Opioid analgesics are narcotic drugs history essay



Opioid analgesics are narcotic drugs derived from the opium plant. They are thought to have originated in the Middle East several millennia ago. Opium grows well in hot climates and as the farmers who grew the plants soon discovered when they harvested their crop; when eaten it eases pain and suffering. Opium poppy can be grown annually. It stands about three to four feet high and comes in many colors. Those hues range from white, pink, red, purple, and violet. It has a four to five inch diameter. The seedpod sheds a milky latex type substance that is known to change color and turn into a " gum" like brown mass upon exposure to air. The word " poppy" comes from a Greek word which is used to describe the seed that falls from the opium plant. In Latin the word means " sleep inducing." It was first classified in this way in a book called Genera Plantarum in 1753. The word opium is derived from the Greek word, meaning " juice of a plant." After all, opium is prepared from the juice of Papaver Somniferum. Opium held great significance in the Greek world, where Galen, a Greek physician noted that this substance would cure almost anything that ails you, but only if used in a cautionary manner.

Opium counteracts certain poisons and venomous bites. It alleviates the symptoms of vertigo, dearness, epilepsy, apoplexy, and dimness of sight. Loss of voice, asthma, coughs of all kinds, and the spitting of blood; have been known to have been lessened with this drug also. It can be used to treat tightness of breath, colic, iliac poisoning, jaundice, and sclerosis of the spleen, pain from kidney stones, urinary tract infections and fevers. Finally the symptoms from dropsies, leprosies, menstrual pain, depression, and pestilences have all been relieved with this medication.

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During the middle of the seventeenth century, opium began being smoked by the Chinese; however, no major problems arose during that time. It wasn't until the early eighteenth century that the Chinese began to see a serious addiction problem surface when the local government made an attempt to prohibit the use of opium. China also ended trading practices of the drug with Western countries at this time. Europe and North America started to see the use of opium rise when it was being morally used as a pain killer.

In the nineteenth century, Sir William Osler called opium "God's Own Medicine" because it was a naturally occurring substance and it was performing miracles alleviating the people's pain. It was easier to get a hold of, in comparison to those other plant-derived medicines that they used back in the early days of medicine. Opium is made up of alkaloids which are broken down into two different groups. They are then classified into the pyridine-phenanthrene group which contains a narcotic component obtained from the raw opium plant. These include morphine, hydrochlorides and codeine. The other group is called the Isoquinoline, which includes Papaverine and Noscapine. More than 20 different alkaloids are present in the un-ripened seed of the opium plant. The analgesic properties of opium have been known for hundreds of years. Opiate drugs are mostly used in pain management in the medical field. Morphine is extracted from the raw opium plant and is treated chemically to produce the semisynthetic narcotics hydromorphone, oxymorphone, oxycodone, and heroin. Heroin is an illegal narcotic in the United States and is not used in medicine. Today, only a small amount of opium is used medicinally, as an analgesic for patients suffering

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from cancer. It is mainly used to obtain alkaloids and their derivatives. Narcotic analgesics are categorized, based on the opioid receptor sites, where they are active. Five categories of opioid receptors have been identified, three of which are involved in the actions of narcotic analgesics; these are called the mu, kappa, and delta receptors. Remifentanil is a very short-acting antagonist, with potent analgesic activity. Synthetic narcotics are laboratory-made analgesics with properties and actions similar to the natural opioids.

The first treaty signed by the United States during the 1833 agreed to control the international trade in opium. During 1842 the legislature instated a regulatory tax code on crude opium and it's importation into this country. In the second half of the 19th century, three forms of opium dependence started developing in the United States. These addictions began from the casual smoking of opium, the self-medication of morphine, and the use of opium for its healing properties. During the Civil War, medics would use morphine to help heal the wounds of the soldiers. After the Civil War, the United States started to import Chinese workers into the country to help expand their railroad system. At that time the Chinese brought along with themselves their " smoking opium" habits which they started to introduce into our society. In 1875, San Francisco was the first city to pass a law in the U. S. to forbidding the smoking of opium. New York followed in 1890 and after that many other states followed as well.

In the early 1900's, Dr. Hamilton Wright, also known as the father of the American Narcotics Law, decided to limit the United States trade policies with China by controlling the efforts to reduce opium importation into the https://assignbuster.com/opioid-analgesics-are-narcotic-drugs-history-essay/ country. During 1912 the United States requested to have an international meeting to help regulate the trading of opium and the use of it. Great Britain was already giving up one of their lucrative businesses with China. They also wanted morphine, heroin, and cocaine included in that deal. Dr. Wright drafted a bill which was submitted by Harrison of New York. It provided that the registered tax collectors would impose a special tax upon all persons who produced, imported, manufactured and dispensed or gave away opium, coca leaves, their salt derivatives, and/ or preparations. It was no wonder they referred to this law as the Harrison Act. Today it's called the Harrison Narcotics Tax Act of 1914. In this bill in Chapter 1(Sec2(a)) it states: any time a physician, dentist, or veterinary surgeon needs to dispense or distribute drugs, they are required to record information on the patient, as well as when it was given, how much they were given and the time the drug was given. Anyone found in violation of this law is fined and sentenced to a \$2000. 00 fine and/or five years in prison.

In 1962, after many years of growing opium, Burma decided to outlaw the substance. It is believed by many that the United States involvement in the Vietnam War is to blame for the surge of illegal heroin being smuggled into the states. The Central Intelligence Agency (CIA) had set up transportation to move the raw opium from Burma and Laos. During some of the transit operations it is believed that Corsican gangsters were shipping opium to the U. S. via the French Connection. At that time, it was believed that 750, 000 Americans where heroin addicts. In July of 1973, President Nixon created the DEA (Drug Enforcement Administration) which falls under the Justice Department's jurisdiction. They were to consolidate all the powers of the

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drug enforcement agencies. In 1988, the single largest heroin smuggle was seized in Bangkok, by the U. S. The intention was for the drug to be brought through the ports of New York and used in the drug wars that were so prevalent in the city. Around 1999, the United Nations Drug Program estimated that Afghanistan grew about 4, 6000 tons of opium which produces about 75% of the world's heroin. In 2000, United States had put into effect the DATA 2000 law which helped with heroin control and attempted to help with the substance abuse.

When the war in Afghanistan broke out in 2001, heroin started to flood the Pakistan markets, and the Taliban that was growing the substance was overthrown. Between the years of 2006-2007 Afghanistan grew from about 92% to 95% of the world's opium. This produced 6, 100 metric tons of the drug. Many of the world leaders were worried about the danger in that. In March of 2009 a study was conducted by the World Health Organization and it was discovered that around 80% of the world's population did not have adequate access to pain killers. They blamed that, on the leaders, for their failure to train health care workers who understood how to control the effect of the drugs on their patients. This may surprise many of you but opium is actually considered one of the crudest, as well as the least potent of the opiates. The Opium Poppy plant produces a milky, latex fluid, which is found on the un-ripened seed of the pod. People take the seed out so that they can smoke it, however, it also can be eaten. Opium is grown wildly in Myanmar and Afghanistan and is sold on the streets where it is in powdered form or even a dark brown solid. This makes it easier for them to smoke, eat or even inject it. The trade name for opium is Camphorated Tincture of Opium.

Paregoric is used for analgesic, and anti-diarrheal purposes. The adverse reactions of opium are light-headedness dizziness sedation, nausea, vomiting, and constipation, suppression of cough, reflux and dry mouth. For medical uses the dosages come in Paregoric: 5-10 mL. PO QID: 10% liquid: 0. 6 mL. PO QID. The most preferred way opium gets into the body and also the fastest, is by intravenous injection, which means shooting it into the veins. Here are a few of the physical effects an opiate user experiences; slow breathing, low blood pressure, seizures, dizziness, weakness, loss of consciousness, coma, confusion, tiredness, small pupils, and delusions.

The opiate addict becomes detached from his/her family, friends. They turn against society as they become more dependent on the drug for basic survival needs. Many families and friends find it hard to know what to do or how best to be able to help those struggling with the problem of drug dependency. Many of the addicts have trouble keeping their jobs, and many can't get one because of their addiction. Without jobs many don't have an income, that will allow them to buy their drugs. This causes them to turn to stealing or committing criminal acts, so that they may support their lifestyle.

The National Institute on Drug abuse (NIDA), a federal agency that was established in 1974, did some research on how these programs affected those in treatment for drug and alcohol problems. The four most common types of treatment programs with high ratings of success are: out-patient treatment clinics, therapeutic communities, short-term residential treatment, and methadone maintenance programs. Many drug addictions are treatable disorders. A successful program is tailored around the individual needs of the person. This helps them control their condition, so that they may still be able https://assignbuster.com/opioid-analgesics-are-narcotic-drugs-history-essay/ to lead a normal and productive life. The NIDA finds that the longer the individual stays in the program the better off he/she will be at recovering. The goal of all drug abuse treatments is to teach each patient the long lasting value of abstinence. The ultimate goal is to reduce drug use to begin with and to improve the patient's ability to function if they do have a problem. This minimizes the effect of the drug on both the abuser and on society as a whole.

For one to truly recover and become free from opium abuse one would have to go through an opium treatment program where he/she would become free of the physical dependency of the drug and they would then be able to function with clarity of mind, becoming free from the confusion it brings. Once they have done this, they can then begin to fully participate in the program and get the full benefit the opium treatments and the therapies involved bring. Individuals are taken through a 12 step recovery program where they meet with counselors, and have peer support groups who are able to share thoughts and ideas with them. After this program many are set up with a long term opium treatment therapy to deal with aftercare, which is every bit as important as the treatment itself. When followed up with medications which minimize that risk the probability of success in detoxification increases immensely.

The topic of drug abuse itself is important and we need to have stricter rules and also implement the enforcement of them. We can't just tighten them because that only makes a small impact. We must make more of a difference while we are enforcing them. One of the current laws on the books, the DATA-2000 law, which is also known and the Drug Addiction Treatment Act https://assignbuster.com/opioid-analgesics-are-narcotic-drugs-history-essay/ of 2000 states in paragraph (2) , section (B), line (iii)(Amended by public law 109-56 on 8/2/2005) The total number of patients the practitioner may treat at any one time will not exceed the applicable number. For purposes of this clause, the applicable number is 30 and may not be changed for 1 year. After this date the practitioner may submit an initial notification, followed by a second notification to the Secretary one of the need and also of the intent to treat up to 100 patients. The second notification under this clause shall contain the certifications required by clauses (i) and (ii) of this subparagraph. Amended by public law 109-469 on 12/29/2006, The Secretary may by regulation change such total number. Many of United States physicians were not happy with this law because after three years if something they were doing was working and showing success; their scope of practice was limited to only 30 clients when they could have been helping more.

In 2006 Sen. Orrin G. Hatch (R-Utah) joined Sen. Carl Levin (D-Mich.) on a senate committee discussing drug abuse and its implications. They had a meeting with several other senators to go over the DATA 2000 law and give updates and see what others thought. The law that was set in 2000 was working however there was one small change made. The practitioners are now allowed to treat up to 100 patients immediately. Sen. Hatch said during a speech in August, 2006: " All of you have joined Carl and me today because we know that this country can develop better treatments for drug abuse. Nobody in this audience needs to be reminded of what is at stake, but it is worth emphasizing again. We need to break the pernicious cycle between heroin addiction and crime. If we can encourage thousands of addicts into rehabilitation today, they and their families will be able to live

more productive lives tomorrow. We can make major gains in our nation's crime problem and improve the social structure and stability of many families who today live under the scourge of drug abuse." (http://www. naabt. org/30 patient limit. cfm)

So, on December 29, 2006 President Bush signed into law H. R. 6344. It allows physicians who are certified to prescribe medications to treat opiate users under the DATA 2000 law to be able to treat up to 100 patients in comparison to 30. This was signed into effect back in 2000. In February 2009 the FDA announced further restrictions, which now limits the opioid-based pain-relievers approved to be used by American citizens and their doctors. Indiana has a drug program that helps with the substance abuse of opium. It is called Opioid Treatment Programs (OTP). OTP provides outpatient services to clients that have an addiction to opioid drugs these drugs include opium, morphine, codeine products, and synthetic products, related to opium. They are classified as heroin, oxycodone, and hydrocodone. The OTP program assists opioid addicts in their ability to obtain the medical attention they need and it provides for them the treatment necessary to help them come clean. It gives them medications like Methadone, or Buprenorphine, to help with their symptoms of withdrawal. You ask if this program works. In 2008, Indiana Opioid Treatment Programs provided services to 12, 898 persons. And the number of patients receiving this type of outpatient treatment in Indiana has increased more than three-fold since 1998, when the data was first reported to State authorities. As of November, 2008, an estimated 260, 000 were treated. (http://www. in. gov/fssa/dmha/files/opiod Addiction Treatment Overview 8. 09. pdf)

used in a moral and medically safe way to treat patients.

The decision that I want the State Legislative Advisory Committee to make is this: open up the medical field to begin research again on the manufacturing of the medical uses of the Opium Poppy plant. Look back to the time of the Greek physician Galen, and how he was able to help treat many medical conditions successfully, before the substance abuse of opium took place and got out of control. He was able to find constructive ways that opium could be

Another researcher, by the name of Friedrich Wilhelm Adam Serturner supports this opinion also. He was a German pharmacologist, and in 1805, he discovered a way to take raw opium, isolate it, and then make it into morphine. This wasn't the first time this was tried but it was the first ever alkaloid to be isolated from any plant Serturner later ran some clinical testing putting the opium in mouse food, to help decrease the over populated community that he was dealing with. He also put some in dog food to exterminate some of the unwanted dogs that were hanging around in the vicinity also. When he found out that morphine could evoke sleep and resulted in death in the test animals his achievements were considered successful. Because of this discovery he was later honored by many universities with an honorary doctoral degree. He was awarded a prize of 2, 000 francs, and at the end of his life, when he severely suffered from gout, which causes an excess build up of uric acid in the body; he prescribed himself some morphine which he had been able to isolate from the opium plant, to deal with the excruciating pain he was experiencing.

What I am asking is that we take a closer look at modifying the "Opium Poppy Control Act of 1942." If we would allow, a few, closely monitored labs, https://assignbuster.com/opioid-analgesics-are-narcotic-drugs-history-essay/

Page 12

to grow and process the opium into medically appropriate research products; we might discover new ways of curing and treating some of our more common illnesses. I am requesting that we have this project funded and be allowed so state medical teams and scientists are able to go into the labs and conduct further research on the ongoing treatment of illnesses, like cancer. Cancer one of the leading causes of death in individuals these days. Many people are dealing with this disease and it has been hard to find one right answer to help them all get better. Wouldn't it be encouraging if there was something that we could do to be able to alleviate some of their symptoms and maybe even find a way to use the opium to attack the cancer cells that are invading their bodies? If we can't find a suitable agent to be able to help cure the progression of the disease it would at least be nice if we could help with the suffering that one may, in the later stages. The reason, I ask that we look closer at being able to grow this plant is that once this plant starts to product its milky latex and it starts to turn brown it dies. If we can stop that process and study what it takes to keep it in that milky form we could probably find more ways to be able to reduce the poisonous aspects that the plant produces, which would reduce the desirability of the plant, for improper drug usage. This could then reduce availability of the drug for the use of heroin in the powder form on the streets.

In conclusion, I want to thank the State Legislative Advisory Committee, those of you in law enforcement, medical professions, start-up treatment groups, and drug abuse activists for being here today and listening to me. You can be a part of the solution today. It was my privilege to be able to share with you the findings my research uncovered on the substance of opium, its history and how it leads us to where we are in our society today. I am hoping that you will take the information that was provided and put it into effect, as there are many people out there, needing our help. Implementing these policies will benefit all of us at one time or another. Watching family members suffer as cancer ravishes their body and then being able to alleviate some of that pain is just one way implementing these policies will help. Observing a drug addicts successful completion of a treatment program is another. We are all touched deep in our souls by stories like this. Thank-you again, for your time and for listening with a teachable and open heart, as we make an asserted effort to rid our society of the terrible plague that drug dependency and abuse leaves on our society as a whole.