PANHANDLE HEALTH

A QUARTERLY PUBLICATION OF THE POTTER-RANDALL COUNTY MEDICAL SOCIETY

Winter 2018 | VOL 29 | NO. 1

The Opioid Crisis

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President's Message:
Healthy through Grace by Faith

by Ryan Rush, MD

During the past three issues of *Panhandle Health*, I have written my opinions regarding the many problems with healthcare systems such as Obamacare, the United Kingdom's National Health Service and the Canadian system. In all healthcare systems around the world, a never ceasing tension or tug-of-war exists between balancing societal cost and the allocation of equal, universal coverage with innovative technologies; the greater number of souls offered the most up-to-date healthcare services at the government's expense, the greater the tax burden becomes on the productive workers. And as Americans, we value our freedom of choice, even if those choices are detrimental to our own well-being. Responsibility for one's own well-being cannot be compelled by legislation, and this is the principal reason why Obamacare has been doomed to certain failure. Much of the federal and state healthcare budgets are spent on caring for the population's ill-advised life-style choices, and presently there lacks any serious discussion by our politicians on how to address this sink hole.

However, we should not look to the government or any politician to save us from our unhealthiness. Neither should we look towards our own innate abilities, wealth or life-style choices, or to our friends and family to rescue us from the sickness and disease that might overtake us at any moment. Does anyone doubt that he/she will not become sick periodically during his/her lifetime no matter how much health insurance or monetary wealth they have? Does anyone doubt that he/she will not die one day? Billionaire Steve Jobs, the founder of Apple, could not survive pancreatic cancer, dying at the young age of 56 despite having access to the world's greatest healthcare technologies and physicians. Disease and death are the consequence of sin, and only by tackling sin can we ever hope to be healthy. Sin, which is any deed, desire, or word contrary to our creator God's eternal law, has resulted in profound strife that resonates in all of our earthly relationships (family, neighbors, enemies, etc.), but most damaging to our relationship with God.

But God, being rich in mercy and because of His great love for us, even though we are sick and dying from our numerous sins, can make us alive together with Jesus Christ, whose death on the cross has atoned for every sin to every person who believes in Him for salvation. Only through Jesus Christ can we find the health for our souls and the rest that we so eagerly long for. Although it is certain that we will suffer from disease, sickness and death during our lifetimes, God gave us his greatest gift, Himself in the person of His unique and only Son, the Lord Jesus Christ. This unearned gift is available to everyone who has faith in Him. In this winter season of holidays and celebrations, may you encounter the living Triune God and be filled with His Spirit. This is my final piece as the president of the Potter-Randall County Medical Society, and I would like to thank all of the board of directors, contributors, staff and volunteers of the Society that have made 2018 a tremendous year. May you and your family have a blessed year in 2019!

Attention: Active, Retired and Resident Members of Potter Randall County Medical Society

Please join us for the 116th Annual Meeting & Installation of Officers

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Place – To Be Announced

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Invitation to follow in the mail

Our Next Issue Of
Panhandle Health
Features:
Physician, Heal Thyself

Editor's Message:
The Opioid Crisis in the Texas Panhandle: Appreciation of and Approach to a Local and National Problem

by Paul Tullar, MD

Abstract:

Amarillo has, similar to our national opioid crisis, it's own local opioid crisis. Many different professions (pharmacy, medicine, law enforcement, judicial/ legal professions) and many different parts of our local health care providers (veterans health care, pain management specialists, surgeons, psychiatrists, addiction specialists, family medicine and other generalists in medical care) recognize, and are taking specific steps to respond to, this health crisis. The opioid crisis costs our neighbors in premature deaths due to overdose, and costs their families in suffering and grief.

Key Words:

Pain management, veterans health, pharmaceutical services, psychiatry, law enforcement, mortality premature, surgeons, grief

The Winter issue of *Panhandle Health* shines, due to the diligent work of guest editor, Dr. Whit Walker, his extraordinary persistence and his interest on behalf of our readers. The Texas Panhandle is no exception to the national opioid crisis. We have just as much an issue in limiting excessive use of opioids in medical inpatient and outpatient practice as anywhere else in our nation. We have just as much a problem with our patients' non- prescribed drug use as anywhere else in our nation. This issue details our local specialists' appreciation of the problem (see law enforcement and legal description) and our regional specialists' understanding of our specific problems and our specific approaches to deal with this problem. We are very fortunate to have contributions from a regional expert in addiction medicine and psychiatry, and from our regional addiction withdrawal and treatment center (ARAD). Contributions from many specialties (pain management, anesthesia, pharmacy, to name but a few) will increase our readers' understanding of the problem and of what's being done to address it.

Dealing with the average patient with opioid dependence is difficult enough, but pregnancy and childbirth present further complexity, as there are, until after birth, two patients to consider. Anesthesia contributions here detail one way to minimize exposure to narcotic medications during labor, while still providing superb pain relief. Our reports also detail the suffering and difficulties in the newborn when opioids continue up to birth, often leading to Neonatal Opioid Withdrawal Syndrome (NOWS).

No description of any health problem would be complete unless we detail the human side of the suffering accompanying the problems of the people with addiction, and of the families that have their own suffering because of this. Like many other serious illnesses, opioid overuse and abuse can be associated with death, either from intentional overdose (suicide) or from accidental overdose. Like many other illnesses, drug dependence has a human cost due to the burden of disability resulting from this disease. The contributions from our neighbors, the people who live in our area, are brave and painfully honest, and allow us this depth of understanding.

Here is our version of our national problem, and in this issue are our responses.

POTTER RANDALL COUNTY MEDICAL SOCIETY (PRCMS) OFFERS HELP TO ADDICTED PHYSICIANS

If you, or a physician you know, are struggling with addiction and are unsure what to do or whom to contact, the Potter-Randall County Medical Society is here to help. We offer face-to-face confidential sessions with the PRCMS Physician Health and Wellness Committee, made up of your physician peers who know and understand recovery. Please don't struggle alone when help is a phone call or an email away. Whether you are calling for yourself, your practice partner, or as a family member of a physician, contact Cindy Barnard, PRCMS Executive Director, at 806-355-6854 or prcms@suddenlinkmail.com. Membership in PRCMS is not required.

Guest Editor's Message:
Increasing Opioid Deaths in the U.S.

by James "Whit" Walker, MD

Opioids can kill. From 1999 to 2011, hydrocodone use increased more than two-fold, oxycodone use more than five-fold (1), and the mortality rate of opioid-related overdoses increased almost four-fold (2). In addition to mortality rates and emergency room visits for non-medical opioid use, neonatal abstinence syndrome (NAS), and overdose related admissions have risen dramatically since 2002. While rates of death have increased for all population groups, the rates are highest for males under age 50 (3).

Of the 72,000 overdose deaths in 2017, 40% (28,800) involved a prescription opioid. Approximately 35% of overdoses involved nonprescription opioids such as heroin or illicit fentanyl. Frequently more than one drug is involved making exact numbers difficult to detail. As Dr. Taylor writes, the fact that JCAHO mandated stronger steps to control pain in 2001 did cause hospitals and physicians either to increase prescriptions or to defend their decision not to increase prescriptions. In hindsight, this was a mistake.

I do practice Internal Medicine and Hospice and Palliative Care, and I am board certified in both. I do prescribe generously to dying patients at the end of life. I am much less generous for those patients who are not terminally ill. The narcotics we use at the end of life have many untoward effects and do not "fix" the problem of pain. In my opinion, they are almost never appropriate for long-term use. Opioid induced hyperalgesia causes myoclonus, confusion, and increase in pain. Constipation, hypogonadism, insulin resistance, urinary dysfunction, increase in cardiac events, falls and deaths should scare those who prescribe and those who consume.

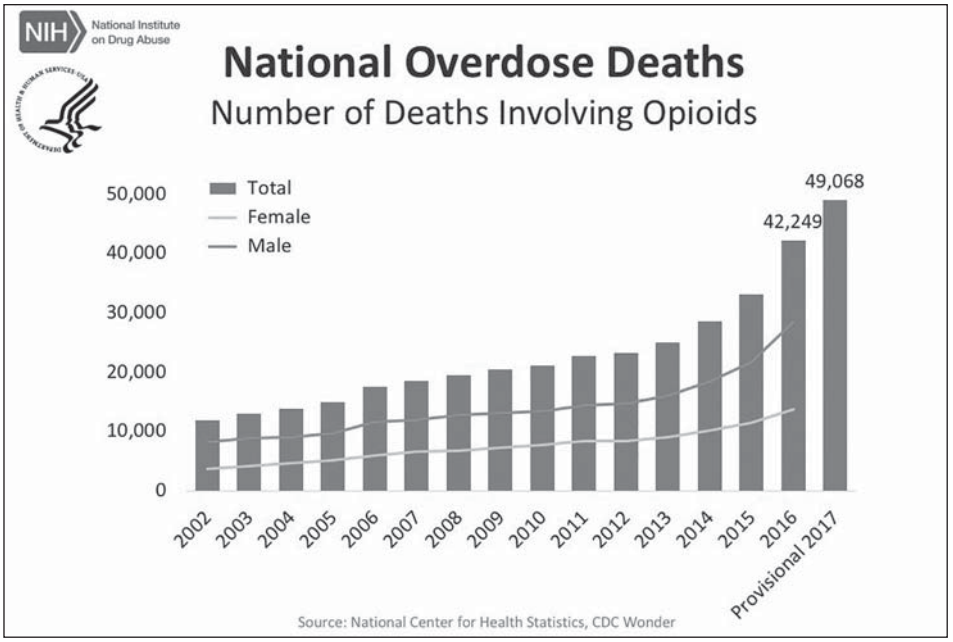
In the Korean War, the USA suffered 36,914 total deaths from 1950 - 1953. In Vietnam, we suffered 58,220 military fatal casualties over 20 years. From 1996 to 2016, 197,000 Americans have died from overdoses related to prescription opioids (4). We clearly have an issue that we simply must address.

Who are these 72,000 people who are dying? They are a heterogeneous group. Some are hard core addicts trying to get high. Some have suffered from painful conditions and are searching for relief from pain. Some are victims of polypharmacy and may not have understood the risk involved with consuming these strong medicines. In this edition of *Panhandle Health*, one father tells of one of the lives we have lost. I salute this man for sharing his story. There are far too many deaths, and these deaths are largely preventable. Also in this publication are valuable articles detailing what can be and what is being done to decrease risks and deaths. I feel these stories need to be told and I am glad we are addressing this issue. The solution is complex.

This edition has many excellent articles. Thank you to all who contributed!

References

1. Jones CM. Trends in the distribution of selected opioids by state, US, 1999–2011. Baltimore, MD: Jun 6, 2013b. Presented at National Meeting Safe States Alliance.
2. Chen LH, Hedegaard H, Warner M. Drug-poisoning deaths involving opioid analgesics: United States, 1999–2011. Hyattsville, MD: National Center for Health Statistics; 2014. NCHS Data Brief 166.
3. CDC. National Center for Health Statistics. Multiple cause of death 1999-2014 on CDC WONDER online database, released 2015. Data are from the Multiple Cause of Death Files, 1999-2014, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. 2015a. [May 25, 2017]. http://wonder.cdc.gov/mcd-icd10.html.
4. Seth P, Rudd R, Noonan, R, Haegerich, T. Quantifying the epidemic of prescription opioid overdose deaths.American Journal of Public Health. March 2018;108(4),e1-e3.



National Overdose Deaths—Number of Deaths Involving Opioid Drugs. *The figure above is a bar chart showing the total number of U.S. overdose deaths involving opioid drugs from 2002 to 2016 and provisional 2017 data. Included in this number are opioid analgesics, along with heroin and illicit synthetic opioids. The chart is overlayed by a line graph showing the number of deaths of females and males from 2002 to 2016. From 2002-2017 there was a 4.1-fold increase in the total number of deaths.*

Executive Director's Message

by Cindy Barnard, Executive Director

Our Winter Issue of *Panhandle Health* is entitled The Opioid Crisis. Of course, it is almost impossible that our citizens don't realize there is such a crisis, but I think it's difficult to imagine how widespread this crisis is. It is frightening in that it has touched every class in America—the rich, the poor, the highly educated and the non-educated, functional and dysfunctional families, citizens of large cities and suburbia as well as small towns and rural areas, etc. Patients with addiction are seen in virtually every doctor's office as well as emergency rooms and urgent care centers. By definition, we are truly living in a crisis (defined as a time of intense difficulty, trouble, and/or danger).

The good news is that doctors no longer freely prescribe opioids for pain as they once did when they had no idea of their addictive powers. Professionally, physicians are now in the process of reversing the epidemic that "they so inadvertently helped to foster." Medical offices, clinics, emergency rooms and hospitals are now dispensing information to the public regarding opioids. Many of us are involved in combatting addiction, and the more information we have, the more successful we will be in winning this war. Historically, the United States has overcome many epidemics, and with medical professionals involved, perhaps this crisis, too, can become part of our past.

As the year ends, I want to thank the 2018 Board of Directors for their service and dedication to our Society. under the leadership of our President, Dr. Ryan Rush, 2018 has been an exceptional year. The following physicians deserve a big thank you for their support as well:

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Another thank you goes to the 2018 *Panhandle Health* Editorial Board, led by Dr. Paul Tullar, Editor, and Dr. Walter Bridges, Associate Editor. Other members are Tracy Crnic, MD, Tarek Naguib, MD, Steve Urban, MD, and Rouzbeh Kordestani, MD.

A final thank you goes to our 2018 "Circle of Friends" for their continued financial support and generosity . Their commitment is absolutely essential to the success of all our events. They are Amarillo National Bank, Baptist Community Services, Neely, Craig & Walton Insurance Agency, Texas Medical Association Insurance Trust, Texas Medical Liability Trust, Happy State Bank, Cenveo Amarillo, Daryl Curtis, CLU, CHFC, and Physicians Financial Partners.

Our cover for this issue is by Marsha Clements. We have put Marsha's paintings on several of our issues, and I owe her a big thank you for always finding me a beautiful one for the covers. She has opened her own studio in Canyon.

My son, James Dison, died of an opioid overdose in 2005. He had struggled with substance abuse/addiction most of his life. In the year prior to his death, he made enormous progress toward becoming clean and sober. Nevertheless, on a summer evening following a relapse that had taken place a few days earlier, he drove to a campsite in northern Arizona where he injected himself and died.

A few months after his death, I felt drawn to write letters to him as a way to try to reach to him across the enormous divide between us. One letter became a few letters which evntually became a large stack of letters. In the letters, and thus in the book, I tried to express emotions, thoughts, reflections, etc., about my relationship with James during the period of his addictions and related problems through and after his death. It is those letters that provide the basis for the book *Overdose: Letters from Dad.*

Jack Dison (author)

Alliance News

by Kristen Atkins, President

As we approach the holiday season and the New Year, I find myself reflecting on the people who I have met and worked with this year. I am thankful for everyone who has volunteered, fundraised and contributed to the Alliance. Without your participation big or small this organization would not be possible.

I'd like to share with all of you the 2018 Alliance accomplishments. The year started with a New Year's Eve fundraiser gala. We had 180 people in attendance who toasted and rang in the year at midnight. The proceeds from the gala allowed us to give Heal the City a $5,000 grant and Our Children's Blessing a $8,500. The checks were presented on Doctor's Day at Taste Dessert and Bar to honor and appreciate the hard work our area physicians do.

This past summer we held our annual family social at Air-U. Families came together and enjoyed a fun afternoon of jumping. The summer ended with a Hard Hats for Little Heads event in July. Members fitted 300 bike helmets. Then, at the end of the summer, our 3rd quarterly meeting was focused on stuffing backpacks for Heal the City's back to school event. Several members and their families along with Give More Hugs and Story Bridge stuffed backpacks with supplies and books. We were so thankful to partner with these non-profits who see and fill the need for our students in Amarillo. The Alliance plans to continue this partnership with Heal the City next year.

Our couples' fall social which is always well attended was held at Dr. Chance & Amy Irwin's beautiful home. Society and alliance members joined together to make this event enjoyable. It was nice to visit and reconnect with old and new friends.

Each month an Alliance member has an opportunity to sign up to provide a meal to the families staying at the Ronald McDonald Children's Home. This is such a simple way to be involved with the Alliance. Another way a member can be involved is to purchase and deliver supplies for the ACTs Community Center. Alliance members contribute to the closet monthly. Alliance members look forward to meeting four times a year. Two of the meetings are committed to service and the other two to learning something new and fun. Big thanks to Kristi Aragon and Lorraine Wilhelm for creating fun opportunities for our members.

As 2019 approaches I encourage old and new members to continue to support the Alliance. It is a great way to meet others who are in the medical community, a way to support our community and our local physicians. Our Facebook page has information regarding meetings and ways to be involved in the Alliance. You can also email us potterZandallalliance@yahoo.com for more information. I challenge anyone new or hasn't been involved this past year to join. We would love to have you.

I want to thank Ashley Troutman for her commitment to the Alliance and stepping into the Presidency role for 2019. Thank you ladies for your time and efforts. We appreciate you tremendously. Thank you to the past board for the support you have given me this year. It was a pleasure serving with you!

Cheers to 2019!
Kristen Atkins

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Take Home Naloxone: Feasibility, Safety and Efficacy

by Thomas G. Martin, MD, MPH, FACMT, FAACT, FACEP

Background

Unintentional opiate overdoses (ODs) are a major cause of morbidity and mortality with increasing rates observed in most parts of the world. In the US from 2002-2017, the number of opioid related deaths increased 4.1-fold, with 29,406 of 49,068 in 2017 related to fentanyl (1). Opioid related deaths may involve prescription and illicit opioids. Risk factors for opioid related deaths include: sedative hypnotic coingestion especially ethanol or benzodiazepines, reduced tolerance from voluntary or involuntary abstinence, and highly lethal adulterants such as fentanyl analogs. Naloxone is a very effective antidote, first approved by the FDA in 1971, to reverse respiratory depression from opioid OD.

Suboptimal First Aid and Prehospital Care

Opioid OD victims often do not receive appropriate assistance from bystanders. Opiate abusers sometimes distrust their community EMS. Some EMS staff choose to give larger than necessary doses of naloxone to ensure a rapid reversal and lower risk of renarcotization. Unnecessarily large doses of naloxone may result in more severe opiate withdrawal. Illicit opioid using bystanders are often reluctant to provide first aid because police are dual-dispatched along with EMS to these scenes. Illicit opioid users warily avoid police for fear of being arrested for outstanding warrants for crimes to finance their habit, possession of illicit substances or even murder for suppling or injecting illicit substances. While some user advocate groups and even local medical associations have urged police to offer immunity to OD bystanders for non-violent, drug-related crimes, few police comply. Fear of arrest and forced abstinence if jailed remain major obstacles to bystander assistance for opioid OD victims.

Feasibility

To be feasible, Take Home Naloxone programs must be acceptable, affordable, teachable and performable. Most opioid abusers said that they would keep it in their home and use it if it were available. The proportion of opioid abusers who use in the presence of others has been reported to vary from 58% to 92%. The first 'Take Home Naloxone' program began in 1996 (2). In the past 20 years, these programs have expanded throughout many parts of the world. In 2014 the World Health Organization published guidelines for community-based overdose management, suggesting that "People likely to witness an opioid overdose should have access to naloxone and be instructed in its administration" (3).

Education

Dispensing naloxone to laypersons should be preceded by proper education. Opioid users who requires naloxone will not be able to self-administer it. Therefore, the education program targets fellow opioid users or those likely to be present at the site of opioid use. This education should include: the purpose of naloxone use, potential adverse effects, recognition of a severe opioid OD, indications for and technique of naloxone use, importance of summoning EMS, reporting outcome of naloxone use and getting more naloxone.

Indication for Use

A serious opioid OD should be suspected if the user is blue, unresponsive to vigorous stimulation or cannot maintain arousal without constant or frequent stimulation. It is important to distinguish between "nodding off" and signs of a serious opioid OD. The indication for naloxone use by a layperson is a serious opioid OD, unresponsive to vigorous stimulation.

Formulations/Cost

The desired formulation for dispensed naloxone (Narcan®) depends upon the intended route of administration, dose and cost. The 1 mg/mL 2 mL ampul is utilized for the subcutaneous (SQ), intramuscular (IM) or intranasal (IN) routes. Narcan Nasal Spray® is a newer formulation that contains 4 mg/spray with 2 sprayers/package. This formulation has much greater absorption (dose) but is more costly than earlier kits designed for IM, SQ or IN routes. For recipients with insurance coverage, the smaller difference in out of pocket expense may not be a deterrent. Most recipients without insurance will not be able to afford this newer preparation unless it is given to them through outside funded harms minimalization programs.

Ease/ Routes of Administration

The IV route is only feasible for trained health care workers. The IM and SQ routes are easy to learn but have a risk of blood born pathogen exposure to the rescuer. The IN route is needleless and the easiest to learn but used to require a special syringe tipped aerosol-generating device (i.e., MAD®). Narcan Nasal Spray® requires no special equipment. On a theoretical basis, the 4 mg per nostril dose delivered with the Narcan Nasal Spray® would be most effective in cases involving fentanyl.

| *continued on page 12*

Leaving Scene or ED Against Medical Advice

Arousal of opioid habituated persons with naloxone often causes acute opioid withdrawal which often makes the recipient very uncomfortable, uncooperative, agitated and sometimes hostile. Many recipients will try to have the prehospital scene prior to EMS arrival or against medical advice (AMA) while treated by EMS or ED staff. Because naloxone has a shorter duration of effect than heroin, there is concern that serious renarcotization may occur. However, several studies have shown that the risk of serious renarcotization or delayed pulmonary edema is very low if the recipient had injected the opioid and is awake, alert and able to ambulate without difficulty.

Medical Legal Risks

The legal risk for layperson naloxone prescribers was judged to be low for those who act in good faith, in the course of professional practice and for a legitimate medical purpose (6). The use of naloxone by health care providers to treat opioid OD is the standard of medical care throughout the world. Naloxone rescue cannot be self-administered but must be performed by bystanders. In 2015, the Texas legislature passed SB 1462, which allows physicians to prescribe opioid antagonists to users' family or friends and provides protections from criminal or civil liability for "any outcome resulting" from naloxone administration (4). In 2016, the Texas Pharmacy Association (TPA) implemented a physician authorized "standing order" for the dispensing of naloxone (5).

Potential Benefits

The sooner that the opioid-induced respiratory failure is corrected, the less likely it is to cause brain injury or death. The delay from time 911 is called until first responders arrive may be considerable. Further time may be lost when EMS wait for police arrival at the scene before starting an IV. The proper use of bystander naloxone in opioid OD is likely to result in less morbidity and mortality and cost of care.

Potential Adverse Consequences

There is concern that, with bystander naloxone, the lower risk of death from opioid OD will remove an important deterrent to opioid abuse and lead to greater risk-taking behavior. However, many believe that opiate abuse is not deterred by the risk of bodily harm or death. Heroin-users know that naloxone wastes the money that they spent on heroin and makes them "dope sick". When surveyed, most opioid abusers responded that they would not use more heroin if they knew that naloxone was on hand (6). Naloxone abuse by opiate abusers is very unlikely to occur. In some areas with well-established Take Home Naloxone programs, concern has arisen when some users have been rescued multiple times. This phenomenon has some saying that those undergoing multiple bystander naloxone rescue should be denied further bystander naloxone or be forced into detoxification programs. Others emphasize that each naloxone rescue saves a life of a loved one and enables another opportunity for rehabilitation.

Efficacy Reports

Despite widespread desire to study the efficacy of Take Home Naloxone, there are few published reports of its efficacy or safety. In 2014, the Harm Reduction Coalition surveyed 140 US naloxone distribution programs (6). From 1996 through June 2014, 644 sites had distributed naloxone to 152,283 lay-

Patron Saint or Poster Child for Take Home Naloxone?

Dan Bigg was found dead in his home on 8/21/18. He was a cofounder and the executive director of Chicago Recovery Alliance (CRA), a group that conducts drug-related harm reduction outreach and opiate-related death prevention. CRA's first-in-the-nation naloxone distribution program was the result of the death of the other CRA co-founder, John Szyler, in 1996. Dan preached that the most important aspect of harm is respectful collaboration, acceptance, and bonding. *Chicago Magazine* named him a Chicagoan of the year in 2017.

The Cook County Medical Examiner's Office recently released his death certificate, which showed that he died of multidrug poisoning (two benzodiazepines, methadone, fentanyl, and acetylfentanyl) (1). Dan broke his cardinal rule by using alone. It didn't matter that he had a silver van full of naloxone, if there was no one there to give it to him. In a 2014 interview with Zachary Siegel, published in The Fix, he said, "Really, what we're talking about building is a relationship with people so that if I'm using I can be honest with you, so that you can watch my back and that is really what we have to aim for in order for naloxone to have maximum utility" (2).

Beside never using alone and always having someone there with naloxone who knows how to use it, his tragic death reminds us to not mix sedative hypnotics with opioids and to beware of deadly fentanyl/analog adulteration.

My answer to the question? "Both."

References

1. Tonic, 2018. (Accessed 11/3/18). https://tonic.vice.com/en_us/article/7x3yag/dan-bigg-overdose-harm-reduction
2. Fix, 2014. (Accessed 11/3/18). https://www.thefix.com/content/patron-saint-harm-reduction

persons with 26,463 overdoses reversed. Naloxone recipients were primarily drug users (81.6%) and their friends and family members (11.7%). As more widespread naloxone distribution to potential bystanders and first responders has occurred, comprehensive surveys become more difficult. Since naloxone rescue is a life-saving therapy, it is unethical to randomize therapy between naloxone and a placebo treatment. Historical and concurrent controls are unreliable since death rates often fluctuate markedly from year to year and between communities. There are many challenges to studying efficacy of Take Home Naloxone.

Summary

Opioid OD is an important cause of drug related morbidity and mortality. Serious complications occur in fewer than 2% of opiate ODs aroused with naloxone and less frequently with earlier arousal. Fear of arrest by police and distrust of EMS are significant obstacles to bystander assistance in opioid overdose. Take Home Naloxone programs are acceptable to most opioid users and prescribers because they are affordable and easy to teach and perform. Because naloxone is well known to make a habituated opioid abuser ill (dope sick), it is unlikely to be abused. Opioid withdrawal can be seen after naloxone use. The likelihood of leaving a scene or ED against medical advice may be increased with Take Home Naloxone programs but is not unsafe in most circumstances. High quality data are not available to evaluate the effectiveness of these programs, and significant obstacles must be overcome to produce them. Take Home Naloxone programs have rescued many thousands of opioid ODs.

Bibliography

1. NIDA, 2017. Deaths Involving Opioid Drugs. (Accessed 10/31/18). https://www.drugabuse.gov/related-topics/trends-statistics/overdose-death-rates

2. Darke S, Hall W. The distribution of naloxone to heroin users. Addiction. 1997;92(9):1195-9.

3. WHO, 2014. Community Management of Opioid Overdose. (Accessed 10/30/18). http://apps.who.int/iris/bitstream/handle/10665/137462/9789241548816_eng.pdf;jsessionid=6C29A00A045183878765A90B9E844B1B?sequence=1

4. Texas Medical Association, 2015. (Accessed 10/31/18). https://www.texmed.org/TrueAntidote/

5. Texas Pharmacy Association, 2016. (Accessed 10/31/18). https://naspa.us/wp-content/uploads/2016/06/TPA-Announces-Standing-Order-Authorizing-Texas-Pharmacists-to-Provide-Naloxone.pdf

6. Wheeler E, Jones TS, Gilbert MK, et al. Opioid overdose prevention programs providing naloxone to laypersons - United States, 2014. CDC. MMWR. 2015;64(23):631-5.

Dr. Martin is Medical Director of Texas Panhandle Poison Center.

An Introduction to Medication-Assisted Treatment for Opioid Use Disorder

by Amy Stark, MD

Imagine a deadly epidemic that does not discriminate by age, sex, ethnicity or socioeconomic status. This epidemic claims the lives of 90 Americans every day, and there is a life-saving treatment, but it is hard to access – what kind of outrage do you think this would inspire? As a physician or community advocate, to what lengths would you go to help your community? This isn't just a hypothetical situation. We are currently in the middle of one of the deadliest epidemics in American history: the opioid epidemic. In October 2017, President Trump declared the opioid crisis a public health emergency. Almost a year later to the very day, President Trump signed off on a bipartisan bill known as the Support for Patients and Communities Act. While this legislation aims to increase access to treatment, it will not be funding an expansion of addiction treatment for opioid use disorder (OUD) (6). The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, defines OUD as a chronic psychiatric disorder characterized by persistent use of opioids, tolerance, repeated withdrawal symptoms, and sustained behavioral changes (1).

There are a lot of different ways to approach treatment of OUD, but most importantly, all treatment decisions should be made collaboratively with the patient. Meeting a patient where they are and assessing their readiness for change is incredibly important. If a patient isn't quite ready to quit using opioids, take a harm reduction approach: focus on education and safety. Encourage the use of clean needles if they are injecting and make sure that they have a naloxone kit for overdose.

If a patient is ready to consider treatment, several options exist. First, an assessment to determine an appropriate level of care will ensure that the patient receives the proper treatment based on their acuity. Treatment options may include detoxification, abstinence based methods and medication-assisted treatment (MAT).

Detoxification is not a stand-alone treatment for OUD, but rather should be considered as a prelude to treatment. Patients who complete detoxification but do not engage in further treatment have astronomical relapse rates, with some studies quoting over 80%. Furthermore, relapse following detoxification is more likely to result in a lethal overdose given loss of physiological tolerance. Similar relapse rates are seen for patients who engage only in behavioral treatments (counselling, AA/NA, etc.) and pursue an abstinence-only model (without MAT).

The Substance Abuse and Mental Health Services Administration (SAMHSA) defines MAT as "the use of medications with counseling and behavioral therapies to treat substance use disorders and prevent opioid overdose" (3). In 1997, a consensus panel from the National Institutes of Health (NIH) published recommendations in support of MAT, stating "[opioid addiction] is a medical disorder that can be effectively treated with significant benefits for the patient and society" (4). Patients on MAT have consistently demonstrated better outcomes than those who are not. Once initiated and stabilized with MAT, many patients completely stop using illicit opioids. Others may continue to use, but less frequently and in smaller amounts, which greatly reduces risk of morbidity and death from overdose. The US Food and Drug Administration (FDA) has approved three medications for the treatment of OUD: methadone, buprenorphine and naltrexone.

Methadone is a long acting racemic mixture and was the first medication approved for the treatment of heroin addiction. Methadone's ability to relieve the withdrawal from opioids was noted as early as 1947. It is administered daily from special clinics called Opioid Treatment Programs (OTP) and is highly regulated by the government. Most often methadone is administered in a liquid form, but it does come in tablets, diskettes and powders. As a full opioid agonist, it binds completely to mu opioid receptors in the central nervous system. The goal of a therapeutic dose is to prevent any kind of withdrawal symptoms for the 24 hours between dosing, prevent craving for other opioids, and attenuate the euphoric effects of illicitly used opioids. Although proven to be generally safe and effective, there are a number of side effects, many drug-drug interactions and black box warnings for respiratory depression (especially when combined with other central nervous system depressants), QT interval prolongation and neonatal abstinence syndrome.

While most physicians are familiar with methadone, fewer have the same level of familiarity with buprenorphine. It is a partial agonist that acts at both the mu and kappa opioid receptors. As a partial and not a full agonist, it occupies the receptors without all the expected opioid effects. Those on buprenorphine are less likely than those on full agonists to have strong feelings of euphoria or significant respiratory depression. Buprenorphine also has a very strong affinity for the receptor and dissociates from the receptor very slowly, making it difficult to displace. Additionally, there is a ceiling effect at moderate doses, meaning that the opioid effects level off, even with further increases in dose. This lowers the risk of misuse, dependency and side effects.

The most commonly seen formulation is a combination of buprenorphine and naloxone (suboxone). The naloxone is added to deter inappropriate diversion of buprenorphine and injection for non-medical use. When taken appropriately, because of its poor oral bioavailability, the naloxone has no significant effects. Buprenorphine used without the naloxone component, or the monoproduct, is seen less often – usually only in pregnant women or in those who have had severe adverse reactions to naloxone. Buprenorphine comes in many different formulations: buccal films, sublingual films, sublingual tablets, and transdermal patches. There is even an implantable device that provides steady continuous levels of buprenorphine for six months for those who are stabilized on a maintenance dose.

Unlike methadone, buprenorphine doesn't have to be dispensed from a special clinic and can be prescribed by all physicians, and in some states, by nurse practitioners and physicians assistants. However, to be licensed to prescribe buprenorphine, physicians must obtain a special waiver from the Drug Enforcement Agency (DEA). Prior to application for the waiver, physicians must complete additional training regarding MAT. There are limits on the number of active buprenorphine prescriptions a physician can write: 30 in the first year following obtaining a waiver, 100 in the second year, and 275 thereafter.

Naltrexone is an opioid antagonist, and its main indication for treating opioid use disorders is to help prevent relapse and opioid overdose and foster long-term recovery. Naltrexone helps with compulsions to use and cravings for opioids. Because naltrexone has no opioid effect, there is no risk of dependency or abuse potential. Similarly, there are no withdrawal symptoms if treatment is stopped abruptly. On the other hand, the lack of activity at the opioid receptor also results in higher rates of attrition and return to use. Naltrexone has a very high affinity for the opioid receptors – higher than heroin, morphine or methadone; it displaces those drugs and blocks their effects which can precipitate withdrawal symptoms. With that in mind, before starting naltrexone, a patient should be abstinent from short-acting opioids for a week and from long-acting opioids such as methadone for 10 days. There is also a depot formulation of naltrexone that can be given once per month which was approved for use by the FDA in 2006 for alcohol dependence and in 2010 for opioid dependence.

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PANHANDLE HEALTH

A Publication of the Potter-Randall County Medical Society

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Purpose *Panhandle Health* strives to promote the health and welfare of the residents of Amarillo and the Texas Panhandle through the publication of practical informative papers on topics of general interest to most physicians while maintaining editorial integrity and newsworthiness.

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Lastly, while not approved for the treatment of OUD, I would be remiss if I didn't mention naloxone. Naloxone is a nonselective opioid antagonist with that competitively binds to mu opioid receptors and is used to treat opioid overdose. Like naltrexone, naloxone has no intrinsic opioid agonist activity. It has fairly poor oral bioavailability because of extensive first-pass metabolism in the liver. However, it has a rapid onset of action when administered intravenously, intramuscularly or with intranasal administration. Naloxone is so safe and effective in treating opioid overdose that even trained laypeople in the community can administer this life-saving medication in emergency situations. Patients with a history of OUD or those who are prescribed high doses of opioid medications should be educated about naloxone, its indications, and how to use it, and they should be offered a prescription. In addition to increasing access to treatment for OUD, the Support for Patients and Communities Act aims to increase the availability of naloxone – providing kits and training to more first responders like police officers, EMS professionals and firefighters.

In summary, we find ourselves in frightening times – 90 people die every day from an opioid overdose. We are truly a nation in crisis. But we are also in a unique position to help our patients. We have more tools and a better understanding of addiction medicine than ever before. Our goals moving forward should be to increase access to MAT for all patients, and to continue to educate our colleagues and the public about safe prescribing of opioids and the risks associated with misuse. Harm reduction strategies should be employed where possible, and we should work to continue to debunk the stigma around substance use disorders. The evidence manifestly shows that OUD patients do better when they are on a maintenance medication like methadone or buprenorphine. This enables them to engage more fully in the other facets of treatment and ultimately to reengage in what is most important to them.

References:

1. American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5th ed.). Arlington, VA: American Psychiatric Publishing.
2. American Psychiatric Association. (2015). The American Psychiatric Publishing Textbook of Substance Abuse Treatment (5th ed.). Arlington, VA: American Psychiatric Publishing.
3. Center for Substance Abuse Treatment. Medication-Assisted Treatment for Opioid Addiction in Opioid Treatment Programs. Treatment Improvement Protocol (TIP) Series 43. HHS Publication No. (SMA) 12-4214. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2005
4. Effective Medical Treatment of Opiate Addiction. NIH Consens Statement Online 1997 Nov 17-19; [cited 2018, October, 30];15(6):1-38.
5. Sadock B. Kaplan & Sadock's comprehensive textbook of psychiatry. Philadelphia: Wolters Kluwer; 2017: 1353-1373.
6. Support for Patients and Communities Ac5t, Pub. L. No. 115-271, 132 Stat. 3894 (2018).

Amy Stark, M.D. is a board certified psychiatrist with specialty training in addiction psychiatry. Upon earning her medical degree from the Texas Tech University Health Sciences Center, Dr. Stark completed residency in general psychiatry at the Mayo Clinic in Rochester, Minnesota. Following residency, Dr. Stark completed a fellowship in addiction psychiatry at Yale University in New Haven, Connecticut.

Dr. Stark's areas of expertise and professional interests include opioid use disorder and medication assisted treatment; alcohol use disorder; stimulant use disorder; mood disorders; anxiety disorders; and psychiatry for specialty populations, including peripartum women and the LGBT community. She is certified to provide transcranial magnetic stimulation as a treatment option for those with treatment-resistant depression. She is currently an Associate Professor of Psychiatry at the Texas Tech University Health Sciences Center School of Medicine in Amarillo.

The Opioid Crisis and Pain Management

by Victor Taylor, MD

A quote by Albert Schweitzer hangs in my office, "…pain is a more terrible lord of mankind than even death itself."

With that in mind I sat out to write a wonderfully articulate and profound article about the opioid crisis, complete with universal truths and the answer to all question related to pain. That ended with an unreadable conglomeration of wordy nonsense.

Take two. I decided to pose a few question and ato nswer them from the standpoint of my experience as an interventional anesthesiologist whose entire practice is related to treating pain. Finally, I wanted to share my perspective on alternatives to opioids in treating chronic pain.

Is there an opioid crisis?

Yes there is. More than 70,000 people died from drug overdoses last year which is more than the year before. That is about the same number as killed by guns and automobile accidents combined. If Pampa, Canyon, Dumas, Hereford, and Borger in the Texas panhandle were wiped out in a single year, that would roughly equal the death toll from opioids in a single year. While deaths related to automobile accidents, murder, AIDS and firearms are stable or declining, deaths from opioid overdoses continue to climb.

Are prescription opioids the main driver of the crisis?

No. Roughly 40% of opioid related deaths are due to prescription opioids. The other 60% of opioid overdoses are due to illegal opioids, particularly heroin and fentanyl.

Do Americans really use more prescription opioids than other countries?

Yes. Americans account for approximately 47,000 opioid doses per one million population per day followed by Canada at 34,444/1 million and Germany at 30,796/million. Great Britain uses roughly 12,000/million and Japan only 1200/million.

Why does the U.S. use more opioid medications than other countries?

There are multiple reasons:

The transformation of the Medical Profession into the Healthcare Industry has led to unintended outcomes. Patient satisfaction surveys and the internet create pressure in an inappropriate direction.

Certain pharmaceutical companies appear to have placed far more focus on profit than patient well-being and scientific truth, leading to false information about the safety of opioid medications being disseminated to physicians and patients.

The astounding medical successes of the 20th century in the realm of infectious disease, nutrition, public health, surgery, anesthesiology and critical care etc., contributed to an abundance of optimism that relatively straightforward answers could be had for most medical problems.

A medical business model that equates Medicine (now Healthcare) with consumer business. Medicine is not a consumer business. Outside of childbirth and aesthetic fields people utilize medical services because they have to, not because they want to.

Why have opioids failed to deliver on the promise of better chronic pain control?

Opioids do not have a positive effect on any of the underlying states that lead to pain. Opioids only address the symptom and are markedly limited in that respect except in the short term.

Opioids work by activating specific receptors in the body – primarily in the central nervous system – that make it harder for an impulse to travel along the nerve as well by activating higher neurologic areas that help suppress pain transmission.

Opioid receptors are G protein type receptors and are subject to down regulation. Prolonged use of opioids can result in persistent changes to the areas of the nervous system involved in pain modulation. Persistent use of opioids can result in neurotoxic changes to the CNS and neuropathic pain unresponsive to opioids.

The result of the body's opioid tolerance is the need to increase the dose to get the same effect. Very quickly the body becomes dependent on the opioids, and withdrawal symptoms can begin after missing a single dose. Withdrawal increases pain which is then relieved by the next dose of opioid.

Besides death are there any other adverse effects from long term use of opioids.

Opioids can lead to decreased reaction times and sleep disturbance that affect overall health and wellbeing. Opioids at higher doses can lead to neurtoxicity/damage to nerve cells, which can cause myoclonus and hyperalgesia.

Opioids can cause ongoing bowel dysfunction that is not diminished by the development of tolerance.

Chronic opioids can interfere with immune function to a variable degree depending on the opioid used and the dose range.

Opioid therapy can suppress the hypothalamic – pituitary axis leading to hypogonadism, impotence, infertility and osteoporosis.

Other adverse effects include nausea, fatigue, urinary retention, dry skin, weight gain, and decreased mental focus.

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So how should we treat chronic pain?

The best way to treat pain is to address the underlying cause. The problem is that pain is complex and has multiple possible causes. Chronic pain usually requires a multimodal approach.

Pain is often caused by biomechanical derangement including herniated discs, adhesions along nerve roots, muscle weakness or imbalance and/or alterations in joint mechanics due to injury or repetitive use.

Another cause of chronic pain is centralization and spinal cord activation leading to hyperactivity of interneurons and chronic stimulation of pain pathways.

Physiologic problems including chronic inflammation can cause pain.

Disease states including rheumatoid arthritis, degenerative nerve disorders, viral infections, blood glucose imbalance, hormonal dysregulation, cancer, bacterial infection etc. can all lead to chronic pain.

Opioid medications do not address any of the causes of chronic pain.

My experience with opioids in chronic pain.

It seems that a major driver of the perception that opioids are effective for chronic pain is driven by the body's dependence on the opioid itself. Physiologic dependence occurs in a person using strong opioids on a regular/scheduled basis. When doses are missed withdrawal begins, leading to increased pain. The withdrawal is then curbed by more opioid. As the withdrawal symptoms abate so does the pain. This raises the question of whether the spike in pain level would have occurred if not for the opioid in the first place.

The majority of patients can wean from schedule II drugs, either off of opioids altogether or to schedule III drugs at much lower doses.

Many patients use opioids more sparingly when they are no longer on schedule II drugs. For many patients opioid use becomes intermittent when they are no longer physiologically dependent on the opioids.

The majority of patients feel better in terms of outlook, energy, mood, focus and overall sense of well-being on low or no dose of opioids. A significant number of patients tell me the best thing I have done for them is to help them get off of opioids.

The majority of patients who wean from high dose opioids who are taking over 40 MME per day are glad they are not at these doses and do not wish to go back to these medications. Some patients despite feeling better overall still want to use higher dose opioids.

Roughly 15-20 % of patients with whom I discuss weaning choose not to remain under my care.

Alternatives to opioids in the treatment of chronic pain.

It is important to approach chronic pain from a multi-modal treatment perspective. For many patients with chronic pain it takes a combination of interventions to get control of their pain.

Antiseizure medications, particularly gabapentin and pregabalin, help modulate neuropathic pain. In my experience these medications are helpful in the majority of chronic pain problems. They are usually not stand-alone drugs. Most of the time these medications need to be titrated to effect. Many patients want to abandon these medications early on due to lack of efficacy at low doses. Educating patients about the reason for escalating the dose instead of discontinuing the medication leads to good compliance.

Useful physical approaches include physical therapy, manipulative therapy, massage, Rolfing, yoga, progressive resistance, traction/inversion, and desensitization. A great deal of chronic pain is related to biomechanical insufficiency. Rehabilitation is essential for good long term outcomes.

Avoid triggers…at least for a while. Once treatment has begun it is important to give the body time to heal and strengthen. Some instances of chronic pain are related to one specific activity that if avoided eliminates the symptoms. Letting patients know that they may have to make changes at least for some time in order to heal is important. Even professional athletes have to take time off for injury.

Anti-inflammatory medications. These medications carry their own set risks. However when they are used judiciously and with breaks in therapy NSAIDs can be very useful. For patients who cannot take NSAIDs, low dose Naltrexone can possibly help.

Fluoroscopically guided interventions: epidural steroid injections can help break up epidural adhesions and decrease inflammation along the nerve roots. For the majority of appropriate patients these interventions are very helpful. Adding specific home stretches and strengthening exercises greatly improves outcomes.

Facet denervation via radiofrequency ablation can give good prolonged relief of spine pain and can be repeated as needed as long as it is effective. Strengthening, stretching, and core work during the time the pain is better can lessen the need for repeated treatments. Inversion therapy or traction for some patients can improve spine related pain issues.

In patients with pain syndromes that do not respond to conservative measures or even surgery, the option of spinal cord stimulation holds promise. In the past several years there have been major strides in spinal cord stimulation technology. Patients who failed to improve with

past SCS technology may have new hope with this approach today.

Lower strength opioids. In my experience the schedule III drugs can be useful in patients without developing many of the adverse effects of the more powerful schedule II drugs.

Diet and hydration are helpful. In my experience avoiding refined sugar helps people with chronic pain feel better, after they get over the sugar withdrawal. Drinking water and staying hydrated also helps people feel more energetic and may optimize function.

Finally, educating patients to what can be expected can help curb opioid use. It may not possible to completely eliminate pain. Our goal is to minimize pain and optimize function. Reminding patients of the things they can do and helping them regain their fighting spirit if they are feeling hopeless can help alleviate suffering even when some pain persist.

Conclusion

The opioid crisis is real. The majority of the fatalities in the opioid crisis are due to illegal drugs, but prescription opioids play a significant role. There are good alternatives to high dose opioids for the treatment of pain for most patients. Taking a multi-modal approach to the treatment of chronic pain is essential. Treatment of pain is complex and may require trial of different therapies.

Most patients can achieve better pain control, function and quality of life using non-schedule II opioids or no opioids at all.

This article reflects my opinion based on my experience as well as my own reading of the literature. Some other intelligent, well-trained persons hold views that are different than my own.

Resources

https://mascc.memberclicks.net/assets/documents/pain_Adverse_Effects_Opioids.pdf

https://www.aci.health.nsw.gov.au/__data/assets/pdf_file/0007/212758/Opioid_adverse_effects.pdf

https://www.medscape.com/viewarticle/813875_4

https://www.mdedge.com/jfponline/article/64302/addiction-medicine/what-are-adverse-effects-prolonged-opioid-use-patients

Mu Opioids and Their Receptors: Evolution of a Concept: Gavril W. Pasternak and Ying-Xian Pan

https://www.cdc.gov/drugoverdose/data/prescribing.html

https://www.drugabuse.gov/related-topics/trends-statistics/overdose-death-rates

https://www.cdc.gov/drugoverdose/data/prescribing.html

https://www.hhs.gov/opioids/about-the-epidemic/index.html

https://www.asipp.org/ASIPP-Guidelines.html

Opioid Use and Opioid Use Disorders (OUD) in Pregnancy

by Heather Holmes, MD

"More Americans died from opioid related deaths in 2016-17 than all US casualties combined from the Vietnam and Iraq wars," announced my husband as he read the latest news headline (Figure 1). It is impossible to read a periodical publication or the internet without realizing that the United States is facing an opioid epidemic, and women are not exempt. 2015 data suggest that 4 per 100 women use prescription pain relievers with the greatest use being among 15 to 25 year-olds, followed by the 26 to 34 age range. We are seeing more opioid use and opioid use disorders (OUD) each year during pregnancy and puerperium. In Texas, the leading cause of maternal mortality, accounting for 17%, is attributed to drug overdose with the majority related to opioids (Figure 2 and 3) (1). Paralleling the rising prevalence of opioid use during pregnancy, a sharp increase in neonatal opioid withdrawal syndrome (NOWS) was reported in 2013, occurring in 6 per 1000 hospital births. OUD affects not only women and their infants, but also families and communities.

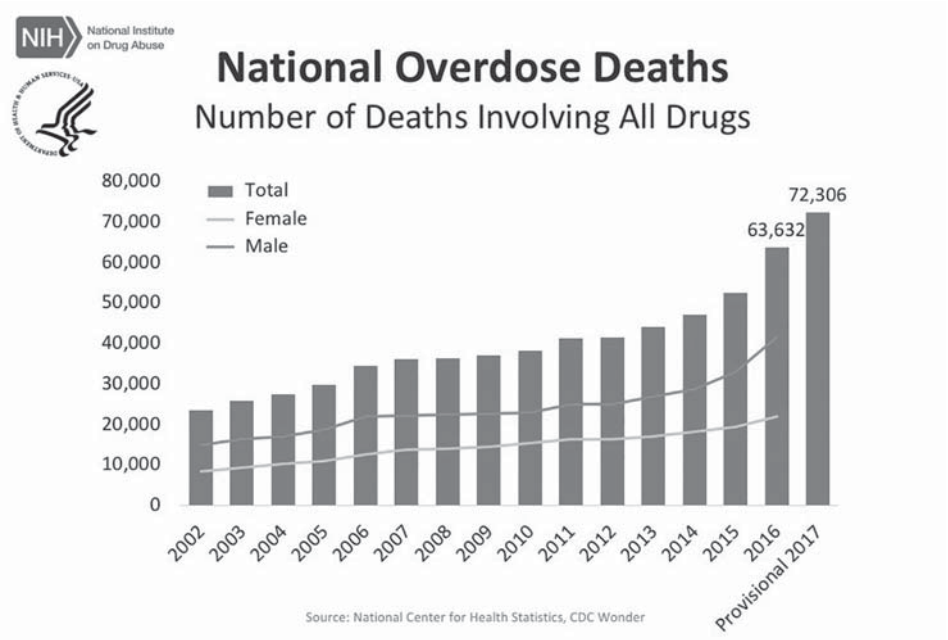

Figure 1. National Overdose Deaths – Number of Deaths Involving All Drugs. Chart overlayed by a line graph demonstrating deaths based upon gender

Table 1

Biologic	***Social***	***Psychologic***
Hormone fluctuations	Traumatic experiences	Mood disorders – depression/anxiety
Body fat percentage	Physical/sexual abuse	Eating disorders
Metabolic rate	Intimate partner violence	Posttraumatic stress disorder (PTSD)
Genetic	Familial/partner exposure	

Dependence

Women become physically dependent on opioid medications more quickly than men – a phenomenon known as telescoping. Biologic, social, and psychologic pathways (Table 1) are postulated mechanisms contributing to why women use substances differently than men (2).

Chronic pain sufferers are more likely to be women and are more likely to use prescription opioids.

Legal Ramifications

Criminalization of substance use during pregnancy is fiercely debated. 18 states in the US have explicitly permitted civil child abuse proceedings. In 2014, the Tennessee legislature passed a law permitting criminal assault charges for illicit substance use in pregnancy with imprisonment if convicted. The statute expired on July 1, 2016. Laws that permit child abuse charges for substance use during pregnancy are currently being considered by several state legislatures. Law enforcement agencies and lawmakers contend that criminal charges act as a deterrent. Medical addiction models promote treatment, not punishment, as the method to reduce use during pregnancy. Advocacy groups such as the National Advocates for Pregnant Women (NAPW) echo the latter philosophy.

Women are less likely to admit to substance use for reasons such as fear of being labeled as a "bad" mother, termination of parental rights, or mandated treatment. Impoverished women and women of color are disproportionately referred to Child Protective Services. Detainment or incarceration for even a few days can result in withdrawal symptoms, leading to fetal distress and death. Threat of punishment is punitive, and thus does not promote prevention and treatment strategies.

Screening for OUD

Substance use disorders affect women across all geographic, socioeconomic, racial, and ethnic groups. Universal screening is recommended during the first prenatal visit. Validated screening tools such as the 4Ps, NIDA Quick Screen, or CRAFFT should be employed. Self-disclosure or screening indicative of high risk for substance use should prompt counseling regarding risks as well as referral to treatment resources in the community to improve maternal and neonatal outcomes. Substance users are more likely

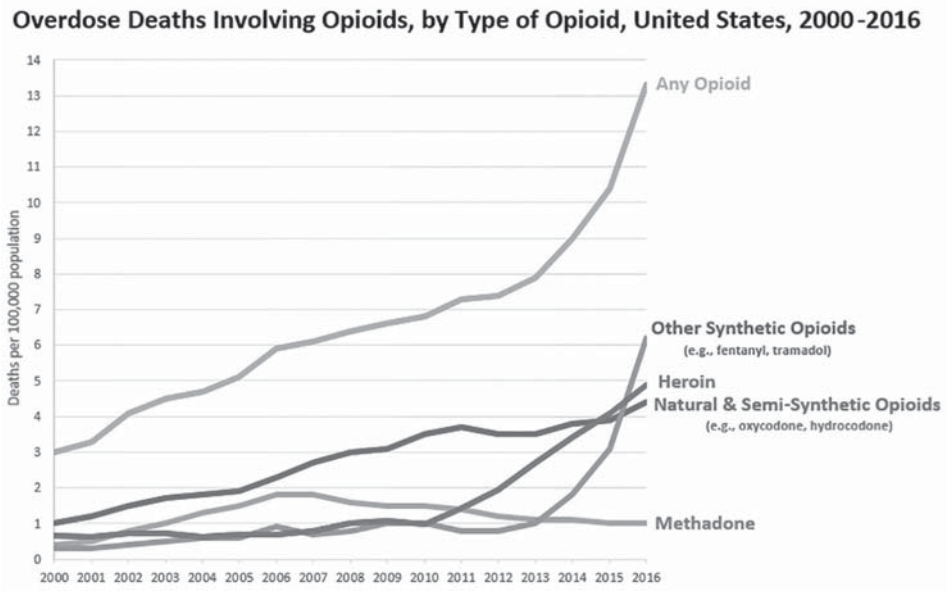

Figure 2. Deaths in U.S. from opioid overdose by type, 2000-2016

to have poor nutrition, limited to no prenatal care, and to engage in abuse of other substances during pregnancy and beyond.

For individuals seeking confidential help/treatment for substance use disorders in our region, the Outreach, Screening, Assessment and Referral Center (OSAR) at Star Care Specialty Health System in Lubbock, Texas (806-740-1421. In addition, Amarillo Recovery from Alcohol and Drugs can be contacted at (806) 350-2723. www.starcarelubbock.org) is available. Individuals can also contact 24-7 hotline at 877-9-NODRUG or TXHHS at www.dshs.state.tx.us/sa/OSAR.

Antepartum

Standard prenatal care is recommended with individualization based upon comorbid conditions. Expanded sexually transmitted infection (STI) screening to include gonorrhea, chlamydia, syphilis, HIV, hepatitis B and C, and tuberculosis should be considered. Confirmation of dating via ultrasound should be performed early. Depression and other behavioral health conditions should also be screened during the first prenatal visit, along with the use of other substances directing social and psychologic counseling referral. Opioid use during pregnancy is associated with birth defects including atrial and ventricular septal defects, spina bifida, and cleft lip/palate. In addition, usage is associated with a 600% increase in obstetrical complications including preterm birth, low birth weight/small for gestational age infants, neonatal opioid withdrawal syndrome (NOWS) formerly known as neonatal abstinence syndrome (NAS), and sudden infant death syndrome (SIDS).

Women are counseled at the outset of pregnancy regarding expectations of discomfort and pain associated with each trimester of pregnancy. For chronic pain patients, emphasis is placed on alternative modalities including non-pharmacologic physical therapy, massage, acupuncture, behavioral therapy, and exercise along with non-opioid pharmacologic treatments. Goals during pregnancy should be avoidance or minimization of the use of opioids for pain management. Pain should be assessed periodically. Intrapartum pain management options should be discussed early in gestation.

Anesthesia consultation to discuss intrapartum and postpartum pain management in the third trimester is reasonable. Postdelivery care of the neonate/infant should be discussed during this period with a pediatrician or neonatologist. Repeat STI screening should be performed. Ultrasound to assess fetal growth is indicated for concerns of growth restriction.

Medically Assisted Treatment (MAT) versus Detoxification

The recommended therapy for opioid use disorders (OUD) during pregnancy is medication assisted treatment (MAT) with methadone or buprenorphine. Opioid agonist therapy reduces high risk behaviors associated with illicit use, which improves pregnancy and neonatal outcomes. Methadone can be administered daily, and, given its long half-life, suppresses maternal cravings and prevents uncontrolled narcotic withdrawal. The agent and dosing are individualized and involve a patient-centered approach. Split dosing may be required during the third trimester given increased metabolism. Methadone cannot be transitioned to buprenorphine as it may precipitate withdrawal. The reverse is not true. Medically supervised therapy not only provides daily dispersal by a licensed facility of MAT, but it comprehensively provides addiction counseling, family therapy, nutrition, and psychosocial services.

The advantage of buprenorphine is that it can be dispensed by a licensed provider in an office setting as there is less likelihood of overdose with this partial agonist. Another advantage over methadone is fewer drug interactions. Long-term data for use during pregnancy however are lacking.

Controversy exists regarding medically supervised withdrawal/detoxification from opioids during pregnancy given the relapse concern. The University of Texas Southwestern Department of Obstetrics has developed an inpatient opioid detoxification (methadone tapering) program that has met with success in a well selected, highly motivated population. The program employs a slow taper of opioids based upon maternal symptoms as well as intensive daily therapy. Gradual weaning minimizes withdrawal symptoms. Long-term management includes outpatient rehabilitation, social support, and ongoing counseling. Infants of women who successfully completed the program had shorter hospital stays, and fewer required treatment for withdrawal (3).

Intrapartum

Individuals should remain on their opioid agonist maintenance dose during labor with additional pain relief such as

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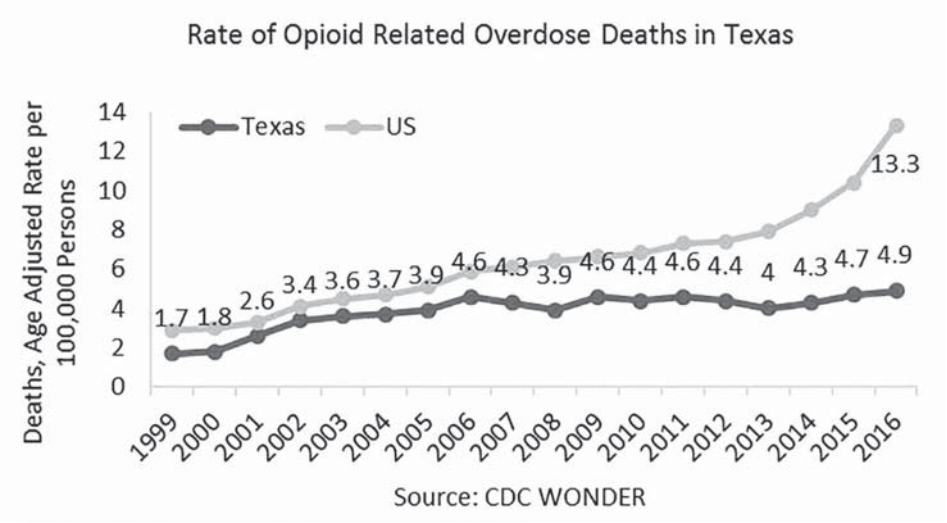

Figure 3. Deaths related to opioid overdose in Texas

an epidural anesthesia as needed. Higher doses of opioids are often necessary to achieve analgesia. Opioid agonist-antagonist drugs should be avoided as they can precipitate acute withdrawal. Pain management in individuals with opioid use disorders is challenging given their increased drug tolerance as well as hypersensitivity to pain. A multimodal approach to pain management is often necessary including neuraxial analgesia, nonsteroidal anti-inflammatory drugs (NSAIDs), and acetaminophen.

Cesarean sections are more likely to need additional pain medications postpartum. To address this issue, Anesthetic Solutions at Northwest Texas Healthcare System has developed an Enhanced Recovery after Surgery (ERAS) protocol that is initiated prior to reaching the operating room. It entails an evidence-based, patient centered approach to improve outcomes, reduce complications, and minimize postoperative pain. For cesarean sections, the protocol was specifically developed in the hopes of reducing opioid use post-delivery with preoperative, opioid sparing regional anesthesia and postoperative initiatives.

Postpartum

Following a routine vaginal delivery, first line pain management should include acetaminophen and NSAIDs. This regimen should also be employed first in all women following a cesarean delivery with the addition of an opioid only if pain persists. Postpartum pain control, especially following cesarean section, is highly effective with the use of injectable nonsteroidal anti-inflammatory agents such as ketorolac.

In 2017, UT Dell Medical School/Seton Health Care Family Hospitals implemented a new means of assessing pain levels on the postpartum unit using functional activity, such as sleeping comfortably and the ability to go to the bathroom, essentially moving away from subjective 1-10 pain scales and Wong-Baker faces pain rating scale. Acetaminophen and ibuprofen are scheduled in combination every 6 hours to reduce opioid use post-delivery. For many individuals this proves effective.

Women who were on MAT should continue these medications postpartum and be referred to outpatient treatment. Close follow-up is essential as rates of relapse are increased during this timeframe (4).

One in 10 women in Pennsylvania, and likely other states, fills a prescription for narcotic pain medications following normal vaginal delivery without a laceration/episiotomy or tubal ligation. Even short-term duration of opioid medication use in a naive patient increases the risk of long-term opioid usage. Physicians have a responsibility to evaluate medication use, specifically opioids, utilized during the hospitalization in all women and judiciously prescribe pain medications for a short duration, if at all, or alternatives following discharge.

Psychosocial support services as well as access to substance use disorder facilities are essential in the postpartum period. Relapse rates are much higher in the postpartum period with substance use beginning shortly after birth. Contraceptive counseling should be addressed throughout pregnancy and at intervals to minimize the risk of unintended pregnancy.

Neonates and Opioid Withdrawal

Neonates can experience symptoms such as shakiness, tremors, fever, poor feeding, vomiting, diarrhea, and sleep disorders after in-utero exposure to opioids. This condition is known as neonatal opioid withdrawal syndrome (NOWS) and can occur for days to weeks following birth. NOWS complicates 60-90% of deliveries following in-utero methadone exposure. Pregnancies that are maintained on MAT are at significant risk for neonatal intensive care admissions as well as NOWS. For this reason, opioid-exposed neonates should be monitored closely by a pediatric care provider. Management may require several weeks of treatment.

U.S. data from 2013 reported that NOWS affected 0.6% of live births. Data for the incidence of NOWS in Texas are unavailable. Texas Medicaid discharge summary data from 2011 reported 852 births with this diagnosis. This is likely a gross underestimation as it does not include outpatient/clinic monitoring and treatment.

Breastfeeding

In women who are not using illicit drugs, are stable on an opioid agonist, and have no other contraindications, breast-feeding is preferable (5). The advantages of breast-feeding for an infant often outweigh any possible negatives. Small amounts of methadone are found in breast milk with the maximum concentration occurring 2-4 hours after dosing. Attempts should be made for those individuals on MAT to time feedings outside of the maximum peak. Overall, women should be maintained on the lowest possible effective dose of opioids to prevent cravings and to avoid relapse. Opioids should however be suspended in the event of a relapse. Breast-feeding also promotes mother and infant bonding as well as providing benefits of immunity.

Conclusion

Women are a vulnerable population for opioid use and opioid use disorders. Long-term treatment includes medications, behavioral therapy, and recovery support. Suddenly stopping opioids poses a great risk to the fetus and invariably does more harm than good. Many women are motivated to discontinue substance use during pregnancy for fetal benefits. Oftentimes they resume usage shortly after birth. Pregnancy and puerperium pose unique considerations for women with opioid use disorders and their infants. Research in the best practice management of OUD in pregnancy is currently lacking.

References

1. Centers for Disease Control and Prevention. Annual Surveillance Report of Drug-Related Risks and Outcomes - United States, 2017. Surveillance Special Report 1. Centers for Disease Control and Prevention, U.S. Department of Health and Human Services. Published August 31, 2017. Accessed [10.13.2018] from https://www.cdc.gov/ drugoverdose/ pdf/pubs/2017 cdc-drug-surveillance-report.pdf

2. Jones H, Goler N, Werner D. Women's Health, Wellness, and Recovery: An Introduction to Women's Substance Use Disorders and Health [webinar]. May 6, 2015. In the Substance Abuse and Mental Health Services Administration's Women Matter! series. Retrieved from: http://www.samhsa.gov/ womenchildren-families/trainings/ women-matter

3. Stewart T. Nelson D. The obstetrical and neonatal impact of maternal opioid detoxification in pregnancy. Am J Obstet Gynecol. September 2013; 267. e1-e5.

4. Society for Maternal -Fetal Medicine. Substance Use Disorders in Pregnancy Workshop [Executive Summary]. January 2018. https://www.smfm.org/ opioid

5. American College of Obstetricians and Gynecologists. Opioid Use and Opioid use Disorders in Pregnancy. ACOG Committee opinion No. 711. Washington, DC: American College of Obstetricians and Gynecologists. Obstet Gynecolog. 2017; 130: e81-94.

Dr. Heather Holmes is an Associate Professor in the ob/gyn department at Texas Tech (Amarillo). She is director of Maternal-Fetal Medicine as well as of the High Risk Ultrasound and Genetics Unit. Dr. Holmes attended medical school at UTMB and completed her ob/gyn residency at Texas Tech (Amarillo) before completing a 3-year MFM fellowship at UT Southwestern. She has won numerous teaching and clinical service awards during her 13 years at Tech in Amarillo.

Opioid Sparing Strategies in Obstetric Surgery

by Gregory Collins, DNP, CRNA

Enhanced recovery after surgery (ERAS) is a collective term used to describe perioperative strategies intended to improve surgical outcomes. First illustrated in 1997 by Henrik Kehlet within the specialty of colorectal surgery, the foundational pathways of ERAS are aimed at shortening the time to complete recovery by the mitigation of stress response and organ dysfunction after surgery. An additional, intended outcome of incorporating ERAS strategies into the care of the patient undergoing a surgical procedure is the ability to limit opioid pain medications throughout the recovery period, which, in the face of the epidemic of opioid misuse currently affecting the country, is a significant attribute.

Background

Cesarean section (CS) is one of the most common surgical procedures performed in the United States, with over 1.2 million operations, or 32% of all live births, completed in 2015 (1). While the vast majority of patients are young and relatively healthy, the CS procedure is considered major abdominal surgery and carries the requisite consequences and potential complications of such, including the untoward effects associated with opioid pain medication. What differentiates CS from other abdominal procedures, however, is the unique circumstance involving the birth of another human, who is immediately dependent on the patient undergoing the procedure. A chance to improve the maternal experience, reduce postoperative complications, and limit or even eliminate the need for opioids, as is hypothesized by the introduction of ERAS strategies into the care of the patient undergoing CS, should be explored and promoted.

Interventions

Preoperation. Early patient education, allowing the patient to eat a light meal within fairly liberal time parameters, and the provision of a carbohydrate-rich beverage up to two hours before the procedure are all effective methods aimed at metabolically preparing the patient and decreasing anxiety, in the incorporation of ERAS strategies into the patient undergoing elective CS. Interventions aimed directly at the perioperative reduction of opioids, however, can be enhanced in the administration of several routine medications before the procedure.

Acetaminophen is a common analgesic with a demonstrated record of safe use in pregnancy which has recently gained traction for use in the perioperative arena when given in an IV infusion. In a randomized controlled trial comparing IV acetaminophen to a placebo, researchers found that the administration of 1000 mg of acetaminophen within an hour before skin incision resulted in a significant decrease in oral opioid consumption for pain control throughout the recovery period after CS (2).

Gabapentinoids have found favor in the preemptive analgesia tracts of ERAS guidelines in numerous surgical specialties because of their ability to restrict the release of sensory excitatory neurotransmitters involved in the transmission of pain signals. Specific data inferences from studies involving urologic and gynecologic procedures under neuraxial anesthesia, combined with an established maternal and neonatal safety profile, suggest that the preoperative administration of the gabapentinoid pregabalin before CS has the ability to prolong the sensory blockade from spinal anesthesia and to significantly reduce postoperative opioid requirements (3,4).

Intraoperative. The primary use of spinal anesthesia in the care of the parturient undergoing CS has been a preferred practice for over three decades, in part due to the ability to keep the patient awake and interactive without the need for airway manipulation. In more recent times, the addition of intrathecal (IT) morphine has dramatically influenced the pain management plans of this patient population, but not without subsequent side effects, primarily pruritis and nausea. Data from both an extensive meta-analysis and another large cohort study suggest that dosing IT morphine at 100 micrograms, an amount much smaller than in traditional practice, has the ability to limit these detrimental side effects while providing equal analgesia compared to higher doses, and still significantly reducing the need for opioid containing medication throughout the recovery period (5,6).

With the parturient in whom IT morphine is contraindicated because of sensitivity, or may potentially be less effective due to a history of opioid dependence, the transversus abdominus plane (TAP) block has potential for use as an adjunct in the multimodal plan of analgesia after CS. The use of ultrasound guidance to isolate and inject local anesthetic into the neurofascial plane, in which the sensory nerves for the lower anterior abdomen reside, has been shown to be a safe and effective pain management technique. Evidence of TAP block use for postoperative analgesia after CS has confirmed this finding. Through the process of meta-analysis, researchers demonstrated the clinical effectiveness of TAP block in providing analgesia after CS when compared to no block or placebo. However, the study showed no appreciable differences in pain management when TAP block was compared to IT morphine, either independently or when used in conjunction (7).

Tissue damage secondary to surgery results in the release of both local and systemic chemical mediators which are responsible for stimulation of nerve fibers, augmenting both acute and chronic pain responses. Glucocorticoid medications have anti-inflammatory properties primarily derived from the suppression of these chemical mediators. A comprehen-

sive systematic review and meta-analysis looking at the effects of dexamethasone in adult patients undergoing general surgery found that a single intraoperative dose resulted in lower pain scores and lower opioid requirements at 2 and 24 hours postoperatively (8). Regarding the effects of glucocorticoids specifically related to CS, a smaller, double-blinded trial demonstrated a significant reduction in postoperative pain in patients randomized to receive 8 mg of dexamethasone, with no increase in adverse outcomes (9).

Postoperative. In line with ERAS strategies from other surgical specialties, early feeding of the patient after CS and expedited removal of the urinary catheter help to untether the patient from the bed and return normal bowel motility and are important components. The capacity to provide adequate postoperative pain management after CS without incorporating opioids requires a multimodal approach. In addition to the analgesia provided by IT morphine, the continuation of scheduled acetaminophen from the preoperative dose into the postoperative period has been demonstrated to significantly reduce pain scores and patient requests for opioid containing medications (10).

Nonsteroidal anti-inflammatory drugs (NSAIDs), of which the most available IV preparation is ketorolac, have potent analgesic effects after surgery and have become an integral part of the multimodal analgesia associated with ERAS. An extensive meta-analysis of trials studying the utilization of NSAIDs after CS demonstrated not only lower pain scores and less opioid consumption, but also less drowsiness and sedation, an effect that is in line with the core ideology of ERAS (11).

An interesting finding in the evidence surrounding multimodal analgesia after CS is found in studies examining the combination of NSAIDs and acetaminophen. Ong, Seymour, Lirk, and Merry conducted a systematic review of 21 studies and almost 2,000 patients receiving either an NSAID or acetaminophen independently, or some combination of the two drugs after surgery. Using pain intensity scores and needs for a supplemental analgesic as outcome measures, the researchers found that the combination of a NSAID and acetaminophen produced superior analgesia over either of the two alone. The degree to which the combination therapy outpaced the individual drugs led the authors to suggest a synergistic effect of the concurrent administration of NSAIDs and acetaminophen (12).

Conclusion

In light of the opioid abuse crisis, and considering the high volume of CS procedures performed annually, the ability to limit the need for opioid containing medications throughout the postoperative period poses a significant benefit to the application of ERAS strategies to the anesthetic management of the patient undergoing CS. Additional opportunities to improve the maternal experience and minimize postoperative complications exist when the treatment pathways of ERAS in obstetric surgery are explored.

References

1. Martin J, Hamilton B, Osterman M. Births in the United States, 2015. *NCHS Data Brief*. 2016;258:1-6. http://www.cdc.gov. Accessed October 31, 2018.

2. Altenau B, Crisp C, Devaiah C, Lambers D. Randomized controlled trial of intravenous acetaminophen for postcesarean delivery pain control. *Am J Obstet Gynecol*. 2017;217(3):362.e1-362.e6. doi:10.1016/j.ajog.2017.04.030

3. Lam D, Choi S, Wong S, Irwin M, Cheung C. Efficacy of pregabalin in acute postoperative pain under different surgical categories. *Medicine (Baltimore)*. 2015;94(46):e1944. doi:10.1097/md.0000000000001944

4. Park M, Lee H, Jeon Y. Preoperative pregabalin prolongs duration of spinal anesthesia and reduces early postoperative pain. *Medicine (Baltimore)*. 2016;95(36):e4828. doi:10.1097/md.0000000000004828

5. Girgin N, Gurbet A, Turker G, Aksu H, Gulhan N. Intrathecal morphine in anesthesia for cesarean delivery: dose-response relationship for combinations of low-dose intrathecal morphine and spinal bupivacaine. *J Clin Anesth*. 2008;20(3):180-185. doi:10.1016/j.jclinane.2007.07.010

6. Sultan P, Halpern S, Pushpanathan E, Patel S, Carvalho B. The effect of intrathecal morphine dose on outcomes after elective cesarean delivery. *Anesthesia & Analgesia*. 2016;123(1):154-164. doi:10.1213/ane.0000000000001255

7. Champaneria R, Shah L, Wilson M, Daniels J. Clinical effectiveness of transversus abdominis plane (TAP) blocks for pain relief after caesarean section: a meta-analysis. *Int J Obstet Anesth*. 2016;28:45-60. doi:10.1016/j.ijoa.2016.07.009

8. Waldron N, Jones C, Gan T, Allen T, Habib A. Impact of perioperative dexamethasone on postoperative analgesia and side-effects: systematic review and meta-analysis. *Br J Anaesth*. 2013;110(2):191-200. doi:10.1093/bja/aes431

9. Shahraki A, Feizi A, Jabalameli M, Nouri S. The effect of intravenous dexamethasone on post-cesarean section pain and vital signs: A double-blind randomized clinical trial. *J Res Pharm Pract*. 2013;2(3):99. doi:10.4103/2279-042x.122370

10. Valentine A, Carvalho B, Lazo T, Riley E. Scheduled acetaminophen with as-needed opioids compared to as-needed acetaminophen plus opioids for post-cesarean pain management. *Int J Obstet Anesth*. 2015;24(3):210-216. doi:10.1016/j.ijoa.2015.03.006

11. Zeng A, Nami N, Wu C, Murphy J. The analgesic efficacy of nonsteroidal antiinflammatory agents (nsaids) in patients undergoing cesarean deliveries. *Reg Anesth Pain Med*. 2016;41(6):763-772. doi:10.1097/aap.0000000000000460

12. Ong C, Seymour R, Lirk P, Merry A. Combining paracetamol (acetaminophen) with nonsteroidal antiinflammatory drugs: a qualitative systematic review of analgesic efficacy for acute postoperative pain. *Anesthesia & Analgesia*. 2010:1. doi:10.1213/ane.0b013e3181cf9281

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Whole Health Approach to Augment VHA Opioid Safety Initiative in Amarillo Veterans Affairs Health (VAHCS)

by Sameh F. Moawad MBChB, DO

Introduction

The opioid epidemic continues to be front and center as a national health care crisis. President Trump signed the SUPPORT for Patients and Communities Act on October 24th, 2018 to increase the country's opioid epidemic response efforts. The bill focuses on improving access to treatment services and allowing government authorities to research non-addictive drugs for patient pain management. The White House also welcomed 21 private sector and nonprofit partners to the bill signing. Each organization pledged to continue in diverse ways to end the opioid epidemic.

In Amarillo VAHCS, we have a dedicated team of health care providers, and other licensed professionals, such as social workers and nurses, across the whole Health Care System. This team takes pride in serving America's heroines and heroes. Our team has implemented many evidence-based best practices to ensure safe opioid prescribing practices for the last few years. We have also launched our Whole Health Committee which leads the delivery of a seamless health care model with great positive impacts on the issues of pain management and opioid safety.

Background and The Opioid Safety Initiative (OSI)

The Opioid Safety Initiative is the coordinating center for all of VA's efforts to promote safe prescribing practices and to address the broader opioid epidemic in the United States.

"In December 2014, Veteran Health Administration (VHA) Memo *Opioid Safety Initiative (OSI) Updates* was released to provide guidance on opioid safety practices that facilities and VISNs (Veterans Service Networks) were expected to engage in moving forward. Progress on improving patient safety under the OSI Memo Updates has been clear and meaningful. To facilitate OSI efforts, facilities including Amarillo VAHCS have continued these existing efforts by tracking lists of patients receiving high dose opioids, concurrent opioid and benzodiazepine prescriptions, lack of recent patient education/opioid consent and lacking urine drug screens."

In Amarillo VAHCS an interdisciplinary team meets regularly as the facility pain management/ opioid safety committee. This team consists of Chief of Staff, a pain management provider, a mental health provider, a primary care (PACT) provider, Chief of Pharmacy, a nursing management representative, a social worker representative, and an inpatient service provider, in addition to other members. This team is tasked with monitoring safe opioid prescribing practices at the Health System level and in reviewing individual patients' charts and making recommendations to other health care providers and prescribers.

In addition to the efforts of the pain management committee, there is a pain management consult team that providers can contact to get the help of an interdisciplinary team including a pain management specialist and a mental health specialist.

Because consultation and referring patients to a pain management specialist was highly utilized, Amarillo VAHCS has recently hired another pain management specialist. Pain management specialists can perform a variety of evidence based procedures to treat pain without using opioid medications.

Because of attention to the guidelines and use of the tools provided by Veterans Health Administration and the Heart of Texas Veterans Service Network, our clinical staff at Thomas E. Creek VAMC has successfully decreased opioid prescribing rate from 25% in 2012 to 15% in 2018, with relative decrease in opioid prescribing rate of (-41%) from 2012 to 2018.

It is noteworthy that 99% of VA Facilities across our nation have decreased opioid prescribing rates since 2012.

Although we came a long way in reducing opioid prescribing rate from 25% in 2012 to 15% in 2018, we still have a lot of work to do at Amarillo VAHCS in this area. Despite the sustained and steady decrease in our opioid prescribing rates over the last several years, Thomas E. Creek VAMC continues to be an outlier on the high side of opioid prescribing rate in comparison to other VA facilities within the Heart of Texas Veterans Integrated Service Network.

As we go through our health care journey at this front, we are committed as part of VHA "To enhance the safe and efficacious care of Veterans who are exposed to opioids. Deploying risk mitigation strategies or modifying treatment plans for patients at elevated risk of experiencing an adverse event related to an opioid prescription or opioid use disorder diagnosis through our interdisciplinary pain management committee and pain management consultation processes with the goal of reducing the likelihood of these events and the desired results of improving patient outcomes."

These measures from VHA have been implemented at Amarillo VAHCS:

- Obtaining state Prescription Drug Monitoring programs (PDMP).
- Urine drug screening.
- Opioid medical informed consent / patient education.
- Using **Stratification Tool for Opioid Risk Mitigation (STORM)** to identify patients who are very high opioid prescription risk for overdose or suicide related events. These patients must be included in the interdisciplinary OSI case reviews of patients with elevated risk opioid prescribing.
- The *STORM Patient Detai*l report displays (1) a risk score and risk category,

(2) patient risk factors, (3) tracking of use of customized risk mitigation strategies, and (4) tracking of selected recent and upcoming encounters. The dashboard is updated nightly and can be used by providers to complete the data-based case reviews.

- STORM can also be used before initiating opioids for patients with new opioid prescription.
- Who should use STORM? "Clinicians should use STORM if they prescribe opioids, care for patients prescribed opioids, or have patients with an Opioid Use Disorder (OUD). This may include Primary Care Providers (PCP), Clinical Pharmacists, Emergency Department personnel, Pain Clinic and Specialty Care clinicians, as well as Patient Aligned Care Team members and Behavioral Health Interdisciplinary Program (BHIP) team members."

Using Opioid Therapy Risk Report (OTRR):

This is a Veteran-focused tool for clinicians who manage long-term opioid therapy (LTOT). The tool gathers information from across the VA and updates daily so that the most up-to-date information is available, regardless of care delivery location. The data displayed is actionable and Veteran and clinician specific.

This tool helps to identify higher risk Veterans receiving long term (> 90 days) opioid therapy. It also shows key variables that influence Veteran risk.

- Amarillo VAHCS mental health teams have been providing treatment for opioid dependency for the appropriate patients on outpatient basis using buprenorphine/naloxone (Suboxone).
- Providers are also encouraged to make naloxone prescriptions available to patients on opioid prescription.
- VHA/ VISN Academic Detailing Service has been providing healthcare providers with tools to help them educate their veteran patients about risks of opioid medication. This tool helped many providers and patients to work together on a plan to taper off opioids.

A Game Changer - Whole Health Approach

- Our Whole Health Committee in Amarillo VAHCS has launched the Whole Health approach to follow VHA Whole Health for Life, which is an approach to expand the VA Whole Health System. This is "a bold redesign of health care, focusing on empowering and equipping veterans to take charge of their health and well-being, guided by a personalized health plan."
- "The VA whole health system considers the physical, mental, emotional, spiritual, and environmental elements that work together to provide the best quality of life for each veteran."
- South Texas VAHCS in San Antonio, Texas was designated as a flagship for Whole Health in the Heart of Texas Health Care Network.
- In our recent executive leadership council of the Heart of Texas veterans integrated service network (VISN), one of the topics presented and discussed was Whole Health, and the following information was shared:

Some of the other evidence-based alternatives to prescription pain medications include:

- Behavioral/cognitive/psychological interventions, such as meditation techniques and progressive muscle relaxation.
- Environmental-based interventions, such as lighting alterations and music therapy.
- Physical interventions, including acupuncture, massage therapy and spinal manipulation.
- Some of the other tools in the Complementary and Integrative Health model include acupuncture, Tai Chi, yoga, Guided Imagery, biofeedback, and clinical hypnosis.
- "Empowering and partnering with veterans to discover their mission, aspiration and purpose is the pathway to a personal health plan. Integration with well-being programs/health coaches in addition to Whole Health Clinical Care team is how Whole Health approach can be implemented" (Dr. Elizabeth Halmai, a Physical Medicine and Rehabilitation specialist at STHCS in San Antonio, Texas).

- As a Doctor of Osteopathic Medicine and a board certified Primary Care Physician, my professional opinion is that the holistic (Whole Health) approach is the answer to not only the opioid epidemic but also to most other medical conditions.

As Dr. Andrew Taylor Still stated, personalizing health care, treating the whole person – spirit, mind and body – is the way to go. This contrasts with treating a few symptoms or even a lone disease process. Working on preventing disease through encouraging healthy life style and healthy habits is evidence-based practice.

This allows the body to heal itself, while providing the appropriate healing environment with the help of medications and different modalities of therapy when appropriate, weighing the benefits of these medications versus the risk, and resorting to surgeries only when necessary.

Dr. Sameh Moawad is chief of staff of the Amarillo VA Heal Care Service. Before joining the VA, he was in primary care private practice. He has risen through the system from CMO at the Lubbock Ambulatory Clinic to his current leadrship position. He serves on several national VA councils including the VHA Risk Management Advisory Council. He is board certified in family practice and is an assistant professor of family medicine at TTUHSC.

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Treating Opiate Use Disordered Individuals: More Than One Path to Recovery

by Martha D. Burkett, MPA, LPC, NCC, LCDC, LADS, ACS

In her article "An Introduction to Medication-Assisted Treatment for Opioid Use Disorder," Amarillo Recovery from Alcohol and Drugs (ARAD) medical director, Dr. Amy Stark, has spoken eloquently on the topic of medication assisted treatments for opiate use disorders, and per Dr. Stark's orders, ARAD has employed Suboxone and naltrexone as an adjuncts to therapy.

ARAD provides both traditional and non-traditional treatment interventions for all substance use disorders, including opiates. For the purposes of this article I will provide information and insight about why the therapies that we provide are helpful in treating opiate use disorders specifically.

All of our participants are engaged in traditional psychotherapy and psychoeducation in both group and individual settings. In psychotherapy, deeper issues such as trauma, grief and loss, shame, family and relationship issues, and relapse prevention are examined, explored, and processed, and new coping strategies are taught and practiced.

Opiate Use Disorder: Patients and Families

Opiate use can be particularly insidious in that it is not as easily detectable other substance misuse, and signs and symptoms that do present, like euphoria, drowsiness, confusion, and changes in sleep and eating patterns, may be attributed by the casual observer to something other than drug use. When family and friends do see signs of impairment, it is harder to confront, as the physiological compulsion to keep using, girded by denial on the part of the user, can be very strong.

When the general public hears "opiate misuse" they often think of heroin, and push it off, saying "we don't have that problem here." It's true that heroin is an opiate that is on an upward trend, especially among youth in the upper middle class. Thus far it has not made a huge appearance in the Panhandle, but it is here. It's also true that teens and adults alike are misusing opiates like Vicodin, codeine, Tylenol #3, and Oxycontin with greater frequency, putting them at risk to become heroin users if ready access to their supplies disappears. Heroin is inexpensive, but the street cost for opiates can be quite high, given the demand that exists. Individuals who are misusing opiates will become desperate if their supply is threatened, and may resort to behavior that would otherwise be uncharacteristic for them. Adolescents love to experiment, and having no notion of the risks involved, may be getting pills from their medicine cabinets at home and taking them in combination with alcohol and other drugs, increasing risk of overdose. Sometimes opiates are prescribed to treat pain associated with sports injuries, and addiction stems from there.

In psychoeducational sessions, basic education about the physiology of substance use disorders, substance use disorders as a brain disease, the impact of substance misuse on the mind body and spirit, as well as health, safety, financial, relationship and social risks are presented and discussed. Typically, treatment emphasizes shame reduction, as shame can be an overwhelming trigger for relapse.

Those closest to the opiate disordered person often feel dismayed and betrayed by the changes that have taken place in their loved one. They are hurt and exhausted by trying to control and help that person. They are confused by the loss of integrity that they witness in their loved one as they spiral deeper into the throes of their opiate use. Lacking education information and support, the emotional and other trauma that comes from living with an opiate use disordered person can take a serious toll. Family and significant others often feel angry, hurt, sad, and afraid; they begin to experience emotional and physical symptoms of their own. On weekends and evenings, families and significant others are invited to participate in psychoeducation and psychotherapy with their loved ones. These sessions aid in understanding the physiology and implications of opiate use disorder. Sessions also help family and significant others reclaim their own health and wellbeing by learning healthy communication and boundary setting.

ARAD does not subscribe to one 'right way' to recover, and so does not teach 12 step recovery *as treatment*. We do encourage exploration if Alcoholics Anonymous (AA) , Narcotics Anonymous, Celebrate Recovery, Bible study, and non-religious spiritual study as *adjuncts to treatment*. We do offer A.A., N.A., Alanon, Chaplaincy services, and Celebrate Recovery Meetings on site. For those who do not wish to partake in these activities, counselors make individually focused assignments for participants to complete and share later in sessions, in lieu of attendance at these scheduled meetings.

Sometimes ARAD utilizes formally trained Peer Recovery Coaches to assist participants on their journey. These coaches are individuals who have lived experience in recovery and have been trained in a peer support protocol approved by the state of Texas. Interactions with Peer Recovery Coaches provide invaluable insight and support for participants.

In addition to traditional therapies, ARAD offers Auricular Acudetox, yoga, art, music, mindfulness training, music, Reiki, and fitness.

ARAD participants who require acute medical detoxification receive this treatment prior to admission, but many participants experience post-acute withdrawal symptoms. Such symp-

toms as anxiety, depression, insomnia, irritability, mood lability, and appetite disturbance are not uncommon in individuals with opiate use disorders. These symptoms vary in intensity and can be distracting and disruptive to one's ability to settle into treatment and begin to process information and emotions, thus impeding the recovery process. Without proper intervention, the dysregulation resulting from these symptoms may trigger a fight or flight response, and participants feel compelled to leave treatment prematurely.

Restorative Services

To help assuage these symptoms and to reduce the impulse to flee treatment, ARAD offers a variety of restorative services and natural interventions that help smooth out the recovery process and awaken the senses and creative impulses that often become dulled as a result of opiate misuse. Each of the wellness activities we offer is backed by evidence indicating the efficacy of these activities in healing mind, body, and spirit, and even in helping to increase dopamine production and to reroute neural pathways in the brain that have been negatively affected by substance misuse.

The relaxation techniques incorporated in yoga can decrease pain, lower blood pressure and reduce anxiety and insomnia. Chronic pain is a common problem for participants with opiate use disorders. Sometimes the pain is a precursor to the disorder, and sometimes impairment results in accidents and injuries that result in chronic pain, creating a significant relapse risk. Learning to cope with pain without opiates or other narcotics is an essential relapse prevention skill. Yoga is another non-intrusive and nonverbal intervention. Yoga can be a very empowering experience, helping to reconnect participants with their bodies, facilitating a new-found sense of self-respect. The meditative breathing and the stretching in yoga can be very helpful in dealing with chronic pain.

Reiki can also be helpful in pain management. Reiki is a Japanese technique for stress reduction and relaxation that also helps to rid the body of toxins and energy blocks that interfere with healing. Because Reiki involves very little touch, it is a 'safe' treatment that can be especially effective in treating both physical and emotional trauma.

Massage therapy helps to increase circulation, rid the body of toxins, relieve tension, reduce stress, relieve anxiety, improve sleep, and promote relaxation throughout the entire body, reducing physical pain. It can also increase mental clarity. Another nonverbal treatment, massage can be powerful in helping participants re-connect with their bodies in healthy ways.

Auricular Acudetox is an acupuncture protocol that stimulates 5 pressure points in the ear. This specific protocol is designed to aid in ridding the body of toxins and elicits a very pleasant relaxation response. Acudetox is helpful in reducing urges and cravings. It is also helps to regulate sleep, appetite, and mood, helping to reduce symptoms of anxiety and depression. It's residual calming effects help participants to focus more quickly and deeply in treatment, facilitating learning as well as physical and emotional healing. Eliciting the relaxation response can help to reduce pain. Auricular Acudetox is non- intrusive and nonverbal, drawing on the body's innate ability to heal itself. It is especially effective and empowering in trauma survivors because it involves very minimal touch and does not require participants to tell their stories in order to heal. This protocol is widely used to treat first responders and survivors of catastrophic events like hurricanes, floods, fires, and even war.

Tai Chi is a martial art that can help with circulation, balance, mental discipline, and alignment. It can also help build confidence and self-esteem and restore physical and emotional energy that has been compromised in active substance misuse.

At ARAD we address every aspect of a participant's life. Exercise is a great way to reconnect with the body, boost endorphins that help to regulate mood, and develop a sense of empowerment and control in a life that has become unmanageable. As a part of treatment, participants have can train with a certified fitness coach at a pace and level that is safe and healthy for them.

Music acts as a medium for processing emotions, trauma, and grief—but music can also be utilized as a calming agent for anxiety or for dysregulation. At ARAD we use music with adults who are so inclined and introduce music in our family work with children.

Art is one of our most popular activities at ARAD. Art uses the creative process to aid in self-expression and to

| *continued on page 34*

improve and enhance the physical, mental and emotional well-being of individuals of all ages. Many of our participants indicate that making art and participating in activities that involve culture and the arts in the community will be a part of their long term plan for sobriety.

Conclusion

Recovery from opiate use disorder is a life-long process, the early stages of which require vigorous and rigorous application of recovery tools and activities, often supplemented by medications like naltrexone and Suboxone. It is suggested that persons in recovery continue in outpatient counseling for at least a year following the completion of more intensive treatment. It is also suggested that 12 step and/or other community supports should be employed for years to come, complemented by a healthy balance of social and recreational activities that do not revolve around alcohol or other drug use. Titrating off medications like naltrexone and suboxone is a personal decision that must be made with the prescribing physician and counseling team.

With proper education, treatment and support, individuals with opiate use disorders and their loved ones can be restored to full functioning, leading happy, healthy, and productive lives. Sometimes those lives are resumed quietly. Sometimes those lives include advocacy for education and awareness about opiate use disorder and the recovery process. In either event, recovery is a deeply personal process, and success can be achieved, defined, and maintained in many ways.

Articles:

1. https://www.thefix.com/content/therapies-outside-box?page=all
2. http://projects.hsl.wisc.edu/SERVICE/modules/35/M35_CT_Substance_Use_Disorder_Treatment_Complementary_Approaches.pdf
3. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3063555/
4. Jackson K. Yoga for addiction — tapping the body's wisdom. *Social Work Today*. 2017; 17(3): 18.
5. Aletraris L, Paino M, Edmond MB, Roman PM, Bride BE. The use of art and music therapy in substance abuse treatment programs. *J Addict Nurs.* 2014; 25(4): 190-6.
6. https://www.oatext.com/Use-of-Reiki-as-a-biofield-therapy-An-adjunct-to-conventional-medical-care.php
7. Li D-X, Zhuang XY, Zhang Y-P, Guo H, Wang Z, Zhang Q, Feng Y-M, Yao Y-G. Effects of Tai Chi on the protracted abstinence syndrome: a time trial analysis. *The American Journal of Chinese Medicine*. 2013; 41(1): 43-57.

Martha Burkett has extensive background in administration of substance abuse programs. She built on a background as a licensed professional counselor with work for the Michigan Health Professional Recovery Program, the State Bar of Michigan and the Army Substance Abuse Program. Before coming to ARAD, she was head of the substance abuse section at US Marine Corps Headquarters in Quantico, Virginia.

From a Father

Life is composed of many blessings, disappointments, and unexpected circumstances that we cannot control. Most of us have families, children, and grandchildren. As a parent, what we do not expect in life is to bury one of our children. Our children are supposed to bury their parents.

In January, 2008 I received a call that my daughter, who was 28 years old, had collapsed in the hallway and died in her apartment. I was traveling to Fort Worth at the time and absolutely went into shock. With the next few days being like a bad nightmare and going without sleep for 56 hours, many questions were being asked why and how this tragedy could happen.

My daughter grew up, graduated from high school in Amarillo and went to college at the University of Texas with a business degree. She then pursued her career working in a law office. She then married and had a son. Unfortunately, her marriage ended, and she became a single parent to this son. My daughter had anxiety, couldn't sleep, and then sought medical attention after her divorce. She was prescribed Xanax and Effexor for anxiety and depression for several months. My daughter was also prescribed metaxalone the week before her death due to an arm injury after falling. Being by herself with her five year old son, the night before going to bed she took the metaxalone, Xanax, and Benadryl which caused an accidental intoxication. The coroner reported a metaxalone toxicity and accidental overdose. A bottle of oxycodone was also found in the home. Her five year old son found her dead the next morning.

After reading the warning label for the prescription drug Xanax, I often wonder why any doctor or patient would even consider taking this drug. I was totally unaware that my daughter was on an anti-anxiety drug. We are unsure if our daughter accidentally took too much of either prescription drug or Benadryl, but I question if someone taking Xanax would have the full mental capacity to think correctly when taking this prescription drug.

A few days later on January 22, 2008, Heath Ledger – actor as the Joker in Dark Knight - died of a similar combination of drugs. His death was ruled an accidental intoxication of prescription drugs. The New York City Medical Examiner's office said "Mr. Heath Ledger died as the result of acute intoxication by the combined effects of oxycodone, hydrocodone, diazepam, temazepam, alprazolam, and doxylamine." He was also only 28 years old.

Now that it is 10 years later, our family still copes in their different ways with my daughter's death. She will always be missed, and I still place a rose on her grave monthly. She was a beautiful woman who had a smile you couldn't forget. Life will always go on regardless what happens to a person in life. Tragedies will always happen by different causes. Our family obviously is not immune to it.

The medical society must get better in treating patients with the proper care and help they actually need. I am not opposed to prescription drugs because they do have an important function in our society. However, we need to better educate the patient, regardless of age, about the risks involved in taking medicine and to offer alternatives. Currently we have over 115 deaths daily in our nation related to opioid abuse or misuse, and these deaths are increasing. It's become an epidemic in our country that needs to be seriously addressed. It is too easy for Americans to obtain prescription drugs from doctors, and doctors are prescribing drugs that may be unnecessary. It seems to me that society just wants to take a "magic pill" when there are other means available either through consultation, natural alternatives, exercise, and/or diet programs. What also needs to be addressed is the influence pharmaceutical companies are having on the medical community as they market their drugs to doctors and as doctors that are succumbing to these marketing tactics. I also find it interesting that, at some hospitals and doctor offices, there is a statement written on the wall asking what your pain level is. How do you think a person addicted to drugs will answer that question?

This is the first time since my daughter's death that I have openly discussed her situation as it has always been too painful of a conversation. I hope and pray that this story and statements are taken seriously, and that the medical society begins to reevaluate the use of prescription drugs, especially opioids, in treating patients.

Narcotic and Drug Use in the Amarillo Area

by Cpl. Jeb Hilton, Amarillo Police Department Crime Prevention Unit

Drug use in the Amarillo area continues to be a huge problem that officers deal with on a daily basis. Drug abuse leads to almost every other crime committed in Amarillo. We tend to see drug users involved with auto burglary, theft, burglary, robbery, ID theft and wide variety of assault related crimes. From January 1, 2018 through September 30, 2018, The Amarillo Police Department worked 1,186 cases where drugs were located and made 855 drug-related arrests. During that same time frame in 2017, the department has worked 1,264 cases where drugs have been located and made 850 drug- related arrests. What we continually hear from the court system and drug advocates is that drug use is a non-violent or victimless crime. Advocates feel that the abuser should not be punished due to that. The offenders are generally given a very light sentence or time served at the jail level to keep prisons from being overcrowded. This quickly puts the drug abuser back out on the streets to commit more thefts, burglaries, or robberies to fund their drug habit. Even though there are victims of the crimes that are being committed, the suspect often cannot be tied to these crimes and is only caught with the drugs. When this occurs the crime remains "victimless" and the abuser is let back out for the cycle to continue.

Methamphetamine

One of the most common illegal drugs that officers in the Amarillo area see is crystal methamphetamine. Meth is being used by a wide range of ages and social classes, and, from talking to the APD Narcotics Unit, is easily obtained by most everyone. Due to the high amounts of methamphetamine in Amarillo, it is one of the cheapest highs that you can buy. Each of the APD patrol shifts will put out an "End of Shift Letter" each day to pass along information from their shift. We see methamphetamine or methamphetamine paraphernalia being located by our officers daily. We are no longer seeing "meth labs" in our area since restrictions have been placed on ephedrine purchases. The meth that we do see in Amarillo is being brought in to the area from Mexico. With I-40 running east and west and I-27 running north and south, most of the drugs that do come in from Mexico go through Amarillo at some point. In 2017 the Amarillo Police Department seized a total of 9.39 pounds of methamphetamine.

Cocaine

Cocaine is still being found in Amarillo. It is mostly being seen in the powder form, but we do still find it in the crack form from time to time. Powder cocaine is commonly found in the Latino bars in Amarillo and mostly in the Hispanic community. In 2017, the Amarillo Police Department seized a total of 6.13 ounces of powder cocaine and 2.76 ounces of crack cocaine. These numbers were down from previous years.

Heroin

Heroin is rarely found by patrol officers in the Amarillo area. Users of heroin are a part of a very secretive group and tend to keep to themselves. We are not finding heroin on people or in vehicles during traffic stops, which leads me to believe the dealers are having the abuser use the product before leaving the sale site. A large majority of the heroin that is in our area is located during search warrants or undercover narcotics stings. In 2017, the Amarillo Police Department seized a total of 7.23 ounces of heroin.

Fentanyl

APD is not seeing many cases involving fentanyl. There have been no drugs found in Amarillo that have been mixed or laced with fentanyl. The small amount of the product that we have seen is in pill form that appears to be commercially made. We are unsure if these pills are coming in from overseas or from Mexico. There have been many articles written about the abuse of fentanyl around the country; however, we have not seen these trends in our area at this point. The first responders in Amarillo are all well trained on the dangers of the drug and are equipped to combat it. Our local ambulance service does carry Narcan on every vehicle if there were to be an exposure.

Prescription Pills

Prescription pill abuse continues to be a problem. We are seeing prescription pills commonly being sold and bought by students in our area schools. The amounts

that are typically found are limited to a few pills at a time. The abuse of prescription pills is not limited to juveniles; pills also commonly abused by adults. The abuse of hydrocodone has gone down due to it being prescribed less. However, with the decline in the amount of hydrocodone being abused, we have seen a rise in the abuse of tramadol. Tramadol pills can be bought on the street for $12 - $15 per pill. Alprazolam (Xanax) is also commonly abused. These pills are being sold in schools and on the streets for $8 - $12 per pill. We do not have many pharmacy burglaries or forged prescriptions being reported in Amarillo, so that would lead one to believe that the majority of the abused products are legally prescribed or brought into our area and sold.

Marijuana

Marijuana is at the top of the list when it comes to illegal substances that the Amarillo Police Department seizes. Amarillo Police Officers seized a total of 196.07 pounds of marijuana in 2017. The amounts of marijuana that are being found on abusers are usually very small. Marijuana found in Amarillo is generally brought in from Colorado due to the legalization of the product in that state. We are finding marijuana on people ranging from middle school aged up to the elderly. We tend to get the response that "it's natural" or "it's being legalized around the country and will be here someday". What we have found is most parents, when contacted about their child possessing marijuana; offer the same reaction as justification. This leads me to believe that these parents do not understand or know the dangerous effects of marijuana on brain development of children and adolescents. Marijuana advocates have established a very persistent presence both online and in social media, and continue to push for legalization in Texas.

THC Products

THC products are becoming more and more common. With these items being commercially made in Colorado, the products are showing up in cars, houses and schools in Amarillo. We are seeing THC in gum, candy, edibles, oils and waxes. Students in local schools are being caught with vaping products that contain THC oils. We tend to hear the same arguments for THC products as we do for marijuana legalization. The backing for legalized THC products is steadily growing in our area. These products have to be sent off to a lab and tested before any charges can be filed.

In summary, large amount of methamphetamine and the low cost make it the drug of choice for the Amarillo area. Marijuana and THC products can be bought legally and at a low price if you are willing to take a short car trip to Colorado, and can be bought locally if you are willing to pay a little more for someone to bring it in for you. Heroin and cocaine are still relevant drugs in the area, even though they are not seen as much as the others. Prescription pills can easily be stolen from a family member or bought on the street or in our local schools. Drug abuse in Amarillo remains a big problem that, in my opinion, will continue to add to the rise in every crime until we can find a better way to combat it.

Texas Medical Association: Opioid Epidemic

by Sherif Zaafran, MD – Texas Medical Board President

State and National Focus on Combatting the Current Opioid Epidemic This past year has been remarkable in the level of response to the opioid abuse epidemic. In 2017, there was a federal declaration of the opioid crisis as a public health emergency, enhanced focus on the issue by the Texas legislature, and an increasing number of counties filing lawsuits against pharmaceutical companies and distributors. The Texas Medical Board has been impacted by several recent changes to state laws addressing opioid abuse, including changes resulting from the legislative Sunset Review process. These are summarized below and the board will provide updates on these issues in future publications. I also want to take this opportunity to clarify the board's regulatory oversight as well as assure practitioners that, even with increased restrictions to opioid prescribing, physicians continue to have the ability to treat legitimate chronic pain under longstanding state law and board rules. Regulating Pain Management Clinics Since the 2009 enactment of legislation requiring Pain Management Clinic registration to address alarming numbers of opioid overdoses in Texas, the board has regularly assessed its enforcement of pain management regulations, including inspections, to ensure an appropriate level of regulation that does not unduly hinder legitimate practice.

The Texas legislature, acting on recommendations from the Sunset Commission to further address the current public health crisis, clarified the board's ability to inspect potential unregistered clinics with the passage of Senate Bill 315 last May. Corresponding changes to Board Rule 195 were adopted at the board's December 2017 meeting and the board will continue to work with stakeholders to address remaining concerns about potential unintended consequences. The board is always mindful of the balance needed to protect the public with practical regulations that address bad actors with minimal impact to the vast majority of practitioners who are safely practicing medicine. The Rule 195 changes were initially published in the Nov. 3 edition of the Texas Register and with the December adoption will become effective by the end of January 2018. It's important to note that if a practice is not issuing prescriptions to a majority of its patients (over 50 percent) on a monthly basis specifically for opioids, benzodiazepines, barbiturates, or carisoprodol, they would not be required to register as a Pain Management Clinic under Rule 195. There are also several practice settings exceptions to registering as delineated under Rule 195.4(b). The most common clinics exempt from registering are those where the physician is personally administering another treatment modality, even if the controlled substances earlier noted are given to a majority of patients, such as a surgery clinic giving prescriptions for postoperative pain. Regardless of whether or not registration is required, Board Rule 170 must still be followed whenever physicians are treat-

ing patients for chronic pain to ensure drugs are used in a therapeutic manner and that the treatment is monitored and evaluated on an ongoing basis. Treating Chronic Pain The treatment of chronic pain is an important and legitimate part of medicine as well as one of the most difficult conditions to treat. Board Rule 170 based on the Texas Intractable Pain Treatment Act passed in 2003, provides physicians the ability to treat chronic pain following evidence-based criteria. The rule sets forth minimum requirements related to the proper treatment of pain and the board's intent has always been to protect the public and provide guidance to physicians. As previously mentioned, those physicians whose practices are focused on chronic pain treatment and provide prescriptions for controlled substances to a majority of their patients must also adhere to Board Rule 195 regarding Pain Management Clinics. Prescription Monitoring Program Another focus of the Sunset Commission and Texas legislature in 2017 was the Texas Prescription Monitoring Program (PMP) maintained by the Texas State Board of Pharmacy. Several new requirements were enacted in House Bill 2561. Effective September 1, 2017, Texas-licensed pharmacies are required to report all dispensed controlled substances records to the Texas PMP no later than the next business day after the prescription is completely filled. While access to the prescription data is statutorily restricted, the information is available to practitioners and pharmacies inquiring about their own prescribing or dispensing history on their patients. State regulatory boards, including TMB, have access as well. House Bill 2561 also requires a joint House and Senate interim committee to study PMP monitoring and submit a report by Jan. 1, 2019. Pending any changes from the committee in the next legislative session, beginning Sept. 1, 2019, all relevant licensees will be required to check a patient's history before prescribing or dispensing four categories of drugs - opioids, benzodiazepines, barbiturates, and carisoprodol. The bill provides exceptions for cancer patients and those in hospice care. Additionally, the bill requires periodic monitoring of licensees' prescribing information to identify potentially harmful prescribing practices. The Chapter 195 rules relating to pain management clinic inspections, along with periodic PMP reports, will continue to be utilized by the board to monitor prescribing practices of providers. It is likely there will be on-going updates and revisions to rules and guidelines based on legislative changes in 2019, as well as regulatory findings and enforcement actions. Prescribing Opioid Antagonists In October, the board received an opinion from the Texas Attorney General clarifying opioid antagonist prescribing to law enforcement agencies under new laws (SB 584 and SB 315) passed in 2017. The Attorney General confirmed that under Section 483.102 of the Health and Safety Code, a prescriber is authorized to directly, or by standing order, prescribe an opioid antagonist to law enforcement agencies in a position to assist persons experiencing an opioid-related drug overdose. The legislation requires the board to adopt guidelines for prescribing opioid antagonists which must address prescribing to a patient to whom an opioid medication is also prescribed and identifying patients at risk of an opioid-related drug overdose. The board's corresponding proposed rule language (Board Rule 170, Subchapter B) will be published in the Texas Register in mid-January and a link will be provided on the board's website at that time. The rules will be eligible for adoption at the board's March 2018 meeting.

Opioid Addiction: Its Impact on Two Physicians Leaders

by Rouzbeh K. Kordestani, MD, MPH

"Addictio" is the Latin root word for addiction. It means to be a slave to something, be it a substance, a routine, or an act.

In medicine, being a slave to the specialty is not far from the truth. But the focus of this article will be on addiction and its presence in physicians' daily lives. Studies suggest that as many as 17% of physicians (across all specialties) are affected by substance addictions. Certain specialties appear to have a higher predilection than others (anesthesiology). These addictions unfortunately bring along with them added problems such as physician dysfunction(s), depression, mental disability and, in some cases, suicide.

As the new administration has suggested, the "use" or abuse of opioid medications is now at epidemic proportions. However, opioid/substance abuse is not new in medicine. In fact, a close look at the lives of two physician leaders (Dr. Sigmund Freud, the renowned neurologist/psychologist and Dr. William Halsted, the father of American surgery) exemplifies how addiction can impact their daily lives, their mental well being and their careers.

Sigmund Freud, MD

Dr. Sigmund Freud (1856-1939) is thought of as the pioneer of psychoanalysis. He started his career as a neurologist in the late 19th century at the Vienna General Hospital. There, as a young neurologist physician, he tried hard to make a name for himself. Unfortunately, his initial efforts were met with little success. In trying to find a niche for his practice, he was careful to observe and partake in any "new" developments. During these same early years, he came across a new wonder drug, cocaine. In the mid-1900s, morphine and opium were the primary drugs used for pain. They were used liberally. For this reason, addiction to these medications was frequent. In the age of morphine and opium, cocaine was new. Some hoped it offered a way out from the prevalence of morphine and opium use. But due to its recent discovery, its effects and its possible uses were poorly understood. Freud decided that this was his opening for success. He took it upon himself to study and extensively catalogue the possible benefits of cocaine. He read all the literature and information that was available at the time and soon published a comprehensive review. Much to his delight, his review was soon published and was widely circulated in the medical community under the heading "Uber Coca" (1884), which translated as "about/on cocaine." The review article propelled Freud to the level of an expert on cocaine.

Around this same time, Freud himself began to experiment with cocaine. In some of his discussions, he reported that he felt unencumbered after the use of cocaine. He wrote, "In my last severe depression, I took coca again, and a small dose lifted me to the heights in a wonderful fashion. I am just now busy collecting the literature for a song of praise to this magical substance (Markel)." More importantly, he reasoned that the drug gave him the opportunity to look beyond regular issues. "A few minutes after taking cocaine, one experiences a sudden exhilaration and feeling of lightness---One senses an increase of self-control and feels more vigorous and more capable of work (Uber Coca, 1884)." He often advocated the use of cocaine as its use would "untie the tongue." Along with this, Freud felt that cocaine could possibly be used to wean patients off of addictions to morphine and/or opium. Since morphine and opium addictions were commonly seen, it was hoped that cocaine would bring forth a solution. Freud's initial experience with a few patients showed that patients could grow less dependent on morphine/opium the more they used cocaine. Freud's own initial studies supported these findings. Much later, unfortunately, it became apparent that, not only were patients not becoming free of their morphine/opium addictions, but they were in fact becoming addicted to cocaine as well, in addition to the morphine and the opium.

Like many of his patients, the effects of cocaine addiction marred Freud's own career achievements. As time went on, Freud lost his ability to be objective and to see how his addiction affected his ability and his professional perspective. It is suggested that one of his famous characters "Irma" was a pseudonym for one of his patients. Freud, along with a fellow physician, a surgeon who was also addicted to cocaine, mismanaged the care of "Irma," leading to her eventual death. However, in his masterpiece, "Interpretation of Dreams," Freud's management of the patient and his ambivalent response to her death sterilized the event and glossed over the ramifications of both physician addiction and malpractice. Even in this grave setting, Freud, in his blinded faith to cocaine, continued to tout the benefits of cocaine as a wonder drug. Like many addicts after him, Freud lost his perspective and was blinded to the overwhelming nature of substance abuse.

William Stewart Halsted, MD

William Halsted, MD (1852-1922), the father of modern American surgery, was also an addict to cocaine. Halsted was drawn to cocaine initially out of medical curiosity. He learned of the crystalline substance from the writings of Dr. Karl Koller, an ophthalmologist, who had demonstrated the advantages of using cocaine as a topical anesthetic in cataract surgery (1884). The drug was thought to be a new wonder drug. As a senior surgeon, Halsted was interested in the new drug and its potential in other aspects of surgery. Halsted was interested in find-

ing alternatives to ether and chloroform, the two most available types of anesthetic. While ether and chloroform both had side effects and were flammable, cocaine seemed to be without fault. In trying to define the uses of cocaine, Halsted soon began to experiment on himself, his students and his residents. Unfortunately, these experiments started Halsted's journey towards addiction. He soon became erratic with wild high and low mood swings. His work and his operations were understandably affected by these emotional outbursts. A famous story details Halsted being presented with a complex open leg fracture while on call at Bellevue Hospital. He responded by simply looking at the patient and, noting that he was not in the mood, then left the hospital where he was on call, returning home, where he stayed for the next several weeks without returning to the hospital (Markel). He was noted to have told his fellow surgeons that he had fallen ill. It is now thought that he was in the midst of one of his many cocaine withdrawals.

Halsted's withdrawal episodes and his ensuing absences had a profound effect on his surgical career. These episodes soon ended his career at Columbia Physicians and Surgeons and at Bellevue Hospital in New York. Only with the foresight and help of Dr. William Welch (of Johns Hopkins fame) was Halsted's career saved. Welch hired Halsted as one of the senior surgeons/researchers at the new hospital system in Baltimore, with the promise that he (Halsted) would handle his addiction. Like many addicts of the time, Halsted handled his cocaine addiction with a mix of interventions. He tried to use small amounts of morphine and opium to wean himself off the cocaine. Alas, he was unsuccessful. He was soon addicted to the morphine and the opium, along with the cocaine.

Halsted's career at Johns Hopkins was an illustrious one. He became Chief Surgeon at the hospital and is credited with many advances in both gallbladder and breast surgery. He also helped design plastic gloves and advocated their use as a standard in aseptic technique. For these many accomplishments, he is accredited at the father of American Surgery. A closer look at his career, however, shows that his presence at Hopkins was characterized by absences from the campus for weeks and in some cases months. These "sabbaticals" were in truth attempts by Halsted to handle/hide his withdrawals/addictions. Welch and Halsted's fellow surgeons and residents did their best to conceal these absences so that Halsted could continue to operate. Halsted continued in this way until his death decades later. In retrospect, as historical details show, Halsted died still addicted to opioids and to cocaine.

Conclusion

Addiction to opioids/morphine/cocaine is unfortunately not a rare occurrence in the medical community. It is a risk in every specialty. As the toll of this problem continues to grow, it is imperative that physicians themselves find a more reasonable and tempered response to this problem. As this article highlights, even the most renown physicians, like Freud and Halsted, were encumbered by their addictions. However, they chose clearly not to admit that they were addicts. This led to lives that were hampered with difficulty and dysfunction.

The solution to addiction is not one of condemnation or of denial but is first and foremost in recognition and treatment. Physicians must first accept that, as a group, they are no different than other professions. Only then can physicians and physician leaders willingly welcome a solution that protects patients and at the same time alleviates the pain and suffering that comes along with addiction.

Bibliography

1. Freud, Sigmund. Uber Coca. Verlag Von Mobitz Perles, Wien; 1884.
2. Markel, Howard. An Anatomy of Addiction: Sigmund Freud, William Halsted, and the Miracle Drug, Cocaine. Pantheon; 2011.
3. Imber, Gerald. Genius on the Edge: the Bizarre Double Life of William Stewart Halsted. Simon and Shuster; 2011.

Osteoporosis: What You Need to Know

by Taru Bharadwaj and Tarek Naguib, MD, M.B.A., F.A.C.P.

What is osteoporosis?

Osteoporosis is a disease where the skeletal system experiences progressive bone loss "to the point where (the bones) break easily (1)." Known as the "silent disease" (2), osteoporosis may not have any symptoms until a bone is broken. Osteoporosis affects over 53 million people in the United States alone, mostly older persons (3).

Why is osteoporosis awareness essential?

Osteoporosis affects lots of people, especially women; in fact, in women over 45 years of age, osteoporosis accounts for more hospitalizations than diabetes, heart attacks and breast cancer (4).

What causes osteoporosis?

As humans grow, old bone is absorbed to make way for new bone, which constantly regenerates (1). As we age, more bone is absorbed than created. Our hormones promote osteoblasts (cells that cause bone growth) and control osteoclasts (cells that cause resorb old bone) (5). In men, testosterone helps maintain bone density but women rely on estrogen (6). These hormones decrease with age, especially in women who see a dramatic decrease in estrogen with menopause. Other factors such as calcium deficiency, protein deficiency, unhealthy lifestyles, certain medications, and family history can also play a role. Although one cannot change family history or gender, active lifestyle and good nutrition can help prevent osteoporosis. Do not be discouraged if you are older; you can still work on preventing osteoporosis and enjoy a good life.

What are the symptoms of osteoporosis?

Osteoporosis is silent especially in earlier stages. This is why it is important to keep up with doctor's appointments to address any suspicions immediately. Advanced osteoporosis appears as loss of height, back pain, stooped posture, a collapsed vertebrae, or fracture (2).

How is osteoporosis treated?

Try to fit in light exercise (especially weight-bearing exercise) and strive for a healthy diet with appropriate amounts of calcium and protein (2). A doctor may prescribe medication to slow down bone loss (3). Another major problem for those living with osteoporosis is easily breaking a bone; this is painful and can lead to other complications. If your balance is not steady, consider using a cane, keep spaces free of clutter, avoid walking on ice or polished floors, wear comfortable shoes, and be mindful of the walking environment (2).

References

1. "Osteoporosis," National Institute of Aging, 2017, https://www.nia.nih.gov/health/osteoporosis.
2. Ibid.
3. "Osteoporosis Overview," National Institute of Health, 2017, https://www.bones.nih.gov/health-info/bone/osteoporosis/overview.
4. "Facts and Statistics," International Osteoporosis Foundation, 2017, https://www.iofbonehealth.org/facts-statistics.
5. T. Katagiri, N. Takahashi, "Regulatory Mechanisms of Osteoblast and Osteoclast differentiation," 2002, https://www.ncbi.nlm.nih.gov/pubmed/12108759
6. Mayo Clinic Staff, "Osteoporosis," Mayo Clinic, 2016, https://www.mayoclinic.org/diseases-conditions/osteoporosis/symptoms-causes/syc-20351968

Pancreatitis versus Peritonitis: It is All in the Gut Feel

by Helayna Abraham, MSIII and Tarek Naguib, MD

Acute pancreatitis is an inflammation of the pancreas that is diagnosed by the presence of at least 2 of the 3 common criteria encountered in this condition: epigastric pain, computed tomographic (CT) findings, and elevation of amylase and lipase of at least 3 times the upper limit of normal value. Despite well-defined criteria the diagnosis of acute pancreatitis can be challenging due to the variation of diagnostic criteria from a person to another and the several conditions that can mimic its presentation. We report a case of acute pancreatitis that was initially diagnosed as peritonitis in person with End-stage renal disease (ESRD) on chronic cyclic peritoneal dialysis (CCPD) which has been previously reported in literature (1).

Case Presentation

A 55 year old lady with type 2 diabetes mellitus, ESRD on CCPD, and cirrhosis presented with a complaint of sharp epigastric pain and tenderness that radiated to both shoulders with nausea, vomiting, and diarrhea for 24 hours. She had a positive Murphey's sign but no fever. The pain was conspicuously absent from the rest of the abdomen including the peritoneal dialysis catheter site. Leukocyte count was 8.7K, hemoglobin 11.7g/dL, platelets 77K, neutrophils 76.1%, BUN 71 mg/dL, creatinine 9.67 mg/dL, albumin 3.3 g/dL, while liver functions were normal. Peritoneal fluid appeared pale yellow and slightly cloudy with WBC count of 4,198/uL, 90% neutrophils, but the gram stain showed no organisms. Abdominal CT was significant for gallstones, cirrhosis, and fluid in the peritoneum. Gallbladder ultrasound confirmed chronic calcular cholecystitis with no biliary obstruction. A nuclear scan (HIDA) showed normal filling of the gallbladder, ruling out acute cholecystitis.

A diagnosis of dialysis-associated peritonitis was made for which intravenous cefepime was initiated after one gram of intravenous vancomycin was infused. Due to persistence of symptoms and negative peritoneal fluid culture on day 4, amylase and lipase were evaluated and revealed 115 U/L (normal <103) and 151 U/L (normal < 82), respectively. Both values peaked a day later to 134 and 214, respectively. Although initial CT showed no evidence of pancreatitis, the elevated amylase and lipase suggested a diagnosis of acute on chronic pancreatitis due to gallstones, especially with the atypical nature of the pain and poor response to antibiotic therapy. She was placed on a clear liquid diet and her condition gradually improved with subsequent reintroduction of solid foods into diet. The peritoneal dialysis catheter was not removed. Subsequent peritoneal fluid analysis showed decrease in WBC to 38/uL and the culture collected before antibiotic therapy remained negative. She was discharged home on hospital day 9 with a final diagnosis of acute on chronic pancreatitis and cholelithiasis. A week after discharge, she remained asymptomatic and an appointment was scheduled in the surgery clinic for elective management of gall bladder disease.

Discussion

The prevalence of chronic pancreatitis in ESRD patients is substantial. Autopsy studies show the prevalence of chronic pancreatitis in persons on CCPD to exceed 50% (2). Risk factors for pancreatitis in these patients include uremia and hypertriglyceridemia associated with renal insufficiency. Moreover, high intra-abdominal pressure caused by peritoneal fluid and a non-physiological composition of peritoneal dialysate may make the pancreas more susceptible to parenchymal damage. Lastly, impairment of microvascularization and hypoxemia may promote the premature activation of proteolytic pancreatic enzymes, rendering peritoneal dialysis patients highly susceptible to pancreatic pathology (3).

Our patient presented with localized epigastric pain that is more likely to be in line with pancreatitis than peritonitis. The negative peritoneal fluid culture that was collected prior to antibiotic administration, the benign abdominal exam besides epigastric tenderness, and the delayed response to antibiotic administration all rendered the original diagnosis of peritonitis much less likely. The mild elevation in pancreatic enzymes, under 3 times of the upper limit of normal value, in acute pancreatitis is a common place in the setting of chronic pancreatitis due to presumed exhaustion of pancreatic parenchyma due to long term inflammation. The normal CT scan finding does not rule out acute pancreatitis since it is only 60% sensitive (4). Accordingly our patient likely suffers from chronic pancreatitis with acute exacerbation due to calcular cholecystitis. The pancreatitis is the likely cause for the elevated peritoneal fluid leukocytes due to inflammation, but not infection, hence the significance of the negative peritoneal fluid culture.

Similar cases have been reported, in which pancreatitis presented as peritonitis in peritoneal dialysis patients, a misdiagnosis which resulted in two mortalities. In these cases, the patients shared similar risk factors: renal failure itself, peritoneal dialysis, peritonitis, catheter surgery, and hypoproteinemia (1). Our patient presents in a manner that is consistent with other cases in the literature although we certainly cannot rule out the presence of concurrent peritonitis with the pancreatitis. We think that the latter presumption, albeit possible, is certainly less likely due to the reasons outlined above.

Due to the fact that the diagnostic criteria of pancreatitis are variable from a person to person, it is important to recognize that pancreatitis is persons on peritoneal dialysis may mascaraed as peritonitis and we raise the awareness of this possibility especially in patients with localized epigastric pain and negative peritoneal cultures. Further work is needed to characterize the underlying etiology and prognosis of pancreatitis in persons on peritoneal dialysis.

References

1. Caruan RJ, Wolfman NT, Karstaedt N, et.al. Pancreatitis: An Important Cause of Abdominal Symptoms in Patients on Peritoneal Dialysis. Am J Kidney Dis 1986; 7(2), 135-140. doi:10.1016/s0272-6386(86)80134-2.
2. Araki T, Ueda M, Ogawa K, et. al. Histological pancreatitis in end-stage renal disease. Int J Pancreatol 1992; 12(3):263-9.
3. Bruno, MJ. Acute pancreatitis in peritoneal dialysis and haemodialysis: Risk, clinical course, outcome, and possible aetiology. Gut 2000; 46(3), 385-389. doi:10.1136/gut.46.3.385
4. Busireddy, K. K., AlObaidy, M., Ramalho, M., et.al. Pancreatitis-imaging approach. World J gastrointest pathophys 2014; 5(3), 252-70.i

by Tarek Naguib, MD, M.B.A., F.A.C.P.

Firearm Violence *Ann Intern Med* (11/20) – The American College of Physicians has published a position paper indicating that firearm violence is a public health threat in the United States that must not be allowed to continue. The college recommends a multifaceted approach that is consistent with the Second Amendment.

Traumatic Brain Injury & Suicide Risk *JAMA* (8/14) – In a nationwide registry containing over 34,000 individuals who died by suicide, TBI was noted to increase the risk of suicide.

Longevity Down & Drug, Suicide Death Up *Clin Psych New* (12/2) - The latest CDC data suggest that the U.S. life expectancy has declined over the past few years. Tragically, this troubling trend is largely driven by deaths from drug overdose and suicide.

Unvaccinated Children *JAMA* (11/27) – The number of unvaccinated children has grown from 29,300 to 47,700 between 2011 and 2015, albeit still only at 1.3% of all children born in 2015. Uninsured children had 9 times the odds than insured children.

Alzheimer's Disease Will Triple by 2060 *JAMA* (11/13) – Alzheimer's disease is projected to increase from 5 million in 2014 to 14 million adults in 2060. Alzheimer's is highest among blacks (14%) and lowest among non-Hispanic whites (10%) while Hispanics are in the middle (12%).

E-Cigarette Use in the U.S. *Ann Intern Med* (10/2) – E-cigarette use is common especially among younger adults, LGBT persons, current cigarette smokers, and persons with comorbid activities. The states with most prevalence are: Oklahoma, Arkansas, Louisiana, Tennessee, Ohio, Nevada, and New Hampshire.

San Francisco Prohibits Flavored Tobacco *Ann Intern Med* (11/20) – The voters in San Francisco defied a $12 million campaign by RJ Reynolds and supported a law that prohibits flavored tobacco products, including menthol cigarettes and flavored vaping liquids-the first such ban in the United States!

FDA to Boost Medical Device Security *JAMA* (11/20 – FDA joined the Department of Homeland Security to boost the protection of wirelessly programmed medical devices, such as pacemakers and insulin pumps, from cybersecurity threats in an era of increased medical record breaches.

Omega-3 Fatty Acid Does not Help Coronaries *JAMA* (10/23) – A trial published in the *New England Journal of Medicine* of over 15,000 diabetic persons followed for a mean of 7.4 years revealed no benefit in reducing serious vascular events or all-cause mortality.

Fish Oil in Pregnancy Stimulates Growth in Children *JAMA* (10/23) – Women who took fish oil during pregnancy had children with higher total lean and bone mass through age 6 years, compared with those who did not take fish oil, according to *British Medical Journal.* Previous studies showed that children born to mothers who used fish oil had 30% less asthma at age 3 years.

High Dose Folic Acid in Pregnancy *JAMA* (11/27) – In a trial of 2300 women 8-16 weeks pregnant with at least one risk factor for preeclampsia, daily folic acid of 4 mg did not prevent preeclampsia compared to those who did not use it. Pregnant women should not take high-dose folic acid to prevent preeclampsia.

Obesity Tops 35% in Seven States *JAMA* (10/30) – Seven states reported obesity rates of over 35%. These are Alabama, Arkansas, Iowa, Louisiana, Mississippi, Oklahoma, and West Virginia. Colorado, DC, and Hawaii were the slimmest, reporting only 23% prevalence of obesity.

Few Americans Hit Fitness Targets *JAMA* (8/14) – Only 23% of US adults met the goal of 150 min weekly moderate-intensity aerobics and 2 weekly muscle strengthening sessions nationwide. Men did better than women (27.2% vs 18.7%).

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Dr. Constantine Saadeh Introduces

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We are so pleased to have Dr. Nicole Davey-Ranasinghe (AΩA, University of Nevada School of Medicine) aboard Allergy A.R.T.S.

Dr. Davey did her internal medicine residency at the University of Nevada School of Medicine where she served as chief resident. Following residency, Dr. Davey completed her clinical training with a **fellowship in rheumatology** at Oregon Health and Science University. She has spent the last three years with Centura Health Physician Group in Durango, Colorado.

Board Certified in rheumatology and internal medicine, she brings experience and passion for the management of both common and complex rheumatologic conditions, such as **rheumatoid arthritis, lupus, osteoarthritis, spondyloarthritis and osteoporosis**.

I know Dr. Davey will be a great asset to the patients of Allergy A.R.T.S. and to the Amarillo medical community. **Welcome!**

To make an appointment with Dr. Davey, please call (806) 353-7000

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