is one of the most trafficked medications. Because of its ability to displace most other opiates, it can precipitate withdrawal; this reason also makes it protective for maintenance as it can protect from overdose.

Naloxone is used for treatment of intoxication and overdose. This drug is short acting and oral bioavailability is less than 1%. It is often given emergently intravenously and works by displacing opioids at the receptor sites. It is now used by families and emergency personal to treat respiratory depression (Lobmaier et al., 2010).

Naltrexone is like naloxone but effective orally and is longer acting. If taken while using opiates, it will precipitate opiate withdrawal, so it is used primarily after detox has been completed. It is most often used as a long acting injectable to aid in relapse prevention of opioid and alcohol use. Like the other medication assisted treatments, it is most effective when used in conjunction with a program that offers psychosocial counseling (Lobmaier et al., 2010).

Abstinence based programs may be most cost effective, but these programs have not been as effective in the treatment of opioid use disorders as in the treatment of other substances such as alcohol, cocaine, and anxiolytic dependence. An advantage is there are no-cost community support programs available in most communities. Alcoholics Anonymous, Sober Living, Celebrate Recovery, Narcotics Anonymous, and Rational Recovery are some of the more well-known programs. Most mental health centers have developed outpatient programs, such as partial hospitalization programs (PHPs) and intensive outpatient programs (IOPs), to assist in immediate treatment and development of recovery skills.

In a study, Marsha Linehan, an expert in treatment for dialectical behavioral treatment (DBT) for borderline personality disorder (BPD) and chronic suicidality treatment, noted DBT is effective in substance use disorders co-existing with BPD. "Prevalence of current substance abuse disorders (SUDS) among clients receiving treatment for BPD range from approximately 25% to 57% when substance use was not used as a criterion for BPD" (Linehan et al., 2002, p.13). The study involved women who were also on opiate maintenance programs, and found that DBT based treatment was effective and that pure reinforcement and acceptance of Cognitive Values Therapy (CVT) combined with a Twelve Step Program held promise (Linehan et al., 2002). These results are significant because opiate addicts with Axis II disorders tend to have poor outcomes. Their personality disorder characteristics make them more prone to impulsive behaviors and poor judgement.

There are multiple options for treatment; unfortunately, access to care can be restrictive related to location, finances, stigma, and willingness to receive care. As noted by Volkow (2014), "addiction is generally refractory to cure, but effective treatment and functional recovery are possible" (p. 2064). The opioid epidemic was partly created by the irresponsible prescribing practices of providers, and we need to take responsibility as a profession and participate in finding solutions. When you look at human history, addiction to substances has been present for hundreds of years. We must continue to work towards educating providers, patients and the in addressing this substantial problem.

Education and prevention regarding opiates and addiction

Education is a significant aspect of treatment. Many groups must be educated about addiction and its effects, including people with addictions and their families, those who care for those addicted, the communities in which they live and our society. Content must include pain, its treatment and the dangers of prescription pain medication. First, we must teach all our clients and families the risks of using prescription pain relievers even when legitimately prescribed for injury or post-surgery pain, and discuss alternatives. Caregivers must understand the risks of addiction and alter their practices to limit the use of pain medications.

People who have been injured and those undergoing surgery must recognize the function of pain. Pain serves to warn the injured person to cease actions that could further damage the body if continued. After surgery, pain signals a body disruption has occurred which will repair as healing occurs. Pain is to be expected after injury or surgery. Unfortunately, many people either have not been fully informed of this fact or believe pain is bad and must be avoided altogether (St Marie et al., 2018).

Potent opioid medications can diminish pain almost completely; however, lack of pain may not be therapeutic for the patient. Chasing zero pain has been implicated as one factor in the rise in opioid prescriptions written in the past few years. This has led to larger numbers of Americans addicted to opioid pain medications and their correlate street drugs (Ryser, 2018).

When a patient is educated about the usual level and duration of pain expected post injury or surgery, the person experiences the pain as usual and is less likely to think the pain is extraordinary. Nina Shapiro (2018), a noted surgeon and professor at David Geffen School of Medicine at the University of California at Los Angeles (UCLA), researches and writes books about medical care. She states, "Providing reasonable expectations regarding degree of pain after surgery likely also helped patients be prepared for some discomfort in the days following surgery" (Shapiro, 2018, p. 3). Results of her research found providing expectations regarding pain degree and duration, as well as recommending the use of non-opioid medication for pain relief, resulted in a significant decrease in post-surgical opioid prescriptions for patients undergoing surgery of the thyroid and parathyroid glands (Shapiro, 2018).

Patients and families need to be taught about the risks of opiate dependence and the "slippery slope" from treatment of opioids for acute pain, and how longer term use can lead to full scale dependence involving issues of withdrawal and overdose. When education is delivered in a neutral, non-biased manner, the patient and family can grasp the risks and alternatives, enabling them to help prevent a downward spiral into addiction and its dangers. For families who have a member already dependent on opioids or the street equivalent, information and access to naloxone (Narcan) - the overdose reversal medication - can potentially save a life (Turner, Fogger, & Frazier, 2018).

Caregivers dealing with persons experiencing pain in physician offices, outpatient clinics, schools, emergency departments and hospitals need more extensive education concerning drug abuse and dependency, as well as their role in treating persons in pain to avoid enabling the initiation or continuation of addiction. Most physicians and nurses receive cursory education in

their programs about drugs, alcohol and the science of addiction. Some will study further and become knowledgeable, but many will function based on the rudimentary knowledge from their basic professional education programs, perhaps supplemented by negative experiences with addicted patients and possibly their own family (St. Marie et al., 2018).

Prescribing patterns for prescription pain relievers must change to reduce the opioid crisis. Post-operative pain should not require more than a few days to a week of opiates, if at all. These medications can be prescribed with gradual weaning built into the prescription or given as needed (prn) to reduce risk for addiction. Providers treating patients experiencing chronic pain must closely monitor their patients with periodic drug screens, regular in-person assessments, periodic checks of their state's PDMP to ensure patients are not obtaining opiates from other caregivers, and short term rather than long term refills of their opioid prescriptions (Park, 2019).

Community education and prevention are vital, as those addicted will have a negative effect upon the wellbeing of their community. Those in positions of influence and power in a community need education about the process of addiction, the specific needs of patients regarding treatment and what can be done to prevent future issues related to opioids and other drugs of abuse (St Marie et al., 2018).

The community, as a whole, must consider what opportunities there are locally for residents, particularly young people. When housing, food and employment are in short supply in an area, the setting fosters hopelessness, which is fertile ground for drugs to take hold as a way to avoid the many problems residents are facing (St Marie et al., 2018).

Preventively, we believe all public and private general education schools should provide fact-based education about alcohol and drugs, preferably beginning in elementary school, so young children do not obtain misinformation or become involved with drugs at an early age. Age appropriate teaching can galvanize children against addiction rather than "show them the way" as some who oppose youth drug education fear.

Many resources exist to assist with public education. The National Institute on Drug Abuse (NIDA), a division of the National Institutes of Health, provides a variety of resources online at https://www.drugabuse.gov/publications. There are online tools, such as a video about shattering myths about drugs, a family check-up regarding parenting, and booklets available free to order through the website or by calling the NIDA. Additionally, fact sheets on prescription drugs and posters are available for downloading (NIDA, 2019).

The United States Drug Enforcement Agency (DEA) partnered with Discovery Education to develop and provide a free comprehensive Kindergarten-12th grade curriculum called Operation Prevention to prevent opioid misuse. It is available at https://www.operationprevention.com/. There is also information on the DEA National Prescription Drug Take-Back Day at https://takebackday.dea.gov/ (DEA, 2019).

The Centers for Disease Control (CDC) of the United States Department of Health and Human Services has many resources for providers, patients, and the general public available at https://www.cdc.gov/drugoverdose/opioids/index.html

The CDC website contains posters, handouts and videos that can be downloaded and used freely with no copyright infringement (CDC, 2019).

Many websites also have guidelines for prescribing and other protocols to guide providers who prescribe pain medication. These are particularly helpful to prescribers and other caregivers less experienced in dealing with issues of addiction. In 2016, the CDC published a guideline for prescribing opioids for chronic pain. These guidelines were designed for primary care physicians treating patients experiencing chronic pain and provide guidance regarding initiating or continuing opioid use; selection, dosage, duration, follow-up, and discontinuation of opioids; and assessment of the risks and addressing the potential harms of opioid use (CDC, 2016). These guidelines are available at https://www.cdc.gov/mmwr/volumes/65/rr/rr6501e1.htm?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fmmwr%2Fvolumes%2F65%2Frr%2Frr6501e1er.htm

The opioid epidemic is certainly a large and complex problem that is daunting and difficult to address. Compiling information for this 3-part series has been difficult as there are mountains of data and information. Deciding what to include in the series has not been easy, and we have only include select information, however, hope it has provided some helpful evidence and direction for practice.

What then is your task? How can you begin to address this tremendous problem? It is akin to eating an elephant. You must take it one bite at a time! We suggest you start by choosing an aspect of the problem that interests you or where you believe you can have an impact. Coordinate with others so services or education are not duplicated or missing. Educate yourself, peers, family, patients, friends and the public about pain, its treatment, and the process of becoming dependent on pain medication.

The opioid crisis is a serious and wide reaching emergency that can be addressed with commitment from all of us to educate and advocate. Our patients and their families, our communities and our nation will benefit from your efforts to help address this crisis.

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