INTRODUCTION

• Opioid is a class of drugs that includes fentanyl, oxycodone, hydrocodone, morphine and heroin
• Opioids are commonly prescribed or administered in a clinical setting following a surgery, injury or situation in which pain needs to be controlled
• The opioid attaches to receptors in the brain which sends signals that cause pain to be blocked
• In addition, it slows a person’s breathing, and provides the user with a euphoric feeling, which can cause users to become addicted
INTRODUCTION

• Opioid abuse and heroin related deaths have increased drastically throughout the United States since 2010
• Drug overdose is now the leading cause of accidental death in the United States
• 64,000 total opioid related deaths in 2016, 16,000 of which are attributed to heroin
• In 2016, 11.5 million people misused prescription opioids
INTRODUCTION

- Wisconsin has seen a drastic increase in opioid deaths, from 111 deaths in 2000, to 827 in 2016
- Milwaukee County has been the most affected county in the state, with a 600% increase between 2003 and 2013
- Between 2012 and 2016, Milwaukee county alone had 967 opiate related deaths
- Prescription pain killer overdoses have increased by 260% among Wisconsin residents between the ages of 12 and 25
STATEMENT OF PURPOSE

• To establish correlation between prescription pain killers and heroin
• Demonstrate to public health officials and physicians the need for better control on prescribing behaviors and the need for alternative pain therapies
• To establish evidence-based strategies to prevent opioid related overdoses and deaths
• Review current policies and programs that have been established
• Provide reasonable suggestions that can be implemented to improve the public health crisis
METHODS

• To establish the best evidence-based practices, a literature review and analysis was conducted through an online search of databases and government websites including:

  • Google Scholar
  • Pubmed
  • National Institute of Health
  • Centers for Disease Control and Prevention
  • National Institute on Drug Abuse
  • What Works for Health
  • The US Department of Justice
METHODS

• The database searches were conducted to identify relevant published studies relating to heroin and prescription opioid abuse as well as the policies and programs that have been initiated to combat the epidemic.

• The following search terms were used:

  • Prescription drug monitoring program
  • PDMP success
  • Naloxone distribution
  • Opioid prevention
  • Drug take back
  • Opioid epidemic state success
  • Opioid policies
  • Medication assisted therapies
RESULTS:

- Literature review identified the best evidence-based strategies for combating the opioid epidemic included:
  - Prescription drug monitoring program enhancement and enforcement
  - Naloxone distribution
  - Development of new policies
  - Medication Alternative Therapies
  - Drug Take Back Programs
  - Increase awareness throughout the community
PRESCRIPTION DRUG MONITORING PROGRAM

- Statewide electronic database that collects data on each patient that receives a prescription for a controlled substance (i.e. opioids)
- Prescribing physicians, medical examiners, law enforcement officials, licensing board officials, and pharmacists can utilize this tool to monitor inappropriate or excessive prescribing behaviors
- Database can be used to identify those who are abusing pain medication and those who are “doctor shopping”
- Currently the PDMP is being used in 49 states, District of Columbia and Guam
PRESCRIPTION DRUG MONITORING PROGRAM

- State of Wisconsin currently has 23,273 prescribers and 1,152 pharmacies of which all data are collected from
- Program was not operational until 2013
- As of 2017, changes to legislation now require dispensers to report within one business day
- Prescribers are now required to review the prescription drug monitoring database prior to writing a new prescription for a controlled substance
- Additional changes now allow law enforcement to access the data upon request without requiring a court order. Law enforcement is also required to report events to the PDMP when violations occur, such as opioid overdoses, stolen drugs or related criminal acts.
**PRESCRIPTION DRUG MONITORING PROGRAM**

- National Ambulatory Medical Care Survey (NAMCS) is an annual survey conducted by the National Center for Health Statistics that collects patient, visit, and clinician information.

- Survey provides information on the reasons for a patient visit, diagnosis and medication that was prescribed during the visit.

- Study sample contained 26,275 office visits in which the visit was pain related.
  - Study showed 5% of patients being prescribed a schedule II opioid
  - 15% receiving at least one opioid analgesic
  - 41% of any kind of pain medication
  - 24% receiving a non-opioid medication
Results of the study indicated that the PDMP showed a significant reduction of the prescribing of schedule II opioids.

- 30% decrease prior to the implementation of the program.
- The study identified a reduction in opioids of any kind and pain medication as a whole and slight increase in the amount of non-opioid medications being prescribed as an alternative option.
- State success stories: Kentucky and Ohio mandated PDMP, which resulted in a decrease of 85% and 62% of opioids per capita. New York and Tennessee showed a decrease in doctor shopping by 75% and 36% respectfully.
NALOXONE DISTRIBUTION AND IMMUNITY POLICY

• 2014, Governor Scott Walker signed seven bills that were called the Heroin Opiate Prevention and Education (H.O.P.E.)

• One of the bills is called the Good Samaritan Law, which protects individuals from prosecution when they report an opioid overdose to 911

• Another bill provides first responders with naloxone in overdose, or suspected overdose circumstances

• Naloxone can now also be distributed over the counter, without a prescription, through local pharmacies and public health agencies
NALOXONE DISTRIBUTION

- 15 countries worldwide have begun to provide naloxone to the public
- Study was conducted to determine the effect of accessible naloxone
- A review of 22 observational studies was completed by comparing the results of the studies using the Bradford Hill Criteria
- The review showed a strong association between take home naloxone and opioid overdoses and mortality prevention
  - 96.3% saved out of the 2336 individuals in the study sample
- Study also found no evidence to suggest that the availability of naloxone increased or encouraged further use of heroin or opioids
MEDICATION ASSISTED THERAPY

• Involves prescribing medications to a patient to relieve the withdrawal symptoms and cravings that come with opioid addiction

• Provides the patient with the necessary tools to safely overcome opioid dependence and attempts to build a person’s ability to live a healthy lifestyle

• Medications can only be dispensed through a Substance Abuse and Mental Health Services Administration certified Opioid Treatment Program and must be taken under supervision
• MAT involves the use of methadone, buprenorphine, and naltrexone.
• Methadone and buprenorphine are used to trick the brain into thinking it’s still receiving opioids without the user obtaining the “high” effect
• Naltrexone blocks the effects of an opioid in the event that a person were to relapse. It eliminates the euphoric and sedative feelings that a person has when taking an opioid
MEDICATION ASSISTED THERAPY

• From 2003 to 2012, the number of facilities that provided Opioid Treatment Programs remained between 1,100 and 1,200, however, in the last few years the number has increased to 1,482 programs

• The number of clients receiving methadone treatment has increased to 356,843 people in 2015

• Buprenorphine being offered at Opioid Treatment Programs has increased from 11% in 2003, to 58% (779 programs) in 2015

• Studies have shown patients on methadone were four times more likely to stay in their treatment program and had 33% fewer positive drug tests when compared to those receiving a placebo treatment
  • Methadone and buprenorphine together also showed to be equally effective at reducing the amount of opioid use
The Centers for Disease Control and Prevention note that the majority of those abusing opioids obtained the drugs from a source other than a prescription

- 71.2% abusing opioids obtained the drugs from a friend or relative

Drug Disposal Programs accept expired, unwanted, or unused medications from users in the community and dispose of them appropriately and responsibly

Items that are allowed to be collected are:

- prescription drugs (controlled and non-controlled) and over the counter medications including ointments, patches, non-aerosol sprays, inhalers and pet medications
DRUG TAKE BACK

• Drug Enforcement Administration hosts two drug take back events each year
  • Since 2010, the events have collected 4.8 million pounds of prescription medications in just 9 total days
  • In 2016, the DEA set another outstanding record with the collection of 447 tons of medications between 5,400 sites throughout the 50 states
• Wisconsin held a statewide Drug Take Back event on October 28, 2017, which included approximately 350 permanent drug collection receptacles and 266 sheriff’s departments
  • In this event alone, Wisconsin collected 60,357 pounds of unused medications
CONCLUSION

• The United States Council of Economic Advisors reports that the opioid epidemic has reached crisis level with opioid related deaths quadrupling over the last 16 years

• The estimated cost of the opioid crisis was approximately $504 billion in 2015, which included costs associated with fatality, healthcare, treatment, prevention, lost wages and work production, and cost to the criminal justice system

• Healthcare and public health officials need to keep in mind that although establishing programs, policies, and prevention strategies is costly, the cost of not addressing the problem is much greater
CONCLUSION

- The Federal Government is providing grants and funding to states to assist in the burden of cost
- The US Department of Health and Human Services dedicated $144.1 million in grants to the Substance Abuse and Mental Health Services Administration
  - Funds set to be allocated throughout 58 locations, including multiple states, cities, communities and healthcare agencies
- 21st Century Cures Act provided $458 million in grants in 2017 to each of the 50 states, four United States territories and the District of Columbia
REFERENCES


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