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Medication-Assisted treatment: Barrier or Facilitator

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Medication-Assisted treatment: Barrier or Facilitator

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Abstract

Using medications in the treatment of substance abuse disorders has become as an important part of available treatment options offered by medical practitioners. In this paper data will be presented to show the benefits and barriers associated with using several types of medication-assisted treatment to treat opioid use disorder. There are three drugs approved by the FDA for the treatment of opioid dependence: Buprenorphine, Methadone, and Naltrexone. There has been limited adoption of pharmacotherapies in the treatment of substance use disorders. In treatment of addiction, medications are used to reduce the intensity associated with withdrawal symptoms, reduction of cravings for the substance, and help reduce the chance of continued use or relapse. This is accomplished by blocking the effects of the drug. Opiate treatment programs offer medication assisted treatment (MAT) to patients who have been identified with an opiate use disorder from a qualified professional. Opioid treatment programs offer an array of services. The purpose of services includes reducing, eliminating, or preventing the use of illicit drugs; as well as reducing possible illegal action and the increase of communicable diseases including HIV. The substance abuse and chemical dependency treatment field has been challenged to implement evidence-based practices. There has recently been a dramatic increase in the number of interventions for substance use prevention and medication-assisted treatment is one of those interventions.

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Introduction

The use of medications in the treatment for substance abuse has become a significant part of the treatment methods available to medical practitioners. The drugs Methadone and Naltrexone have a relatively long history, but over the last ten years' medications such as Buprenorphine, with this that could be called a superior plan of treatment are beginning to be more noticeable. (Roman, Abraham, & Knudsen, (2011).

The website *FDA* (2019) outlines the three drugs approved for the treatment of opioid dependence as: Buprenorphine, Methadone, and Naltrexone. All three treatment options have proven to be safe and effective when combined with counseling and psychosocial support. Some individuals believe that people who seek treatment options for Opioid Use Disorders should be offered access to all three options. Providing access allows providers of services to collaborate with clients to select a form of treatment suited to their personal needs. Due to the chronic nature of Opiate Use Disorder, it is recommended that the need for continuing a medication-assisted treatment program be re-evaluated periodically. There is not a maximum recommended duration of services for maintenance treatment. Some patients may choose to continue treatment indefinitely.

The concern in the United States with the opioid epidemic continues to increase. New treatments such as medication-assisted treatment programs have been met with concern by some and enthusiasm with others. There has been a lack of adoption of these new practices and this paper will investigate the reasons behind those who believe in the treatment and those who are against it.

Dangers of Opioids

Now more than ever, we are hearing of the misuse of prescription opiate pain medication. Experts of the field acknowledge that the abuse of these of drugs begun more than twenty years back. Throughout the United States, healthcare experts are giving significantly more consideration to this issue, and physicians are considering this when recommending opiates as a treatment option. Before taking them, one should learn as much as possible concerning these medicines.

How Opiates work:

Opiates are medications that reduce the strength of pain indicators in the patient's brain. They also affect the areas of the brain which regulate an individual's emotion, thus helping to reduce the effects of pain. This is one of the reasons they can be habit forming.

Opiates include:

Oxycodone (OxyContin, Percocet), Hydrocodone (Vicodin): These potent opiates are the most commonly used for painful disorders such as broken bones, dental issues, and conditions such as cancer.

Morphine: This is commonly used after a surgical procedure to lessen pain

Codeine: This is commonly used for mild pain. It can be prescribed for other health issues such as coughs and severe diarrhea.

Some shocking facts about opioids

The consequences of opiates, involving their habit forming abilities, are a large factor to the more than 16,600 U.S. deaths from painkillers that happen every year. That is around 45 people a

day in emergency rooms across the United States. And this does not include the people who have gone to the emergency room and survived the overdose. (CDC, 2018)

Prescriptions for opiates have risen to 300 percent in the last decade or so. Vicodin and other hydrocodone-combination painkillers are the most commonly prescribed drugs in the United States. (CDC, 2018)

The problem of opiate abuse first began in the late 1990s and by the year 2007, deaths from opiate overdose outstripped deaths from heroin and cocaine in the United States. (CDC, 2018)

In more current years, hundreds of federal, state, and local mediations have been instigated in reaction to the opiate epidemic. Presently there is a national database that helps healthcare experts to monitor usage, deaths and other developing data.

When misused, even one large dose can cause severe respiratory failure, which can lead to death. Nearly one third of females of child bearing age had an opiate prescription filled every year between the years of 2008 and 2012. Contact with opiates during pregnancy increases the risk of defects in the unborn child's brain, heart, spine and abdominal wall. (CDC, 2018)

Sometimes these painkillers do not even relieve the pain. Patients chronically using opiates could feel worse due to their side effects. Side effects can include: constipation, sedation and depression. Other patients experience aggravated pain after starting opiates. This is known as opioid-induced hyperalgesia. (CDC, 2018)

Some numbers on amount of opiates prescribed yearly

After a continual growth of the general national opiate prescribing frequency starting in the year 2006, the over-all number of prescriptions distributed peaked in the year 2012 to beyond

255 million and there was a prescription rate of 81.3 prescriptions for every 100 people. (CDC, 2018)

The general nationwide opiate prescription rate dropped in the years 2012 to 2017, and in 2017, the prescription rate fell to the least it had been in more than 10 years, being 58.7 prescriptions per 100 people, which is a whole of more than 191 million opiate prescriptions. (CDC, 2018)

Nonetheless, in 2017, prescription rates continued to continue to be higher in specific parts of the United States. In 16% of counties in the United States, sufficient opiate prescriptions were prescribed for each person to have one. Whereas the complete opiate prescription rate in 2017 was 58.7 prescriptions per 100 persons, other regions had amounts up to seven times as high as that. (CDC, 2018)

According to the Substance Abuse and Mental Health Services Administration's National Survey on Drug Use and Health, a projected 1.9 million people in the United States qualify for abuse and dependence criteria for prescription pain relievers. Also, the Centers for Disease Control and Prevention report that yearly, more people die from prescription painkiller overdoses than from heroin and cocaine combined. (SAMH 2019)

Long term effects of opiate use

A 2012 study by AnGee Baldini, MD, Michael Von Korff, ScD, and Elizabeth H. B. Lin, MD, MPH found the following information: The reprimand to decrease the abuse of prescription opiates was publicized by the U.S. Food and Drug Administration (FDA), National Drug Control Policy, The Drug Enforcement Agency. These organizations recommended physician education regarding opiate prescriptions. The recent motivation of change was compelled by the rising

number of deaths and overdoses reported by the Centers for Disease Control and Prevention. The prevalence of chronic pain has risen to 40% now in the countries contributing, with 10% to 25% of the populace suffering from substantial deficiency due to their chronic pain. Using opiates to treat chronic pain that is not related to cancer is becoming more common subsequent to the endorsements given by numerous pain societies. The commonness of long term opiate use has steadily risen since the year 1980 with approximately 6-8 million people in the United States using opiates for the management of long term pain built on the stated use of long-lasting opiate therapy. With this extensive usage, there is a large amount of material on the consequences of opiates suitable for use by primary care doctors. This review does consider scientific studies published within the last six years providing data pertinent to the possible side effects of opiates.

The information collected is accessible in an organ system methodology to enable training in the practice of primary care doctors. The goals are to improve the doctors' abilities in discussing the side effects of opiates with their patients of whom are considering long term use for long-lasting discomfort, as well as to raise awareness of doctors and users in recognizing possible side effects that could be caused by the use of the opiate pain killers. (Baldini, Von Korff, & Lin, 2012)

Method: The research for the data in the reports available in scientific periodicals in the years 2005-2011 was directed utilizing Quality Clinical Guidelines, Medline Agency for Healthcare Research and Cochrane Database of Systematic Reviews and Evidence Based Reports. A review was implemented due to the large amount of publications related to the negative effects of opiates being normally trivial, and the multiplicity of negative effects across the systems

prevented a measureable evaluation. The organ systems included were the respiratory, immune, gastrointestinal, musculoskeletal, cardiovascular, endocrine, and the central nervous system. Inside each system, it was initially considered articles to meet criteria that included the words opiate and each organ system in the title, or body of each article. There were 1,974 initially identified articles, 74 of which incorporated verification of prolonged opiate abuse on each system that was identified. In the identified articles, there were 43 selected on the significance in prescribing by primary care doctors. Other articles identified by the experts' recommendations and other related bibliographies supplemented the study. (Baldini, Von Korff, & Lin, 2012)

Results: Gastrointestinal System Effects

Constipation was one of the predominant negative effects of long term opiate therapy generally well-known by doctors and their patients as a negative outcome of opiate use. The pathophysiology of this progression outcomes from the stimulus of the opiate receptors in the digestive tract. Multiple studies have reported that up to 45% of patients using opiates experience constipation, while up to 25% also reported nausea. Constipation related to opiate usage still remains obstinate to treatment using laxatives and stool softener medications. Constipation reported had been severe enough that patients had to reduce the dosage of their medicine or stop opiate use completely. In the starkest examples, opiate abuse has been known to raise the possibility of bowel obstructions, which could result in being hospitalized and even demise. In supplement to the constipation and nausea, opiate use could trigger bloating, vomiting, and abdominal cramps. The risk of intestinal bleeding is comparable to nonsteroidal anti-inflammatory (NSAID) medications. (Baldini, Von Korff, & Lin, 2012)

The negative consequences of these intestinal effects weigh significance for particular attention. Constipation can be related with other quality of life problems. Studies discovered that up to one third of constipated opiate users reported psychological suffering and increased frequency of being depressed related to the controlled patients. Patients with stomach complaints related to opiate use have considerably more hospital visits and hospital admission rates, longer stays while admitted in the hospital, and higher rates of primary care doctor visits. The linked damage to quality of life should be compared to opiate efficiency for their chronic pain. (Baldini, Von Korff, & Lin, 2012)

Respiratory System Effects

There has been a link between sleep breathing disorders and the use of opiates found in more current studies. Continuing opiate use is proven to be related to the symptoms of sleep disordered breathing, ataxic breathing, sleep apnea, hypoxemia, and also retention of carbon dioxide. With patients that were on opiate therapy for six months or longer, the commonness of mild to severe sleep disordered breathing has been proven to be up to 75%. Comparing, samples of the population, sleep disordered breathing is only detected in 3% - 20% of people. In another smaller study, sleep apnea was discovered in up to 30% of patients using methadone. Also as much as 10% of patients using opiate therapy experience a type of hypoxemia. These adverse results of opiates seem to happen in a dependent of dose manner. Ataxic breathing was detected in as many as 92% of patients who were given a morphine dose of 200 mg, 61% of patients taking under 200 mg, and in only 5% of patients that were not taking opiates. While the risk of death from opiate overdose has been established in other studies, death from sleep disordered breathing does need more research, as what studies that are available are usually small and contain misleading samples. (Baldini, Von Korff, & Lin, 2012)

Respiratory System Depression

There are life threatening side effects of opiate medications such as bradycardia, respiratory depression, and hypotension, occurring during an opiate overdose. Though this is not completely comprehended, a physical tolerance to painkillers does not automatically compare to a tolerance of the results of opiates on the breathing system. Patients who were being prescribed larger doses of opiates were found to have proficiency in the increased risk of overdose. The estimations of this danger all differ, nonetheless more current documentation has established an 8.9% increase in persons using more than 100 milligrams daily, relative to persons receiving opiate treatment of fewer than 20 milligrams daily. And a 3.7 % rise amongst people using more than 50 milligrams daily. Among patients prescribed higher opiate dosages, the danger of opiate overdosing can be projected to be 1.8% for each year of opiate use. Furthermore, 12% of overdoses resulted in death, proposing a yearly overdose possibility of 2 per 1,000 individuals per year among patients on high dose opiate treatment. The approximations were even with Centers for Disease Control and Prevention mortality information related to deaths from opiate overdose. Which are almost equivalent to car accidents as one of the prominent causes of death of 35–54 year olds. (Baldini, Von Korff, & Lin, 2012)

Cardiovascular System Effects

A recent analysis amongst elderly people suffering from arthritis discovered that opiate painkillers were paralleled to NSAID medications such as ibuprofen, opiate therapy was linked to a 77% increased risk of cardiovascular occurrences such as heart failure. During the initial 30 days, the risk of cardiovascular occurrences was comparable with most opiates. Conversely, following 180 days of being on codeine, treatment was coupled with up to a 62% upsurge in

these opposing actions as paralleled to hydrocodone treatment. Another large study examining health insurance claims showed increased risks of myocardial infarction and cardiovascular revascularization among patients on opiate therapy relative to people not using opiates. All the results of opposing cardiovascular properties of opiates could be described by the possible prejudices in investigation and may need to be repeated. It cannot be presumed that opiates have lower cardiotoxicity than COX-2 inhibitors in the nonexistence of data supporting this assumption. (Baldini, Von Korff, & Lin, 2012)

Central Nervous System Effects

A noteworthy problem, especially among elderly users is Opiate neurotoxicity. Dizziness and sedation are additional properties that could potentially result in unintentional penalties amongst patients getting indefinite opiate treatment, such as breaks, painful falls, respiratory distress. Hyperalgesia related to extreme sensitivity to pain has been described in people on opiate regimens. Also, patients on opiate medications are shown to develop elevated levels of depression of around 38%. Intriguingly, it has been shown that people on opiates with emotional illness have a suggestively superior amounts of hospital stays. Associated use of central nervous system depressants such as barbiturates, and alcohol magnify respiratory depression and can result in potential apnea. (Baldini, Von Korff, & Lin, 2012)

Musculoskeletal System Effects

One of the important unfavorable effects of opiate painkillers are their relationship with the elevated possibility for fractures. However, the main reason for this increased risk is not clearly comprehended, the dominant idea is that opiates do lead to an elevated potential for tumbles across the central nervous system such as dizziness and decreased alertness. New studies report a

related risk of breaks at about 1.4 for elderly people who are utilizing opiate medications. Nonetheless, other approximations have positioned the threat ratio for amplified breakage at close to 4.9 when associating people using opiates to the age related controls who were prescribed NSAIDs. While the comparative risk is humble at best, because the rates of fractures are greater among elderly adults, the total increase in fracture risk is very prominent. In the population of over age 65-year-old, opiate medications bestowed a risk of 1.6 for fractures. New studies have found that propoxyphene and morphine greater than 50 mg daily doubled the risk of fractures in elderly patients, with an annual fracture rate of 9.95%. Also, higher amounts of opiates communicate to a elevated fracture possibility amongst elderly patients. Another study uncovered that shorter acting opiates carry higher fracture risk than longer acting opiates inside the beginning two weeks being used. (Baldini, Von Korff, & Lin, 2012)

Almost all recent studies related the necessity for more examination of the elevated risk for fractures. Although the number of fractures has gradually decreased, the overall rate for death is remaining at a high rate of 21.9% per 1 year. Additionally, patients who do survive a related event more often do not regain their highest quality of life. They more often have declines in their mental and physical health, and also may require institutional or long term care facilities. They also have diminished quality adjusted years of life. With respect to other analgesic therapies, opiates displayed a substantial rise in fractures when paralleled to other medicines like NSAIDs. (Baldini, Von Korff, & Lin, 2012)

Endocrine System Effects

Long term opiate use has been proved to have an effect on the endocrine system of both the male and female. The apparatus of these results is supposed to happen through contact with the

hypothalamic pituitary adrenal axis. Opiate pain killers have been proven to disturb the release of all the hormones including the anterior pituitary including adrenocorticotrophic hormone, growth hormone, thyroid-stimulating hormone, prolactin, and the lutein-stimulating hormone. Individuals using long term opiate therapy have been shown to have a hyperactive functioning hypothalamic-pituitary-adrenal axis supplemented by the decreased functioning of the hypothalamic-pituitary-gonadal axis. With all of the enteropathies perceived, some of the weightiest pertain to the decrease of the gonadotropin-releasing hormone. (Baldini, Von Korff, & Lin, 2012)

The reduction in the gonadotropin hormone can be apparent in male patients as hypogonadism, recognized as opiate induced androgen deficiency, fatigue, sexual dysfunction, infertility, and also related to decreased levels of testosterone. The decrease of testosterone is of special concern because introductory studies suggest the increased risk of metabolic syndrome and insulin resistance. (Baldini, Von Korff, & Lin, 2012)

The reduced pulsatile release of gonadotropin-releasing hormone and the succeeding reduction in luteinizing and follicle stimulating hormones can have potential effects in females also. Reduced quantities of estrogen, low follicle stimulating hormone, and more amplified prolactin could result in osteoporosis, or other conditions such as galactorrhea. These initial conclusions propose the need for thoughtfulness when prescribing to people with pre-existing disorders. It is known that these side effects are usually changeable with discontinuation of medication or by lowering the dosage. (Baldini, Von Korff, & Lin, 2012)

Immune System Effects

Many kinds of opiates, such as morphine and fentanyl, are proven to have immunosuppressive effects. Studies of these effects are challenging to calculate, as precise tools are needed for additional examination. It is known that these opiates affect the opiate receptors on all of the immune cells. They could also moderate the immune function subtly through glucocorticoids discharged by the hypothalamic-pituitary-adrenal axis and norepinephrine that is released by the sympathetic nervous system. More current studies have exposed an upsurge in pneumonia risk in elderly people on long term opiate treatment. (Baldini, Von Korff, & Lin, 2012)

How is opiate addiction treated?

Opiate treatment programs and services vary by each provider and by the type of services needed to effectively address each patient's needs. According to The Hazelden Betty Ford Foundation, here are some of the key components of successful opioid addiction treatment. (The Hazelden Betty Ford Foundation, 2019)

Dialectical Behavioral Therapy (DBT)

This treatment approach emphasizes behavioral change, problem-solving and emotional regulation, validation, mindfulness and acceptance

Cognitive Behavioral Therapy (CBT)

This form of treatment focuses on exploring patterns of thinking that lead to self-destructive actions, identifying beliefs that direct thoughts, and learning to modify these patterns of thinking to improve person's coping skills

Acceptance and Commitment Therapy (ACT)

This technique uses mindfulness and behavioral activation to increase psychological flexibility and the ability to engage in values-based, positive behaviors while experiencing difficult thoughts, emotions or sensations

Motivational Enhancement and Interviewing

This is a collaborative approach that helps patients identify their benefits with regard to staying sober, working through difficult issues, and developing skills necessary to accomplish their goals

Medication-Assisted Therapies (MAT)

Medications are now used to treat substance use disorders related to opioids and alcohol, helping ease withdrawal symptoms and reduce drug cravings. Use of medication-assisted treatment for opioid dependence with naltrexone and buprenorphine/naloxone is supported by scientific research and recommended by the U.S. Department of Health and Human Services Substance Abuse and Mental Health Services Administration (SAMHSA), National Institute on Drug Abuse (NIDA), Washington Circle, and the Veterans Administration.

Mental Health Services

More often than not, addiction comes with complicating factors such as depression, anxiety and trauma. These are also known as co-occurring disorders. With such complex conditions, the most effective approaches to care integrate treatment for the addiction and the mental health so that both issues are being addressed at the same time. Services may include

individual or group therapy, family therapy, diagnostic assessments or medication management. Each type and frequency of care is determined by initial and ongoing assessments.

Contingency Management/Motivational Incentives (CM)

Incentive based interventions also known as tangible rewards are used to reinforce positive behaviors, increase addiction treatment retention and promote abstinence from drug abuse.

Interpersonal Therapy (IPT)

This is a short-term, limited focus treatment for depression and anxiety.

Solution Focused Brief Therapy/Solution Focused Therapy

This is a goal oriented therapy focusing on the individual's present and future, rather than past. This is considered goal-oriented therapy.

Mindfulness-Based Cognitive Therapy (MBCT)

This technique is used to help prevent depression relapse; it works especially well for those suffering from major depressive disorder

Educational Groups and Lectures

This therapy focus on educating people about disorders and developing coping strategies

Twelve Step Facilitation (TSF)

Originally designed as a system to actively engage patients in abstinence based support groups such as Alcoholics Anonymous, the interventions today are more widely utilized to help patients achieve and sustain recovery from both substance use disorders and their co-occurring conditions

Other Therapies

Other treatment approaches may include many other therapies that complement care programs and services, such as:

- Animal-Assisted Programming
- Relapse Prevention Skills Group
- Communications Training
- Recovery Management Skills Building
- Stress Reduction Skills Training
- Yoga
- Spiritual Care
- Emotional Regulation
- Distress Tolerance Skills Training
- Experiential Therapy
- Process Focused Group Therapy

(The Hazelden Betty Ford Foundation, 2019)

In this paper we explore Medication assisted treatment, commonly known as MAT.

Evidenced Based-Practices

Research is a systematic investigation involving the interpreting, collecting, and analyzing of information in a sequential manner for the purpose of increasing an individual's understanding of the phenomenon of interest. Each characteristic of interest and all aspects of the environment where the information resides must be defined clearly in order to be confident in what we find is real. The process of collecting and organizing the data should be conducted and reported with the most possible precision. This will allow other researchers to reproduce and verify the validity of findings. The purpose of research is to inform the profession and enhance the ability to use best-practice methods (Sheperis, Young, & Daniels, 2017).

Evidence-based programs and practices (EBPPs) are specific techniques and intervention models that have shown to have beneficial effects on results through arduous evaluations. Evidence-based practice is a process that brings together expertise from professionals, the top available research, and input from individuals to identify services demonstrated to achieve positive outcomes (Family and Health Services Bureau 2006).

Limited topics in opiate treatment have more importance than the importance of implementing evidence-based programs. There is remarkable consensus among leaders within the field of addiction treatment about the importance of treatment programs' willingness to adopt particular innovations (Roman et al., 2011). Evidence-based practices and research can help

enhance the quality of treatment for substance use disorders by reducing or eliminating the ambivalent attitudes towards treatment with medication assisted treatment.

According to the Family and Health Services Bureau (2006), individuals may think the use of evidence-based programs and practices de-emphasizes decisions based on opinion, authority, or experience. However, utilizing these programs simply means that the best available research is identified and combined with other factors for the best results. Most advocates of evidence-based research programs do not diminish their importance associated with experience. They believe they should be integrated with experiences and resources which agencies and practitioners bring to practice. Additionally, numerous funding entities require the agencies to document outcomes and identify evidence-based practices and programs that have been utilized.

Certain policies have utilized modest recording of the adopted behaviors as the standard for compliance to new criteria because accomplishment of the goal for enriching treatment quality through innovation is defined by larger degrees of adoption of behavior by treatment organizations. However, evidence-based practices cannot be placed in one generic category as a measure for the quality of treatment because there has been no attention given to longer term application and the degree to which it really tails after acceptance (Roman et al., 2011).

There is yet to be an accepted typology to categorize evidence-based practices related to substance use disorder treatment. Yet, there is no doubt that they are not alike in their likelihoods for application inside opiate treatment agencies. Requirements for change within organizations regarding the object of evidence-based practices and programs varies widely. Some implementations flow easily and others can have the potential to cause major disruptions

in the delivery of treatment within the organization. Some innovations directly affect the client and others have no direct effect on the client care (Roman et al., 2011).

Medication-assisted treatment in combination with counseling and behavioral therapies can help individuals sustain recovery. More can be done to facilitate treatment options and develop additional therapies for individuals suffering with an Opioid Use Disorder diagnosis. Some clients may choose to continue maintenance indefinitely which is the cause of concern for some practitioners for fear the client has simply swapped one addiction for another. Others argue that addiction is considered a disease, so why not use medication to treat and manage that disease like you would any other.

The contrast between traditional psychosocial and pharmacological advances captures little. Long-term treatment success is perhaps achieved by facilitating acceptance of medication-assisted treatment programs, implementation of pharmacological treatment, psychosocial interventions, and multiple psychosocial considerations. Recent empirical effectiveness of buprenorphine drugs like Suboxone appears to challenge this assumption (Roman et al., 2011).

FDA Approved Drugs for Treatment

FDA-approved buprenorphine products approved for the treatment of opioid dependence include:

Bunavail (buprenorphine and naloxone) buccal film

Cassipa (buprenorphine and naloxone) sublingual film

Probuphine (buprenorphine) implant for subdermal administration

Sublocade (buprenorphine extended-release) injection for subcutaneous use

Suboxone (buprenorphine and naloxone) sublingual film for sublingual or buccal use, or sublingual tablet.

Subutex (buprenorphine) sublingual tablet

Zubsolv (buprenorphine and naloxone) sublingual tablets

FDA-approved methadone products approved for the treatment of opioid dependence include:

Dolophine (methadone hydrochloride) tablets

Methadone (methadone hydrochloride) oral concentrate

FDA-approved naltrexone products approved for the treatment of opioid dependence include:

Vivitrol (naltrexone for extended-release injectable suspension) intramuscular (FDA, 2019).

Suboxone

Suboxone, once thought to be a miracle drug to treat opiate addiction, is actually causing an epidemic in its own right. Suboxone is a mixture of buprenorphine, a semi-synthetic opioid, and naloxone, an opiate blocker. Suboxone has become overprescribed by medical professionals to an uninformed patient population.

Suboxone was first approved for use in the United States in 2003. Conclusions validate that the drug was formerly favored by the FDA to be used as a medication to aid opiate addicted patients with the uncomfortable symptoms associated with withdrawing from opiates. The use of the suboxone was designed to aid opiate addiction patients in a medical office setting, to help overcome opiate addiction. Conversely, it seems that many medical practitioners began to see the commercial profits of Suboxone being used as an opiate maintenance program, and ignoring the long term effects. For this reason, some patients have been enrolled in a Suboxone program for multiple years, as many as 10 or more.

Patients were attempting to overcome addictions to powerful narcotics such as heroin and OxyContin and many doctors offered Suboxone as the answer. However, regardless of the justifications or rationalizations from many within the medical and addiction treatment field, the basic premise of a Suboxone maintenance program is trading one illegal drug for a legal drug. It is saying “take this pill and you’ll be okay” or “take this pill and it will take care of your addiction.” Basically, patients going into a doctor’s office to find a way to “overcome their addiction” are years later finding themselves still physically dependent and addicted to a substance. Suboxone keeps opiate withdrawal symptoms at bay, but does not offer any actual treatment and clearly does not offer a solution for overcoming addiction. Take the Suboxone supply away from a person on a Suboxone maintenance program and there is little doubt that they will turn to heroin or OxyContin or another form of opiate once withdrawal symptoms begin. This is not the patients fault- they were sold a faulty bill of goods by many of those people prescribing Suboxone.

Hopefully, a competent and informed doctor will explain that a patient needs treatment for their psychological and emotional issues as well, and a competent doctor will be informed of

the physical effects of long term Suboxone use, but the question is how many doctor's are uninformed and therefore unable to give this necessary information to their patients? Patients being prescribed Suboxone were told this prescribed medicine would be the solution to their problem of drug addiction. In addition to the fact that a patient is still physically dependent on a substance to function, there are several disturbing effects of Suboxone that are rarely discussed.

Suboxone and Its Side Effects

Since Suboxone is often being prescribed by physicians that are not trained in addiction medicine and in the treatment of addiction, there are many issues go unobserved and are not regulated. Suboxone utilized as medication for treatment of opiate detox is first-rate. In the hands of a properly trained practitioner, Suboxone makes opiate detox significantly more comfortable. Suboxone is an outstanding treatment in assisting opiate addicts throughout their withdrawal symptoms. Conversely, the long term use of Suboxone may cause a multitude of medical problems. Additionally, numerous Suboxone users report getting sober from the Suboxone is more challenging other opiate medications. Since normal opiate detox lasts 5-7 days Suboxone may stay in the system for as many as 9 days. Withdrawal from Suboxone may take weeks to many months and will only bring painful physical systems and possibly more disturbing mental health problems. Patients often report depression and anxiety. Many report that withdrawing from the use of Suboxone, may last weeks and even months.

Suboxone in the Long Term, Is it Safe?

Suboxone use in the long term will cause withdrawal symptoms such as: anxiety, nausea depression, restlessness, sweats, fatigue, joint and muscle pain, insomnia, loss of libido, lack of

motivation. Opiate withdrawal symptoms normally last about one week, Suboxone withdrawal may last for some weeks or even months.

Methadone

Methadone has been used for decades to treat people who are addicted to heroin and narcotic pain medicines. When taken as prescribed, it is safe and effective. It allows people to recover from their addiction and to reclaim active and meaningful lives. For optimal results, patients should also participate in a comprehensive medication-assisted treatment (MAT) program that includes counseling and social support.

Methadone decreases opiate cravings and withdrawing and blocks the effects of illegal opiates. Methadone may be prescribed as liquid, powder or wafer and is taken once a day. Methadone is effective in higher doses, particularly for heroin users, helping them stay in treatment programs longer.

As with all medications used in medication-assisted treatment (MAT), methadone is to be prescribed as part of a comprehensive treatment plan that includes counseling and participation in social support programs.

Patients taking methadone to treat opioid addiction must receive the medication under the supervision of a physician. After a period of stability (based on progress and proven, consistent compliance with the medication dosage), patients may be allowed to take methadone at home between program visits. By law, methadone can only be dispensed through an opioid treatment program (OTP) certified by SAMHSA.

The length of time in methadone treatment varies from person to person. According to the National Institute on Drug Abuse Publication Principles of Drug Addiction Treatment: A

Research-Based Guide – 2012 (PDF | 391 KB), the length of methadone treatment should be a minimum of 12 months. Some patients may require treatment for years. Even if a patient feels that they are ready to stop methadone treatment, it must be stopped gradually to prevent withdrawal. Such a decision should be supervised by a doctor.

Naltrexone

Naltrexone, commonly known by its brand name Vivitrol is an antagonist or opiate blocker medication. Antagonists form an obstruction that blocks opiate particles from connecting to the opioid receptors. Antagonists attach to opioid receptors, but do not result in the release of dopamine. They are not addictive and will not result in any type of physical dependence.

Vivitrol blocks opioid receptors in the brain for one month, helping patients prevent relapse to opioid dependence, following opioid detox. Patients must be opioid-free before starting Vivitrol.

New study backed by the National Institute on Drug Abuse (NIDA) exposed that the relapse rates among adults with a history of opiate dependence were lower for patients receiving extended-release naltrexone than for those receiving treatment as usual (brief counseling and referrals for community treatment programs). Administered as a monthly injection, Vivitrol is an FDA-approved sustained-release, opioid antagonist for the prevention of relapse to opioid dependence. (NIH, 2016)

This study is the initial big randomized trial of naltrexone versus usual care conditions among adults. The results presented that at 24 weeks (six monthly injections) of extended-release naltrexone resulted in a considerably lower opioid relapse rate (43 percent to 64 percent) between the two groups. Furthermore, while there were no overdoses observed in the extended-

release naltrexone group, there were seven in the usual care group, with three resultants in deaths. (NIH, 2016)

Opiate Addiction Truth

Many believe opiate addicts are seen as being hopeless by many within the medical field. The potential for relapse for opiate addicts is so high and the rate of overdose is higher than any other drugs in addiction treatment. Usually, opiate addicts that seek treatment and succeed at having some time away from opiates end up using opiates again, and because of the decreased tolerance this often results in an overdose. Many addicts die from this. For this reason, medication assisted treatment such as Suboxone or methadone is often used by doctors and treatment centers as “harm reduction”.

The resulting facts are that these practitioners do not look at an opiate addict as someone that can ever succeed at sobriety, but more so as a number that they are trying save from being in the overdose statistics. Such as, “that girl could certainly not get sober so we should try to keep her from overdosing and dying.” This may seem like a brilliant belief, but here are two main issues:

This knowledge is underestimating the addict’s willingness and ability to get clean. Treating with this harm reduction theory instead of offering them complete addiction treatment seems to be uneducated and shows diminutive understanding of addiction. This may be true or that, or the doctor is simply looking to cash in on profitable side of medication assisted treatment to keep someone on maintenance treatment than helping them get clean and sober by giving them effective addiction treatment.

Suboxone is the facilitator for this new maintenance treatment model and may actually be causing more damage than benefits. More addicts than ever are being prescribed Suboxone and getting less and less real treatment and never improving their quality of life. Regularly they substitute opiate abuse with another problem, such as with drinking alcohol or by using other drugs, or engaging in other high risk behaviors. More often many are still suffering with emotional distress or trauma that has not been resolved. When these persons definitively understand that the amazing wonder drug Suboxone has manifested into a completely new addiction and they want to stop use, they will find it more difficult to do than the opiates they were initially recovering from.

But also, many experienced, educated clinicians that employ Suboxone properly, pair it with effective treatment and use a complete look at each patient and their individual situations. There are may be some cases when Suboxone maintenance best or only solution for the patients' condition. However, these are very few cases. Normally, numerous physicians recommending Suboxone are doing this without requiring any type of ample treatment. Furthermore, numerous physicians that recommend Suboxone need less than an appointment and a payment for a person to receive their suboxone. Many times, after the first visit, the doctor will prescribe the suboxone after only a short second visit. This definitely should not be comprehensive addiction treatment. This is absolutely not recovery based therapy in any definition.

Opiate Abuse in Today's Youth

Abuse of opiates, is one of the most rapidly developing addiction problems in the United States. In 2016 there were a reported 3.6 percent of pubescents aged from 12 to 17 abusing opiates. The statistics are doubled among older juveniles and younger adults aged 18 to 25. The majority of this issue is due to prescribed opiates and not from heroin. (HHS, 2019)

According to The U.S. Department of Health and Human Services (2019) opioid abuse is declining. Among high school seniors, past-year misuse of prescription opiates lessened from a peak of 9.5% in the year 2004 to 3.4% in the year 2018. The misuse of the drug Vicodin reduced from an all-time high of 10.5% in the year 2003 to 1.7% in the year 2018. The misuse of OxyContin decreased from 5.5% in the year 2005 to 2.3% in the year 2018. (HHS, 2019)

Additionally, children in 12th grade agree that opiates are more difficult to get access to than in years past. In the year 2010, 54% of 12th graders agreed that these medications were more easily obtainable, as paralleled to 32.5% in the year 2018. Overdose is the most serious significance of any type of drug abuse, especially opiates. Although the number of drug overdose deaths are still lower in general, the rate of overdose deaths among youth is still on the rise. In the year 2015, 4,235 young people aged 15 to 24 were declared dead from drug overdoses and more than half were attributed to opiates. (HHS, 2019)

All adolescents are at risk for misusing opiates. Although, there are a wide range of factors that can either increase the risk of prescription drug misuse or help protect against it. For example:

- Individuals at increased risk of opioid misuse include those with: acute and chronic pain, physical health problems, or a history of mental illness or other substance use or misuse. Youth who have witnessed a family member overdose or who have friends who misuse prescription drugs also are at highest risk. Data shows that almost half of adolescents aged 12 to 17 reported

misusing prescription pain relievers and reported that they were free or purchased them from a friend or even a family member. This reported rate is more than half for young adults aged 18 to 25 who reported their misuse of pain relievers. (HHS, 2019)

- Youth at the lowest risk were those who are committed to getting good grades, and going to college and those who are educated about the dangers of prescription drug abuse. Furthermore, young people who have a stronger relationship with their parents and whose parents do not approve of substance use are also at a lower risk of misuse. (HHS, 2019)

MAT for Youth

Using MAT such as Suboxone can be used in 2 primary ways:

1. As a short course of treatment to reduce the complications of opiate withdrawal.
2. As a longer course of maintenance treatment

Though younger opiate users are at higher risk for overdose and other serious effects, since teenage users rarely have lengthy use histories, they are not necessarily great candidates for long-term Suboxone maintenance treatment.

According to a SAMHSA (2018) expert consensus panel, for adolescent opiate dependent users:

1. A short course of Suboxone for detoxification followed by continuing treatment with naltrexone is the preferred treatment to start with.
2. If, after detox with Suboxone and continuing treatment with naltrexone, relapse occurs, then Suboxone maintenance treatment becomes more appropriate.

Opiate Abuse in The Elderly

One population usually overlooked for substance abuse is the elderly many of whom are on these medications for chronic pain, places them at high risk of abuse. Prescription opiate abuse affects up to 17% of adults over the age of 60 according to the National Institute on Alcohol Abuse and Alcoholism (2019). Due to inadequate information, very little data, and rushed office visits, prescribers, abuse among the elderly often goes unnoticed. This is worsened by the circumstance that elderly people often have medical or mental disorders that imitate indicators of substance abuse, such as depression, diabetes, or dementia. (NIAAA,2019)

According to the Office of Alcoholism and Substance Abuse Services, substance abuse among senior citizens can be categorized into two forms: the “hardy survivor,” or those who have been abusing substances for numerous years and have reached age 65, and the “late onset” group, which is those who form addictions later in life. (NIAAA, 2019) Medication assisted treatment such as methadone can be considered as a viable option for seniors experiencing prescription opiate abuse or seniors who are experiencing chronic pain.

There are numerous factors that lead to turning to substance abuse later in life. These could be health correlated problems or life changing traumas that take an emotional toll. These events may provoke substance-abusing behavior that can result in a total substance abuse.

Possible risk factors for drug addiction in the elderly include:

- Retirement
- Death of a family member
- Death of a spouse, pet or close friend

- Loss of income or financial strains
- Relocation or placement in a nursing home
- Insomnia
- Family discord
- Decline in mental or physical health

(NIAAA, 2019)

Benefits of Medication Assisted Treatment

Benefits of Methadone include:

- Easy induction
- Lower medication costs
- High retention rates
- Lowers drug use
- History of successful use in pregnant women

(Williams, 2018)

Benefits of Suboxone include:

- Minimal overdose risk
- Flexible dosing
- Excellent pain control
- Better outcomes in newborns

- Less stigma
- Injectable forms are being created

(Williams, 2018)

Benefits of Vivitrol include:

- Relieves cravings
- No fear of withdrawal symptoms
- Blocks opiate use of any kind
- Twice as successful in extended release injectable form

(Williams, 2018)

Disadvantages of Medication Assisted Treatment

The disadvantages of Methadone include:

- Daily dosing
- Limited or no access to local programs
- Risks of combining with other medications
- Highly stigmatized
- Can lead to cardiac issues

(Williams, 2018)

The disadvantages of Suboxone include:

- Risks of painful withdrawal

- Street value
- Stigma
- Patients can misuse and abuse
- Requires DEA Waivered clinician

(Williams, 2018)

The disadvantages of Vivitrol include:

- Hard to find trained providers
- Insurance issues
- No pain relief
- Lowers tolerance
- Less effective in oral pill form

(Williams, 2018)

Success Rates of MAT- Suboxone

People addicted to prescription painkillers reduce their opioid abuse when given sustained treatment with the medication buprenorphine plus naloxone (Suboxone), according to research published in *The Archives of General Psychiatry* and conducted by the National Institute on Drug Abuse (NIDA), part of the National Institutes of Health. The study, which was the first randomized large scale clinical trial using a medication for the treatment of prescription opioid abuse, also showed that the addition of intensive opioid dependence counseling provided no added benefit. (NIDA 2007)

"The study suggests that patients addicted to prescription opioid painkillers can be effectively treated in primary care settings using Suboxone," said NIDA Director Nora D. Volkow, M.D.

"However, once the medication was discontinued, patients had a high rate of relapse — so, more research is needed to determine how to sustain recovery among patients addicted to opioid medications." (NIDA 2007)

Pain medications are beneficial when used as prescribed, but they have significant abuse liability, especially when taken for non-medical reasons. This study examined whether the FDA-approved medication Suboxone could help combat this growing problem. Suboxone is a combination of buprenorphine to reduce opioid craving plus naloxone, which causes withdrawal symptoms in someone addicted to opioids if Suboxone were taken by a route other than orally, as prescribed. This combination was specifically designed to prevent abuse and diversion of buprenorphine and was one of the first to be eligible for prescribing under the Drug Addiction Treatment Act, which permits specially trained physicians to prescribe certain FDA approved medications for the treatment of opioid addiction. (NIDA 2007)

Most studies examining treatments for opioid dependence have been done with heroin-addicted patients at methadone clinics, so there have been little data on treatment for patients addicted to prescription painkillers, especially in the offices of primary care doctors. To help address this issue, NIDA's Clinical Trials Network launched the Prescription Opioid Addiction Treatment Study (POATS) in 2007, which took place at 10 treatment sites around the country.

"Despite the tremendous increase in the prevalence of addiction to prescription painkillers, little research has focused on this patient population," said Roger Weiss, M.D., of Harvard Medical School, Boston, and the lead author of the study. "This is the first large-scale study to examine

treatments exclusively for people who were abusing prescription painkiller medications and were treated with buprenorphine-naloxone, which can be prescribed in a physician's office." (NIDA 2007)

In the study, more than 600 treatment-seeking outpatients addicted to prescription opioids received Suboxone in combination with brief standard medical management, in which physicians evaluated treatment effectiveness and recommended abstinence and self-help participation. Half of the participants also received varying intensities of addiction counseling as provided by trained substance abuse or mental health professionals. (NIDA 2007)

Results showed that approximately 49 percent of participants reduced prescription painkiller abuse during extended (at least 12-week) Suboxone treatment. This success rate dropped to 8.6 percent once Suboxone was discontinued. Reductions in prescription painkiller abuse were seen regardless of whether or not the patient reported suffering chronic pain, and participants who received intensive addiction counseling did not show better outcomes when compared to those who did not receive this additional counseling. (NIDA 2007)

Success Rates of MAT- Methadone

Methadone maintenance is more effective in reducing heroin use among addicts than a 180 -day detoxification program that included an array of counseling services, a UC San Francisco study has found.

The objective of the study was to compare methadone maintenance—a widely used but controversial method of weaning heroin addicts off the drug—with an alternative treatment of psychosocially enriched 180 day methadone assisted

detoxification. Methadone maintenance resulted in lower heroin use rates and fewer drug-related HIV risk behaviors, such as sharing needles. The study results will be published in the March 8 issue of the Journal of the American Medical Association.

“Methadone maintenance is controversial,” said Sharon Hall, PhD, lead author of the study and UCSF professor in residence and vice-chair of psychiatry. “People don’t like it because it is continued provision of an addicting drug. When people come on methadone maintenance, they may stay on it for several years. The idea of the study was to do a comparison to find a method that was as effective but didn’t involve indefinite treatment with an addicting drug.”

Methadone maintenance has been used to treat heroin addiction since 1964, Hall said. Heroin is a short-acting opiate, Hall explained, meaning it produces a high and a withdrawal effect rapidly. Methadone is a slower acting—and legal—opiate. It works by stabilizing heroin users so that they do not have a heroin-induced euphoria or suffer from severe withdrawal symptoms.

The study enrolled 179 participants who were assessed monthly for a year. A urine specimen was collected each time.

Those in the methadone maintenance part of the study received stable doses of methadone. Participants also attended one hour per week of substance abuse group therapy for the first six months and one hour per month of individual therapy.

Those in the 180 -day detoxification program received 120 days of methadone treatment, followed by 60 days of methadone dose reduction until they were no longer taking methadone. They also received a host of drug counseling services. During the first six months, participants were required to attend two hours per week of substance abuse group therapy, one hour per week of cocaine group therapy if they were found to also be addicted to that drug, and a series of one- hour substance abuse education classes held weekly. They also attended weekly individual therapy sessions. During the last seven months of the study, participants were offered aftercare treatment that included weekly individual and group psychotherapy and liaison services with the criminal justice system, medical clinics and social service agencies.

Methadone maintenance was found to retain more patients and be more effective in decreasing heroin use, though use was still high in both groups. Also, the study found that those addicted to cocaine were more likely to drop out of the 180-day program than the methadone maintenance program.

“I think the results came out the way they did because heroin is a very addicting drug and we need pharmacological tools at this point to fight that addiction,” Hall said. “It’s not enough to just provide psychosocial services when we lose methadone. There are two ways the field could change. One is to develop more sophisticated pharmacological treatments for heroin addiction that have less addiction potential. Another thing we need to think about is

developing psychosocial interventions targeting what methadone patients need like legal and vocational services.”

Hall added that one of the reasons the counseling services offered as part of the 180- day detoxification program did not lower heroin use might be because they were too general.

“The other thing this study points out is that a long time ago methadone maintenance clinics had many more services than they do now,” she said. “And perhaps that’s one of the reasons the 180 day detoxification didn’t work. The services were limited in scope. We didn’t have legal or vocational services or family therapy. Many methadone programs have lost funding for these types of services and we have yet to see what a methadone program looks like that has them.”

Success Rates of MAT- Vivitrol

Recent research indicates that extended release naltrexone also known as Vivitrol, resulted in a lower rate of opiate relapse when paralleled to the usual treatment in a mainly male and minority people. The study participants were on an outpatient basis, voluntary participants with criminal justice involvement and opioid abstinence.

The National Institute on Drug Abuse, a government organization that is part of the National Institutes of Health (NIH) co-sponsored a large, multisite, randomized trial to test the effectiveness of extended-release naltrexone among community-dwelling criminal justice

offenders who were at high risk for opioid relapse and other related adverse outcomes. The co-sponsor was Alkermes, the manufacturer of the product.

The report can be accessed at: *Lee JD et al. "Extended-release naltrexone to prevent opioid relapse in criminal justice offenders." N Eng J Med 2016; 374:1232-42.*

The authors stated that opioid dependence disproportionately affects U.S. criminal justice system populations. Relapse back to drug addiction and opioid overdose deaths occur at higher rates after release from incarceration.

METHODS

The trial involved five sites, all independently funded and using a common collaborative protocol. The sites were:

1. University of Pennsylvania
2. New York University School of Medicine
3. Bellevue Hospital Center
4. Brown University
5. Rhode Island Hospital
6. Columbia University
7. Friends Research Institute

The trial was open label without placebo control. It evaluated a 24-week course of Vivitrol compared with the usual treatment, such as counseling for community treatment programs for the prevention of opiate relapse among adults who had a history of opiate dependence and a

preference for opiate free rather than medication assisted treatment programs, and who were sober from opiates at the time of the study. (Lee JD et al, 2016)

The main result was the time to an opiate relapse event, being outlined as 10 days or more of opiate use in 28 days as evaluated by self-report and by urine drug screens obtained every two weeks. A positive urine screen was processed as 5 days of opiate use. (Lee JD et al, 2016)

Secondary results of attention include rates of alcohol and non opiate drugs, risk of HIV, arrests, incarcerations, and overdose. (Lee JD et al, 2016)

RECRUITMENT

The study engaged adult volunteers who were criminal offenders with a background of opiate use. It includes 153 participants that were allotted to Vivitrol and 155 that were allocated to the usual rehab treatment groups. (Lee JD et al, 2016)

The average age of all the subjects was 44 years old, with 85% of participants being male. All participants reported their history of opiate use, and 34% reported using heroin or another opiate in the 30 days prior. (Lee JD et al, 2016)

Doctors and nurses dispensed Vivitrol via injection. Vivitrol was administered at 380 milligrams every four weeks, intramuscularly. Participants in the opposing treatment group received similar counseling, education on the prevention of relapse, overdose, and encouragement for community participation. (Lee JD et al, 2016)

Appointments followed screening, every two weeks for a 24-week treatment phase. After treatment follow up appointments were scheduled at weeks 27, 52, and week 78 including urine drug screens and patient reporting of opiate and any other drug use. (Lee JD et al, 2016)

STUDY RESULTS

1. During the 24-week treatment phase, the amount of time to relapse was considerably lengthier at 10.5 weeks in the Vivitrol group than was in the other treatment group at 5.0 weeks.
2. Relapse was identified in 66 patients in the Vivitrol group, as paralleled to 99 in the usual treatment group.
3. There was a 74% rate of negative urine drug screens throughout the 24-week treatment and 56% in the usual treatment group. At one year after treatment, rates of opiate negative urine drug screens were equivalent at 46% in both groups.

(Lee JD et al, 2016)

SUMMARY

The study indicated that Vivitrol ensued in a lower rate of opiate relapse than the rate was with usual treatment. The study did not compare Vivitrol with the regular of opiate agonist that is in medication assisted treatment.

Suboxone Withdrawal

Throughout withdrawal, the body is performing a lot of exertion. Therefore, one can anticipate to go through physical symptoms as you suffer from the detox process. Also, a

person's mental health issues may emerge. Some detox and treatment facilities offer expert assistance in handling Suboxone withdrawal symptoms. Adequate treatment centers aim to make your detox as easy as is possible. Some of the most common physical symptoms of detox are:

- Hot and Cold episodes
- Skin Irregularities
- Fatigue/Tiredness
- Muscle Pain and Discomfort
- Cravings for drugs
- Sweating
- Nausea
- Vomiting
- Loss of Appetite
- Diarrhea
- Insomnia

(Nova 2018)

The usual symptoms of detox are:

- Irritability
- Depression
- Suicidality
- Anxiety

In addition to depression and anxiety, withdrawal may trigger dormant mental health issues to ascent. Such as, when a female is using Suboxone maintenance for 10 years because it helps her thoughts of irritation and void. While detoxing from the Suboxone, she be reminded of these feelings without the numbing effects of Suboxone. Perhaps she is struggling with a personality disorder for numerous years without any idea about her diagnosis. These thoughts could be disturbing, if she has never sought help from a professional who is able postulate material and education about the motives following these feelings. (Nova 2018)

Suboxone Withdrawal Timeline

Paralleled with other opiates, Suboxone does take more time to affect your body and will remain effective for a longer period. The time connected with opiate withdrawal is different for everyone. Since Suboxone is long acting, the symptoms of withdrawal will not surface as fast as they will when with drawling from other opiates. This will make withdrawal from Suboxone more challenging. (Nova 2018)

Withdrawing from Suboxone will neither take place all at once or struggle on endlessly. It is more like a many step procedure. The following timeline indicates when symptoms cultivate during the detox progression. These times may differ for everyone, contingent on their distinctive body chemistry. (Nova 2018)

- Days 1 – 3: Physical indicators begin to appear within 12 hours after the last use of Suboxone. Muscle pain, nausea and diarrhea are common.
- Days 4 – 7: Patients may suffer from insomnia as the system eradicates the Suboxone. Anxiety and irritability are common at this stage.

- Weeks 2 – 4: After week one, many people become depressed.
- Month 2+: Relapse prevention is critical at this stage. Cravings for Suboxone may happen years after last use of the drug.

(Nova 2018)

Coping with Suboxone Withdrawal Symptoms

There are many approaches to assist with suboxone withdrawal. Some may be treated at home, while others may only be accessible in a medical detox program. Counselors are able to assist, classify and survive any emotions that may be felt during withdrawing. Physicians that have knowledge of addiction know how to treat Suboxone withdrawal, and can help you towards the best treatment and medications. Persons should involve themselves in some of these healthy habits:

- Exercise
- Eating a balanced diet
- Hydration
- Social Interaction
- Fun Activities

Whether at home or in a medical detox program, patients could profit from using some over the counter medication. Some common medications that may help cope with Suboxone withdrawal include:

- Over the counter painkillers such as Tylenol

- Anti-nausea medications
- Stomach settling remedies such as Sprite or Ginger Ale
- Antacids
- Anti-diarrheal medications
- Multivitamins

(Nova 2018)

Methadone Withdrawal

Symptoms of methadone withdrawal, typically start to appear within 24-36 hours after your last dosage of the medication. The detox process is supervised by a physician. The duration of the process varies for every person, and it could last from 2-3 weeks up to 6 months.

You may be withdrawing within the first 30 hours that you stop taking methadone, if you experience:

- tiredness
- anxiety
- restlessness
- sweating
- watery eyes
- runny nose

- yawning
- trouble sleeping

In the beginning withdrawal symptoms may feel like the flu. Unlike with the flu, withdrawal symptoms can remain severe for several days. Symptoms may worsen after three days.

Including:

- muscle aches and pains
- goosebumps
- severe nausea
- vomiting
- cramps
- diarrhea
- depression
- drug cravings

The symptoms will be at their peak during the first week. Some symptoms can last longer than a week. These include low energy, anxiety, insomnia, and depression. Withdrawal can cause so much discomfort that the risk of returning to the use of other opiates is very high.

Consequently, some people discuss remaining on methadone but at a lower dose. Once a person becomes more stable at a lower dose, another attempt to detox can be discussed. (Harris, 2000)

The American College of Obstetricians and Gynecologists (ACOG) acknowledges that medically supervised withdrawal can be considered an option under the care of a doctor that is experienced in perinatal addiction medicine and with the consent of the mother if she is not willing to begin MAT. (ACOG, 2017)

“Concern about medication-assisted treatment must be weighed against the negative effects of ongoing misuse of opioids, which can be much more detrimental to mom and baby,” said lead Committee Opinion author, Maria Mascola, M.D. “Medication-assisted treatment improves adherence to prenatal care and addiction treatment programs and has been shown to reduce the risk of pregnancy complications. And while neonatal abstinence syndrome is often seen in infants who have been exposed prenatally to opioids, it is important to remember that it is an expected and treatable condition that has not been found to have any significant effect on cognitive development.” (ACOG, 2017)

“Opioid Use and Opioid Use Disorder in Pregnancy,” provides an up-to-date summary of treatment options, like methadone and suboxone. This will allow providers to offer better care for pregnant mothers suffering from opioid use disorder. ACOG recommends that screening for the mother’s opiate use take place during the first prenatal care visit. Verbal screening is preferred over urine testing for initial screening because it allows for a more complete assessment of the mother’s opiate use disorder providing opportunity for conversation that may encourage lifestyle changes. Urine drug testing may also be used as an adjunct to screening, but does not detect all substances and can produce false-positives. (ACOG, 2017)

“The postpartum period is already a vulnerable time for new moms, in general, as they face the stresses of sleep deprivation, caring for a newborn, and possibly symptoms of postpartum

depression,” said Mascola. “Women with opioid use disorder are dealing with all those things in addition to the challenges of their addiction, which—without treatment and support—can often lead to relapse. These guidelines are meant to help ob-gyns assert themselves in the care of their patients, so that they can make a lasting difference in their lives.” (ACOG, 2017)

Conclusion

The use of medications to treat substance use disorders has emerged as a significant part of the treatment methods available to medical practitioners. The data in this paper has been presented to show the benefits and barriers associated with using several types of medication-assisted treatment to treat opiate use. Providing an overview including the pros and cons of the three drugs approved by the FDA for the treatment of opioid dependence: Buprenorphine, Methadone, and Naltrexone. In treatment of addiction, medications are used to reduce the intensity associated with withdrawal symptoms, reduction of cravings for the substance, and help reduce the chance of continued use or relapse.

Opioid treatment programs provide medication-assisted treatment to individuals who have been diagnosed with an opioid use disorder from a qualified professional. Opioid treatment programs offer an array of services. The purpose of their services include reducing, eliminating, or preventing the use of illicit drugs; as well as reducing potential criminal activity and the spread of infectious diseases. The substance abuse treatment field has been challenged to implement evidence-based practices. There has recently been a dramatic increase in the number of interventions for substance use prevention and medication-assisted treatment is one of those interventions.

All three of these treatment options have been proven to be safe and effective when combined with counseling and psychosocial support. Some individuals believe that people who

seek treatment options for Opioid Use Disorders should be offered access to all three of these options. Providing access to these options allows providers of services to collaborate with clients to select a form of treatment suited to their personal needs.

Due to the chronic nature of Opioid Use Disorder, it is recommended that the need for continuing a medication-assisted treatment program be re-evaluated periodically. There is not a maximum recommended duration of services for maintenance treatment. Some patients may choose to continue treatment indefinitely. All benefits and disadvantages should be considered by patients and their doctor when considering a treatment option best suited and personalized to each individual's needs.

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