

Famous Artworks from the Perspective of Drug Addiction Special Exhibition



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Contents

- 005 Introduction
- 006 Mona Lisa on Heroin
- 010 Upside-down Pictures - Drugs and Pharmaceuticals
- 014 Father of Toxicology - Paracelsus Uses Opium Tincture
- 018 The Son of Man with Opium Poppy
- 022 Twelve Scenes of a Gloomy City
- 026 Songs and Films About the Dangers of Opium
- 028 Taking drugs once leads to addiction for years and cravings for life
- 032 Extreme Joy Begets Sorrow – AI Generated Image
- 034 Opium Harms
- 048 Quack Sells Opioids
- 052 Pandora Opens the Box of Drug Harms
- 056 Street Urchins Take Drugs on the Backstreets of a City
- 060 From Cigarette Smoking to Drug Use
- 064 The Fall of Man Due to Drug Addiction
- 068 A Sorrowing Old Man Addicted to Drugs
- 072 Girl with a LSD Pill Earring
- 076 Escaping Criticism but Not the Effects of Ecstasy
- 080 Boy with a Lute on Methamphetamine
- 084 The Nightmare of Methamphetamine
- 088 Venus on Methamphetamine diet pills
- 092 The Treachery of Marijuana
- 096 Ketamine and the Fountain
- 100 Drug Use Mirrored in the Eyes
- 104 Adam and Eve Meet a Drug-Dealing Snake
- 110 Fortune Teller Sells Drug-Laced Coffee Packets
- 114 Narcissus Sees Himself After Taking Drugs
- 118 The Scream of the Drug -Addicted Brain (Animation)
- 122 The Effects of Drug Addiction on the Family Film
- 126 Return of the Prodigal Son from Drug Addiction
- 130 Hope for Recovery Inside Pandora's Box
- 132 VR Exhibition QR code

Famous Artworks



Drug Prevention

Introduction

If subjects of famous artworks, such as Mona Lisa, Girl with a Pearl Earring, The Son of Man, Pandora, Sorrowing Old Man, and Venus, suffered from drug addiction, what would they look like? In this exhibition, works by famous masters have been modified based on appearance and status that are characteristics of drug addiction. Through comparisons of original and modified works, the horrors of drug addiction are revealed. In addition, the drug addiction mechanism and harmful effects of drugs are introduced. The purpose is to keep people from taking drugs and falling into the abyss of drug addiction.

Mona Lisa on Heroin



Mona Lisa



circa 1503-1519
Leonardo da Vinci, 1452-1519
oil painting
77 x 53 cm
Location: Louvre, Paris, France
Source: wiki

Mona Lisa by Renaissance painter Leonardo da Vinci is one of the most famous paintings in the world. It depicts a woman with an enigmatic smile. Due to the use of aerial perspective, the mountains and water in the distance appear shrouded in haze. The subject is shown close up, her features softened as she blends into her surroundings, the result of the sfumato technique and layering of transparent oil paint.



Mona Lisa on Heroin

This modified painting depicts the constricted pupils, dramatic weight loss, and skin lesions that are associated with heroin use. Heroin is a central nervous system depressant and opioid that is injected or smoked. In its purest form, heroin is a white powder produced by the heating of morphine and acetic anhydride. Its analgesic effect is 4 to 8-fold that of morphine and its toxicity 10-fold. Heroin is highly addictive and withdrawal symptoms can be debilitating. Moreover, by sharing needles, users are at risk of contracting HIV, hepatitis B, or hepatitis C.



Photo:mjib.gov.tw

Brick of heroin



Heroin addict

Upside-down Pictures - Drugs and Pharmaceuticals



Upside-down Pictures – Daruma



1852
 Utagawa Kuniyoshi, 1798-1861
 woodblock print
 25 x 36 cm
 Location: Takasaki Tower Museum of Art
 Source: twitter.com

This interesting woodblock print is in the Ukiyo-e style and provides a different perspective when turned 180 degrees. These sets of faces were created by Utgawa Kuniyoshi. There is Daruma, who symbolizes right and good. When turned upside down, the evil Gedo appears. The other set of faces belongs to Tokusakari, a character from a Noh play, and Ikyu, a character from a Kabuki play.



Pharmaceuticals or drugs?

Pharmaceuticals or drugs?

There is a fine line between pharmaceuticals and drugs. Addictive narcotics, psychotropics, and medicines that require proper management are controlled substances. Controlled substances that are prescribed by a physician for legal medical use are pharmaceuticals. Controlled substances that are abused for non-medical purposes are considered drugs.

Father of Toxicology - Paracelsus Uses Opium Tincture



Paracelsus



17th century
Unknown Flemish painter
oil painting
54 x 72 cm
Location: Louvre, Paris, France
Source: wiki

A portrait of Paracelsus was painted by Quentin Matsys (circa 1465-1530) but lost. This 17th century reproduction is in the collection of the Louvre. It depicts Paracelsus in a three-quarter profile with a small book. Along the bottom is written “the famous doctor Paracelsus”. Paracelsus (1493-1541), known as the father of toxicology, was a physician and alchemist during the Renaissance period. He once said that, “Solely the dose determines that a thing is not a poison.” In other words, the dosage is what makes a substance harmful.



The key to toxicity is dosage;
the danger of drugs is addiction

Anything can be toxic, as toxicity is determined by dosage. Even though water seems non-toxic, if large amounts of it is consumed in a short period of time, water intoxication results. The worst thing about drugs is that they are addictive. Once people become addicted to a drug, they continue taking it more often and in larger amounts. As the dosage increases, they risk overdose and death. This modified painting presents the symptoms of opium tincture abuse, including constricted pupils (miosis), red eyes, inflammation around the corners of the mouth (angular cheilitis), and dramatic weight loss. Opium tincture, in which opium powder is dissolved in alcohol, was recommended for medical use by Paracelsus. Opium is an analgesic and cough suppressant. It can also relieve diarrhea. However, opium is addictive. Its excessive use can lead to respiratory failure and even death.



Photo:abuse-drug, nlm.nih.gov, agapeta art

The Son of Man with Opium Poppy



The Son of Man



1964
René Magritte, 1898-1967
oil painting
116 x 89 cm
Location: Private collection
Source: wiki

In this painting, a man is dressed in black suit, red tie, and black bowler hat. Most of his face is obscured by a green apple and he is only able to peek through the leaves. Unable to see his face, there is a sense of mystery that stimulates imagination. The artist, René Magritte, once said that people are not interested in what can be clearly and easily seen. Rather, they want to know what is hidden.

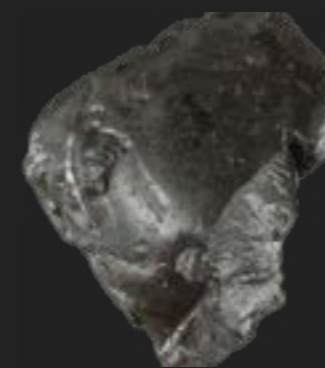


The Son of Man with Opium Poppy

This modified painting presents a man whose face is partially obscured by an opium poppy. However, it is possible to see that dark circles have formed under his eyes and his face has thinned, which are characteristics of opium abuse. Opium is a central nervous system depressant that is highly addictive. Excessive use can lead to acute toxicity. If an addict stops taking opium, withdrawal symptoms include abdominal pain, muscle pain, contortion, cramps, shivering, and goosebumps. Opium, morphine, codeine, and heroin are all refined from the opium poppy. Due to the addictiveness of these drugs, many countries have strict regulations regarding the cultivation of opium poppies.



Opium poppy



Opium



Opium addict

Photo:wiki, DEA, wiki by Bullenwächter

Twelve Scenes of a Gloomy City

竹槍一支打得妻離子散未聞炮聲震地



銅燈半盞燒盡田地房廊不見煙火沖天

A bamboo gun tears families apart,
without any noise.

A small copper lamp burns and the
fields and houses are gone, without any
smoke in the sky.

This poem was popular toward the end of the Qing dynasty and the start of the Republican period. It describes the devastation brought about by opium smoking in China. “Bamboo gun” refers to the opium pipe. Opium addiction tore many families apart, making it worse than guns and bullets. “Copper lamp” refers to the equipment for heating opium. Opium was expensive and its abuse often led to financial ruin, such that the burning of an opium lamp caused families to lose their fields and homes, making it worse than a fire.



Twelve Scenes of a Gloomy City



1922
Chen Le-Qin
ink paintings
27 x 27 cm each
Location: Opium War Museum
Source: Google Arts & Culture

These 12 paintings cover the descent into and outcome of addiction, with themes that include becoming lost, worried parents, happiness followed by sorrow, property loss due to addiction, turning a deaf ear, resentment accumulate into anger, greater desire than hunger or thirst, crying wife and children, home in peril, self caused sorrow, homelessness, and such as the results. They describe the son of a wealthy family whose wife has left him and who has suffered various tragedies to warn people of the dangers of opium smoking. This story reflects the state of society at that time. During the period when opium abuse was common, countless families were destroyed and society was in turmoil.



Songs and Films About the Dangers of Opium



The Candy-Peddling Song

Li Xianglan (1920-2014), whose given name was Yoshiko Yamaguchi, was Japanese. During World War II, she was a well-known singer and actress in China, Japan, and Taiwan. She sang “The Candy-Peddling Song” in the film *Eternity*, in which she also starred.



Quitting Opium Song

Li Ruizu (1919-2011) was a well-known singer of Cantonese songs in Hong Kong. In 1961, his “Quitting Opium Song” urged people not to take opium or heroin. The melody was from Lu Wencheng’s 1952 composition “Guang Gun Yin Yuan (Marriage for Bachelors)”.

Taking Drugs Once Leads to Addiction for Years and Cravings for Life (Special Effects Wall)



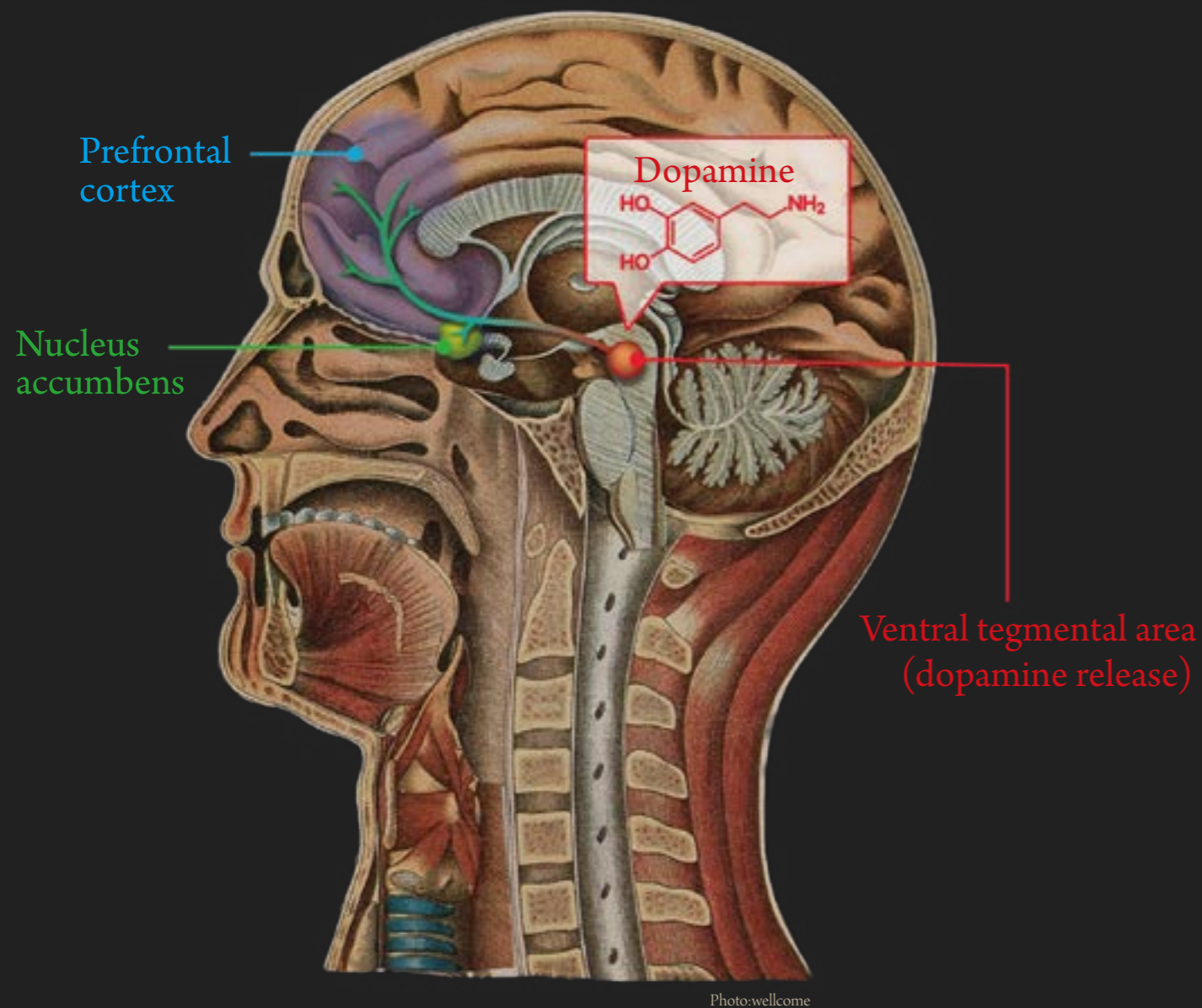
Photo:wallpapertop.net

Taking drugs once leads to addiction for years and cravings for life

Taking drugs may be something people choose to do of their own free will. However, drug addiction is like imprisonment for life. Drug use can damage the brain and addiction is a chronic and recurring brain disorder. Even if successfully rehabilitated, coming in contact with people and places related to drug use can result in relapse. Those who have never taken drugs should not try them out of curiosity or due to peer pressure. The price for taking drugs once may be a lifetime of being held hostage by addiction.

Drug addiction mechanism

Dopaminergic neurons are concentrated in the ventral tegmental area of the brain. This area is involved in the physical reward pathway. When the brain receives stimuli from an activity such as eating, sex, or exercise, dopamine is released from the ventral tegmental area to the nucleus accumbens and prefrontal cortex, resulting in a sense of pleasure. Drugs induce release of dopamine from the ventral tegmental area to produce a much heightened sense of euphoria that exceeds that of food, sex, or exercise, making users want to repeat the experience. The body's protective mechanism will reduce cranial nerve response to balance the excessive dopamine release, meaning that more of the drug must be taken to achieve the previous level of euphoria. If drug use is stopped, imbalance in cranial nerve response produces debilitating withdrawal symptoms. Therefore, drug addiction is about pursuing the feeling of euphoria and avoiding withdrawal symptoms, causing a compulsive brain disorder that leads to repeated drug use.

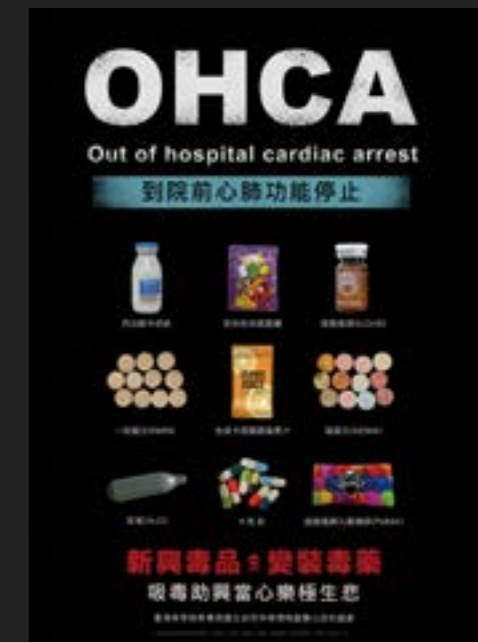


Brain and addiction reward pathway

Extreme Joy Begets Sorrow – AI Generated Image



Photo:piqsels.com



This image, formed via machine learning and generative model with 500 million iterations, features a mix of nine types of popular newly emerging drugs and a skull, which symbolizes death, to raise awareness of the risks of recreational drug use. Newly emerging drugs appear in places where young people like to have fun, such as bars, karaoke clubs, dance halls, and private parties. They are also called club drugs or recreational drugs. Due to the unknown toxicity of synthetic drugs and the common practice of mixing different types of drugs, there can be lethal consequences.

* The generative model and its extended development are based on Python 3.8 programming language, GAN algorithm, TensorFlow v2.4.1 AI main frame, Scikit-Learn 0.24.1 AI-assisted module, and OpenCV 4.5.1 image processing framework.

Opium Harms



Humen Battle during the First Opium War in 1841 – skirmish between Qing and British ships in Chuanbi Bay.

Photo:wiki



Interior of an opium smoking saloon, 1866 after Thomas Allom Color printed

Opium harms in China

In the 18th century, to resolve the trade imbalance with China, the British sold opium. This led to a large outflow of silver and financial difficulty for China. In response, China began cultivating opium poppies on a large scale. In the late 19th century, domestic production exceeded imports and there were opium dens throughout China. The number of opium addicts continued to rise and included both the poor and the wealthy. Scholars estimated that there were two million opium smokers in China before the opium wars. By the early 20th century that number had risen to 13.5 million. In light of the serious harms caused by opium consumption, the Qing government sent Lin Zexu to Canton (Guangzhou) to end the illicit trade in opium. His actions led to grievances by the British government and the First Opium War. Following China's defeat, the Treaty of Nanking (Nanjing), the first of the Unequal Treaties, was signed, which reduced China to a semi-colonial country.



Smoking of opium by commoners

Photo:printest



Smoking of opium by the wealthy

Photo:wiki



The destruction of opium at Humen, 1839

Photo:wiki

Opium harms in Taiwan

The occupation of Taiwan by Japan began in 1895. Although the Japanese considered opium smoking a bad habit, to avoid public opposition and to keep economic benefit, they issued a gradual ban and established government monopoly, as opium users had to present a special permit to purchase it. In this way, the government also sought to control the population of opium users. After 30 years, addicts still had not been cut off and the application process for special permit was opened several times. This resulted in dissatisfaction among the Taiwanese people.



Opium production site in Taiwan

Photo:hiveminer



Taiwanese smoking opium

Photo:tumblr



Opium use special permit

In 1930, Dr. Chiang Wei-Shui of the Taiwanese People's Party sent a telegram to the League of Nations (predecessor to the United Nations) to protest these violations of the International Opium Convention. This forced the government to establish a rehabilitation center for opium addicts, which was overseen by Dr. Tu Tsung-Ming, the first Doctor of Medical Sciences in Taiwan. He used a tapering method with good results. In 1940, Tu recommended a complete ban on opium and mandatory treatment for all opium addicts. However, it was not until June 1945 that the government abolished the special permit system and terminated its monopoly.



Tu Tsung-Ming

Photo:Wiki



Chiang Wei-Shui

Photo:facebook.com/JiangWeiShui



Telegram to the League of Nations sent by Chiang Wei-Shui



Rehabilitation center

Photo:lib.ntu.edu.tw

Global opium harms

In the 19th century, opium addiction was already rampant around the world. In Europe and North America, opium tinctures were used to treat various physical and mental ailments. However, this led to opium addiction. England sold large quantities of opium to China, with countless Chinese turning to opium smoking. Following the opium wars, China sent laborers to Southeast Asia, as well as to Europe, North America, and Australia. Some brought the habit of opium smoking with them and opium dens became breeding grounds for crime. Towards the end of the 19th century, due to advances in medicine, people became aware of the severity of the opium harms. In 1909, the US initiated the International Opium Commission, which met in Shanghai, China. Representatives from 13 countries attended and affirmed the principle of worldwide prohibition of opium and other drugs.



Opium smoker in Paris, 1931



Opium smokers in San Francisco, 1892



Opium smoker in Turkestan, 1865-1872



Opium smokers in Java, Indonesia, 1800s



Opium smokers in Calcutta's Chinatown, India, 1945



Opium smokers in Bangladesh, 1860s



Opium smokers in Vietnam, 1899



Opium smokers in Singapore, 1940s



Opium smokers in Manila, the Philippines, 1924

Quack Sells Opioids



The Quack



1650-1679

Jan Steen, circa 1626-1679

oil painting

22 x 27 cm

Location: Rijksmuseum

Source: wiki

Jan Steen was a genre painter during the Dutch Golden Age who was inspired by scenes from daily life. Quacks selling “medicines” were often depicted in Dutch genre paintings. In this painting, a quack is standing under a tree peddling his concoctions to an elderly man with an injured arm. On a table, supported by a wooden barrel, displayed his products. A woman next to the table is counting coins. Behind her is a crowd of onlookers. On the tree appears to be an official document with several seals attached.



Quack Sells Opioids

In this modified painting, the quack is shown introducing fentanyl to the elderly man with his arm in a sling. On the table are opium and various opioids such as morphine, heroin, hydromorphone, and oxycodone. In the US, many people have become addicted to opioids, which are analgesics, due to improper prescription practices, mass marketing by pharmaceutical companies, and their availability on the black market, leading to drug addiction and serious social issues. From 1999 to 2017, more than 400,000 people died due to opioid overdose. In 2010, the US government instituted controls on the issuance of opioid prescriptions. As a result, many addicts turned to heroin, which is less expensive and more potent. To increase their profits, drug dealers mix heroin with cheaper, more potent, and more lethal synthetic opioids such as fentanyl, leading to large numbers of deaths due to overdose. The toxicity of fentanyl is 50-100 times that of morphine. It can be lethal in amounts as low as three milligrams. From 2016-2017, some 28,000 Americans died from this drug.

Pandora Opens the Box of Drug Harms



Pandora



1871

Dante Gabriel Rossetti, 1828-1882

oil painting

79 x 131 cm

Location: Private collection

Source: wiki

In this painting, the Greek myth of a curious Pandora opening a box and releasing all sorts of misfortunes on humanity such as illnesses and disasters is depicted. Dante Gabriel Rossetti presents Pandora with eyes open looking straight ahead. On the box is engraved the phrase “Nescitur ignescitur” (“unknown it burns”). An ominous cloud of smoke emerges from the box and swirls around Pandora’s head.



Pandora Opens the Box of Drug Harms- From Curiosity to Addiction

In this modified painting, a curious Pandora has opened the box of harms of methamphetamine, cocaine, ecstasy (MDMA), and super ecstasy (PMMA), as evidenced by skin lesions, enlarged pupils, dark circles under the eyes, and obvious thinning. Curiosity, peer pressure, stress relief, and need for an energy boost are the main reasons young people take drugs, with curiosity at the top of that list. During the 2018 National Survey of Substance Use in Taiwan, 70.5% of respondents noted that they began taking drugs due to curiosity. An appropriate amount of curiosity can help us explore the world and expand our horizons. However, curiosity without vigilance brings disaster not only to an individual, but also to the people around him/her. Pandora's curiosity brought about endless misfortune when she opened the box of drug harms.

Street Urchins Take Drugs on the Backstreets of a City



Street Urchins on the Backstreets of a City



1890

Karl Witkowski, 1860-1910

oil painting

58.5 x 42 cm

Location: Private collection

Source: mutualart

Street urchins are the subject of this painting by Karl Witkowski. In an alley, two boys are smoking, while a third boy stands to the side with his hands in his pockets looking on. Through the perspective of these subjects, the artist draws the viewer into this scene. The corner behind three boys outlines a scene of tall buildings, implying an urban setting.



Street Urchins Take Drugs on the Backstreets of a City - From Peer Pressure to Addiction

Following modifications to this painting, the boys are shown smoking marijuana. One boy has a meth pipe in his pocket and another, who is sitting on the bench, has a lighter and methamphetamine. There are sores on their faces from habitual drug use. Adolescents are easily influenced by friends who are drug users. Most first-time users are given drugs by a friend. Moreover, if one person in their network of friends is a drug user, they are more likely to meet different types of drug users. The best strategy to avoid drugs is to stay away from people and places associated with drugs.



Photo:flickr by artem

From Cigarette Smoking to Drug Use



Their First Smoke



1889
Karl Witkowski, 1860-1910
oil painting
56 x 71 cm
Location: Private collection
Source: wiki

Karl Witowski was a Polish-American artist with a talent for portraits and genre paintings. He recorded scenes from daily life and portraits of children living in impoverished areas in the US, especially newsboys and shoeshine boys. He depicted them living their lives, working, playing, and spending time with their pets. In this painting, two shoeshine boys in tattered clothes are sitting next to a staircase smoking.



From Cigarette Smoking to Drug Use

In this modified painting, two shoeshine boys are smoking marijuana and using a syringe and needle to inject methamphetamine. The dark circles under their eyes and skin lesions are characteristic of drug addiction. Addiction (to tobacco, alcohol, and drugs) can occur at any stage in life. Based on research in the US by professors Kandel and Yamaguchi on the gateway theory of drug abuse, there is a progression in the use of addictive substances. Those who smoke cigarettes and drink alcohol as adolescents are more likely to smoke marijuana or take cocaine or crack when they are older.



Photo: flickr by imagens evangelicas, amphetascreen

The Fall of Man



The Fall of Man Due to Drug Addiction



1616

Hendrick Goltzius, 1558-1617

oil painting

104.5 x 138.4 cm

Location: National Gallery of Art in Washington D.C.

Source: nga.gov

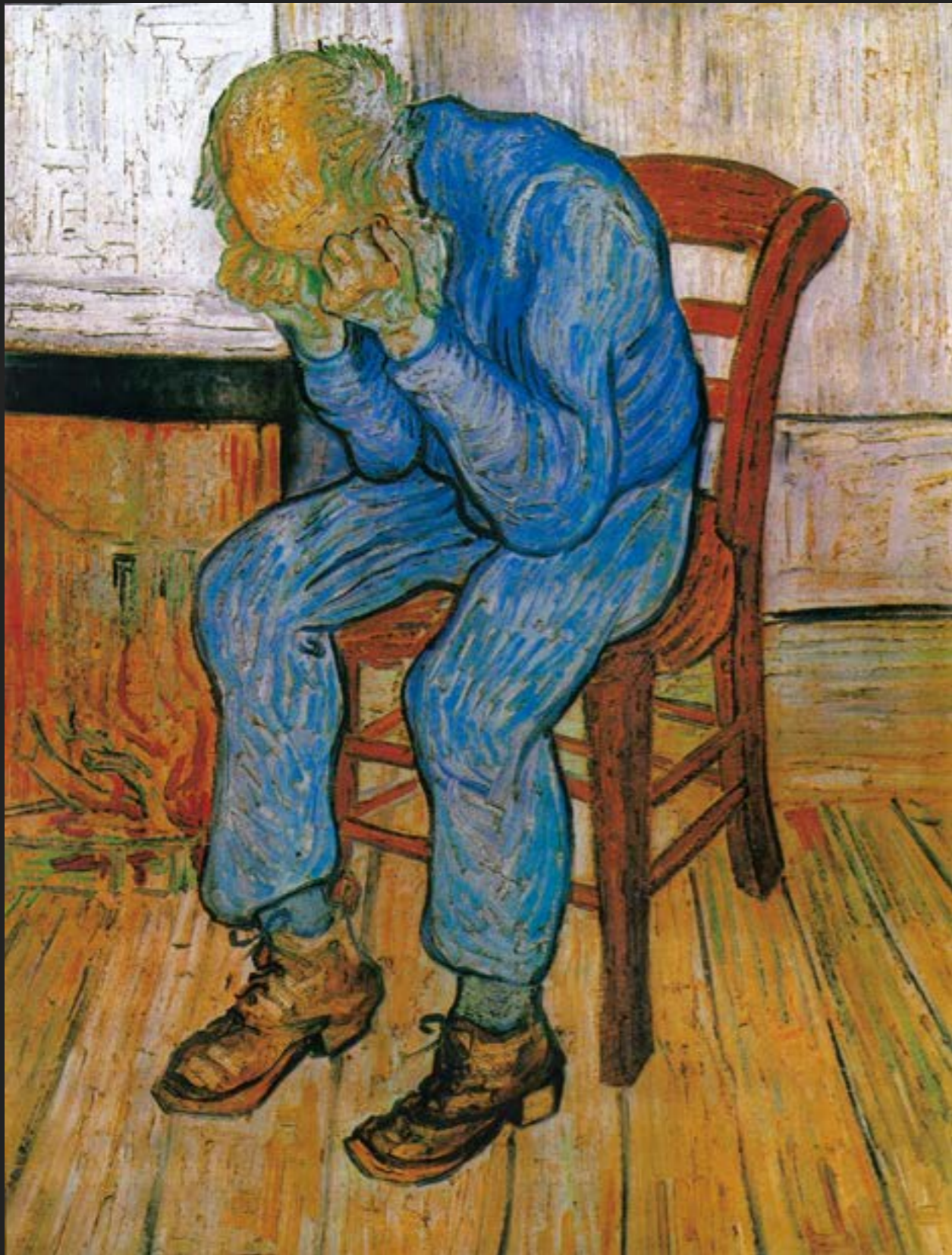
In this traditional Biblical image of the fall of man, Hendrick Goltzius portrays Adam and Eve as mythological lovers in the Garden of Eden. Their toned bodies and lustful expressions create a scene of seduction, as they partake the forbidden fruit that leads to the Fall. The serpent with a sweet female face is hiding bad intentions and represents deception. The goats symbolize loss of restraint and purity. In contrast, the elephant walking away in the distance represents the virtues of piety and self-control, which this couple lacks. The cat, lying next to Adam, reminds viewers to think about and understand the consequences of succumbing to temptation.



The Fall of Man Due to Drug Addiction

In this adaptation of the painting, Eve is holding the fruit of the opium poppy. In Adam's hand is a bottle of fentanyl. On the ground are opioids, such as morphine, heroin, oxycodone and hydrocodone. Due to their drug abuse, they have dark circles under their eyes. There is a fine line between medical use and drug abuse. Used appropriately, drugs can treat a variety of illnesses and disorders. However, their abuse may lead to addiction and ruined lives. Since the 1990s, due to improper prescription practices, many people in the US have become addicted to opioids. When prescription opioids became inaccessible, addicts switched to other drugs creating serious public health and social issues.

A Sorrowing Old Man Addicted to Drugs



Sorrowing Old Man



1890
Vincent van Gogh, 1853-1890
oil painting
80 x 64 cm
Location: Kröller-Müller Museum
Source: wiki

This painting, also known as *At Eternity's Gate*, was completed by Vincent van Gogh while in an asylum at Saint-Rémy. It depicts a balding elderly man dressed in blue shirt and pants. He is seated on a chair by a fire, his face in his hands, conveying sadness and pain.



A Sorrowing Old Man Addicted to Drugs

In this modified version of the painting, an elderly man takes drugs to cope with depression. On the floor are needle, syringe, lighter, charred spoon, addictive drugs, methamphetamine, and used meth pipe. According to the 2014 National Survey of Substance Use in Taiwan, among drug users there is a 4.4 times higher incidence of depression. Those who suffer from depression, resort to drugs can make their condition worse. Although drugs can temporarily relieve symptoms of depression, they bring other problems such as addiction, tolerance, and withdrawal symptoms. As a result, people are unable to stay away from drugs, take higher and higher doses, worsening their situation. Professional help is needed to treat and manage depression or mental illness caused by drug abuse. It is best not to delay seeking help or to resort to drug abuse.



Photo:piqsels.com

Girl with a LSD Pill Earring



Girl with a Pearl Earring



1665
Johannes Vermeer, 1632-1675
oil painting
44.5 x 39 cm
Location: Mauritshuis Museum
Source: wiki

Girl with a Pearl Earring is the work of Dutch painter Johannes Vermeer. It depicts a girl in exotic dress and Eastern-style turban, against a dark background, with her face turned to the side. She seems to be looking at viewers with her large beautiful eyes. Her plump lips are slightly parted as if she is saying something. The large shiny pearl earring embellishes the painting. This is not a traditional portrait but, rather, a "tronie". The identity of this girl is unclear. She may be an idealized version of a young Dutch woman of that era.

Girl with a LSD Pill Earring

In this modified version, the subject has taken the hallucinogenic drug LSD. She exhibits dilated pupils and distorted facial features as she experiences hallucinations. LSD, or lysergic acid diethylamide, is a psychedelic that affects the central nervous system. Its crystals can dissolve in water and are clear, odorless, and slightly bitter. Only about 100 micrograms (equivalent to 1/10 of a sand grain) are needed for an effect. This drug produces hallucinations that can lead users to harm themselves, to suicide, or to violent behavior. Physiologically, its side effects include dilated pupils, elevated body temperature, heart rate, and blood pressure, dry mouth, nausea and vomiting, and headaches. This is a common club drug sold in the form of laced postage stamps to attract users.



Photo:DEA

Hallucinogenic drug LSD



LSD addict

Escaping Criticism but Not the Effects of Ecstasy



Escaping Criticism



1874
Pere Borrell del Caso, 1835-1910
oil painting
75.7 x 61 cm
Location: Bank of Spain, Madrid
Source: wiki

Spanish artist Pere Borrell del Caso was adept at creating realistic trompe-l'oeil (optical illusion) paintings. A boy with eyes opened wide and lips parted appears surprised at something to the left of and below him. He grasps the frame, ready to step out of it. The vivid expression and pose create the illusion that he is emerging from the frame into the world of the viewer.



Escaping Criticism but Not the Effects of Ecstasy

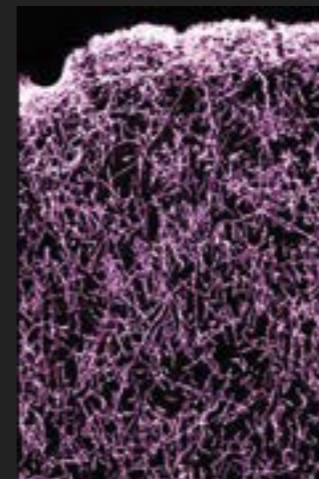
In this adaptation of the painting, the subject is shown after using ecstasy. His pupils are dilated and he is exhibiting involuntary facial muscle contortion and confused mental state. Ecstasy, also known as the happy pill or Adam, is a central nervous system stimulant. It is one of the most common club drugs, often seen at parties or gatherings. Ecstasy can cause serious damage to the brain. In one overseas study, squirrel monkeys were administered ecstasy for four consecutive days. Then, the serotonergic fibers in their cerebral cortex were observed. Two weeks following use, serotonergic fibers became sparse. Seven years later, serotonergic fiber numbers had not yet recovered to pre-ecstasy use levels. These results revealed that ecstasy can cause long-term damage to the brain.

Comparisons of serotonergic fibers in the cerebral cortex before and after ecstasy use

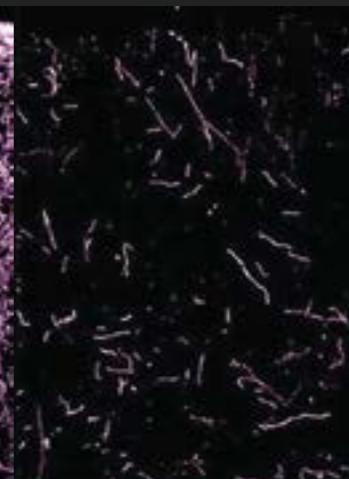
Photo:Wiki, NIH



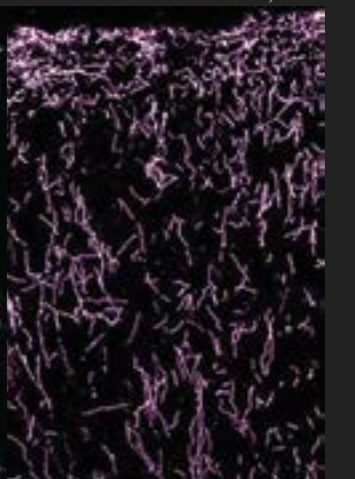
Squirrel monkey



Normal



Two weeks later



Seven years later

Boy with a Lute on Methamphetamine



Boy with a Lute



1625

Frans Hals, 1582-1666

oil painting

72.1 x 59.1 cm

Location: Metropolitan Museum of Art, New York

Source: wiki

Boy with a Lute is the work of Dutch painter Frans Hals. It depicts a lute player pouring the last drop of red wine onto his left thumbnail to signal that he needs a refill. Hals was exceptionally talented at capturing facial expressions. He used broad and unrestrained strokes to create the vivid expression and action of this subject, seemingly bringing him to life.



Boy with a Lute on Methamphetamine

In this modified painting, the boy with a lute is a methamphetamine addict with severe tooth decay (“meth mouth”) and “meth sores”. Methamphetamine is a central nervous system stimulant. In crystalline form, it is white and odorless, appearing like rock sugar. It is one of the most common drugs and also known as meth, ice, and crystal meth. In the initial stage of use, methamphetamine results in dilated pupils, increased energy, sleeplessness, and reduced appetite. Repeated use leads to addiction. Addicts are often talkative and suffer from headaches, high fever, elevated blood pressure, paranoia, auditory hallucinations, visual hallucinations, persecutory delusion, and mental illness.



Methamphetamine

Photo:DEA



Methamphetamine addict

The Nightmare of Methamphetamine



The Nightmare



1781

Henry Fuseli, 1741-1825

oil painting

101.6 x 127 cm

Location: Detroit Institute of Arts

Source: wiki

Romantic painter Henry Fuseli created scenes of mystery and terror that were inspired by classic European literature, dramas, and mythological tales. This is one of Fuseli's famed masterpieces. It is highly imaginative and reveals something of his personality. An incubus, or ape-like mythological creature, has appeared in the middle of the night and is sitting on a woman who is in deep slumber. In the background is the head of a dark horse, which refers to a mare in the night or nightmare.



The Nightmare of Methamphetamine

In this modified version of the painting, a woman who is a habitual methamphetamine user has developed schizophrenia and skin lesions. Abuse of methamphetamine can lead to mental illness, such as schizophrenia, which was once referred to as methamphetamine-induced psychosis. Long-term methamphetamine users often suffer paranoia, irritability, and persecutory delusion, as well as auditory and visual hallucinations. In those prone to schizophrenia but without symptoms prior to drug use, such symptoms quickly appear. Even in those not considered at high risk, mental illness can develop with long-term methamphetamine use.

Venus on Methamphetamine diet pills



Venus at a Mirror



1614-1615
Peter Paul Rubens, 1577-1640
oil painting
123 x 98 cm
Location: Liechtenstein Museum
Source: wiki

In this work, Peter Paul Rubens, who painted for the Spanish court, depicts the goddess Venus with a plump figure and long blonde hair. Venus is admiring herself in a mirror. In her reflection, her head is tilted, such that her face is framed as if in a portrait. Expensive accessories and a maidservant with dark skin set off her fair complexion.



Venus on Methamphetamine diet pills

In this modified version of the painting, Venus has been using methamphetamine to lose weight. From her reflection in the mirror, her face has thinned, especially around the cheeks, and she has dark circles under her eyes and a poor complexion. Methamphetamine reduces appetite. Therefore, some unscrupulous businesspeople add it to diet pills to speed up weight loss. However, methamphetamine is addictive. Long-term use can lead to mental illness, delusions, and hallucinations. If heart palpitations, sudden feeling of excitement, insomnia, paranoia, auditory hallucinations, delusions, emotional instability, or delirium occur after taking diet pills, immediately seek medical attention to ensure safe weight loss.



Photo:piqsels.com

The Treachery of Marijuana



The Treachery of Images



1929

René Magritte, 1898-1967

oil painting

60.33 x 81.12 cm

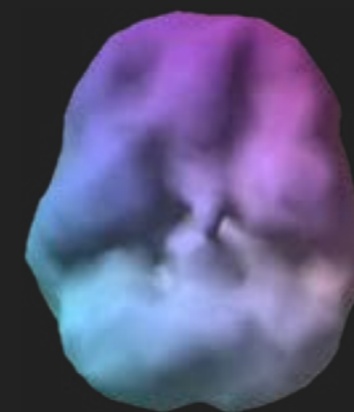
Location: Los Angeles County Museum of Art

Source: wiki

Artist René Magritte painted an image of a pipe on canvas. Underneath is the sentence, "Ceci n'est pas une pipe (This is not a pipe.)" Through this image and these words, Magritte wants viewers to think about the true nature of objects and to not be too quick to believe what they see. Neither the painting nor its written description is the pipe. Images and text are only ways for people to form relationships with reality.

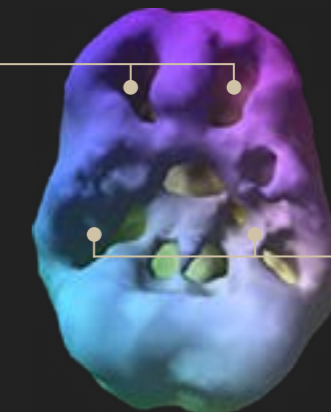
The Treachery of Marijuana

In this adaptation of the painting, the pipe has been filled with marijuana. Marijuana affects the central nervous system and is a hallucinogen. The harmful component is tetrahydrocannabinol (THC). Marijuana use can cause heart palpitations, delusions, hallucinations, dry mouth, and redness of the eyes. Long-term use can lead to addiction and adverse impacts on the brain areas of the frontal lobe and temporal lobe associated with learning and memory. It can also affect motor coordination resulting in increased risk of traffic accidents. As with tobacco smoking, smoking of marijuana can cause respiratory illness and is associated with higher incidence of cancer. In young people, marijuana use can affect brain development, impacting memory and learning. In pregnant women, marijuana use can affect development of the fetus, resulting in birth defects.



Normal

Frontal lobe:
attention
judgment
behavior
planning



Temporal lobe:
hearing
emotions
memory

Damage to the frontal and temporal lobes in a 16-year-old who smoked marijuana daily for two years

Single photon emission computed tomography (SPECT) scans

Ketamine and the Fountain



Fountain



1917

Marcel Duchamp, 1887-1968

The original is a readymade sculpture, this is a photograph of the original.

63 x 48 x 35 cm

Location: The original has been lost.

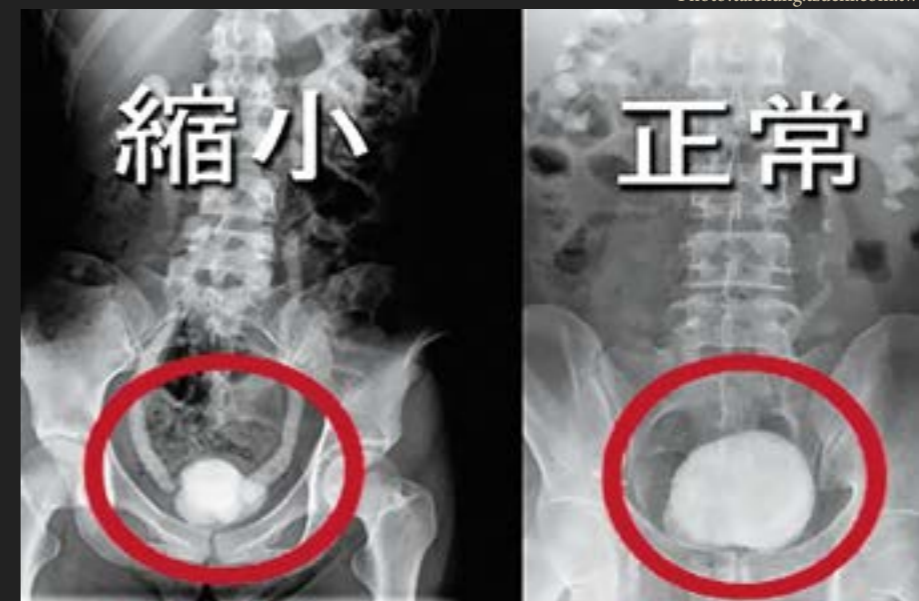
Marcel Duchamp created 17 reproductions.

Source: wiki, photo of this artwork taken by Alfred Stieglitz in 1917

Fountain was a readymade sculpture completed by Marcel Duchamp in 1917. It consisted of a porcelain urinal signed "R. Mutt" with the year 1917 written on it. In April 1917, Duchamp submitted this to an exhibition of the Society of Independent Artists in New York. Although not rejected, it was not displayed. With the signature on this readymade sculpture, he endowed it with new meaning and transformed it into an artwork, creating a new convention for the recognition and definition of art in which value is determined by the artist's thought process.

Association between ketamine use and bladder cystitis

The inspiration for this work is Marcel Duchamp's 1917 Fountain. Inside the porcelain urinal has been placed a white softball, which represents a normal bladder with a capacity of 400-500 cc. A red ping pong ball represents the bladder of a ketamine cystitis patient, with a capacity of only 30-40 cc. Ketamine is a central nervous system depressant. In the initial stage of use there is no obvious physical discomfort. Therefore, people often mistakenly think that ketamine is not harmful or addictive. After repeated use, addiction can occur in addition to worsening memory, bladder inflammation, frequent urination, painful urination, and abdominal pain. In severe cases, there is permanent damage such as cognitive impairment and bladder atrophy.



Atrophy

Normal

Drug Use Mirrored in the Eyes



The False Mirror



1929

René Magritte, 1898-1967

oil painting

54 x 80.9 cm

Location: Museum of Modern Art, New York

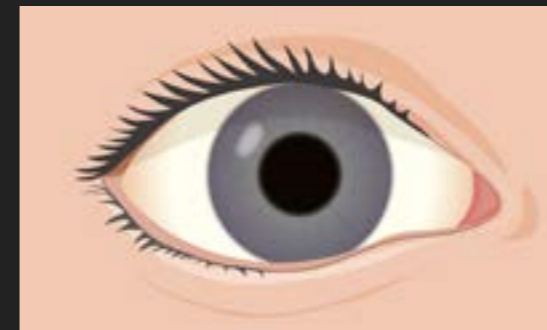
Source: moma.org

Belgian surrealist painter René Magritte created works based on daily life that addressed various issues. The False Mirror consists of a large eye with no eyelashes. The iris is a blue sky with white clouds. Magritte connects viewer and painting through the acts of seeing and being seen, to express that what we observe is not always real. No matter if it is a person seeing the painting, the painting that is being seen, or a person being seen by the painting, the truth is hidden behind a calm expression.



Drug Use Mirrored in the Eyes

The modified painting in the top left depicts a dilated pupil caused by a central nervous system stimulant, while the modified painting on the bottom left depicts a constricted pupil caused by a central nervous system depressant. Heroin and ketamine are central nervous system depressants. Users first feel a sense of euphoria followed by fatigue, somnolence, and constriction of the pupils. Methamphetamine and ecstasy are central nervous system stimulants. Users experience heightened sense of excitement and elevated mood. They may speak nonsensically and present with dilated pupils.



Normal pupil
(non-drug user)



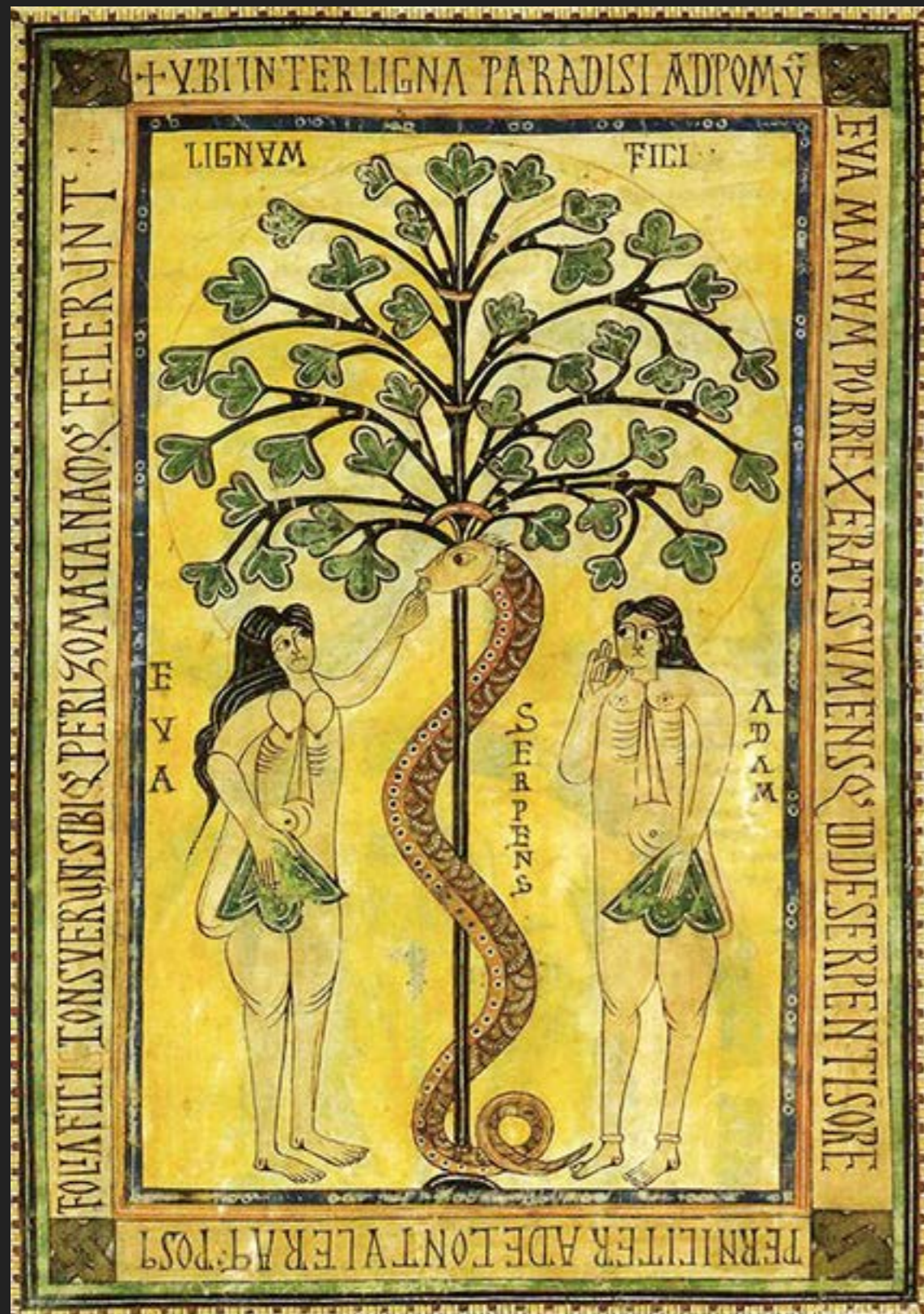
Dilated pupil
(stimulant user)



Constricted pupil
(depressant user)

Adam and Eve Meet a Drug-Dealing Snake

Adam and Eve



976

Vigila, 10th century
hand-drawn illustration

22.8 x 32.5 cm

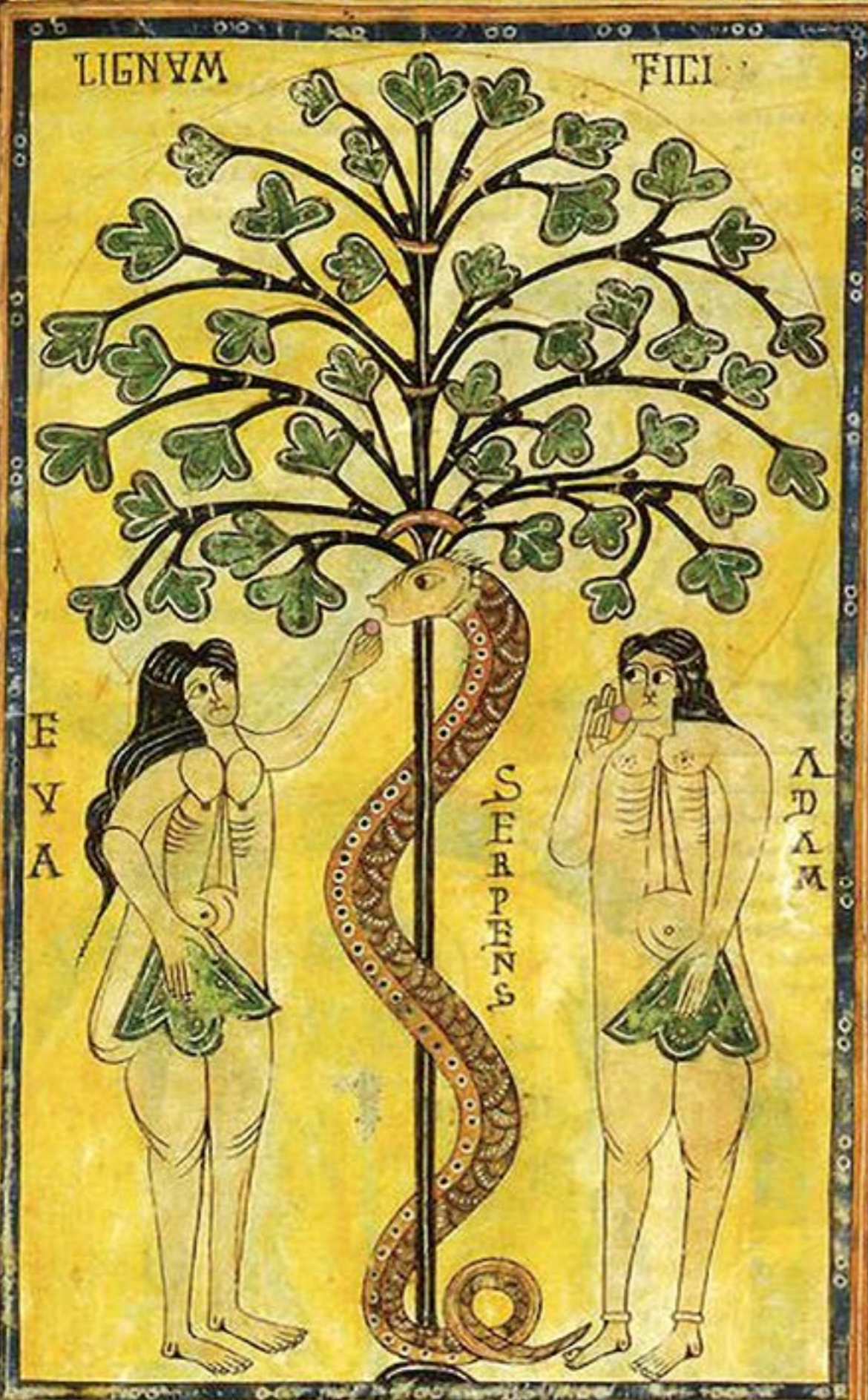
Location: Royal Library of the Monastery of El Escorial

Source: pinterest

This illustration of Adam and Eve is from the Codex Vigilanus. In the center is a fig tree with Adam and Eve on either side. Under the enticement of the snake, Eve has received the fruit from the Tree of the Knowledge of Good and Evil from its mouth. After eating the fruit, Adam and Eve can distinguish good and evil. As a result, they cover themselves with fig leaves. The graphical representation of the fig tree, dense patterns on the snake, band of text, and geometrical shapes are from Islamic cultural influences.

† VBI INTER LIGNA PARADISI AD POMVM

FOLIIS TONSVERUNT SIBI & PERI SOMATANAM & FELERUNT



EVA MANVM PORREXERAT SV MENS & IDESERPENTIS ORE

PERNICITER ADE LONT VLERAT POS

Adam and Eve Meet a Drug-Dealing Snake

In this adaptation, the snake entices Eve with Nimetazepam (Erimin) and Adam is already holding an Erimin tablet. They have dark circles under their eyes, a side effect of this drug. Erimin is a central nervous system depressant used to treat insomnia when abused can cause drowsiness, nausea, short-term memory loss, rebound insomnia, hallucinations, depression, and respiratory depression. Drug dealers often pose as a friend so that first-time users let their guard down or they offer a drug free of charge the first time. They may also try to convince new users that a drug is not addictive or that it is medicinal, good for losing weight or relieving boredom, or is trendy.

LSD-laced postage stamps



photo:antidrug.moj.gov.tw, mohw.gov.tw, taipeipolice, Laval Police

THC-laced gummy bear



PMMA-laced coffee packet



Liquid drug mixture



Ecstasy



Drugs in Disguise

Newly emerging drugs that are currently gaining in popularity do not fit the image of stereotypical “drugs”. To attract people to try them and to avoid detection, packaging of newly emerging drugs resembles that of popular brands or is printed with popular or cartoon images. Or, these drugs are mixed into fruit gelatin, chocolate, herbal tea, instant coffee packets, or milk tea packets. There is usually a combination of drugs, such as cathinones, ketamine, ecstasy, and methamphetamine. Since most newly emerging drugs are blended or synthetic, their level of toxicity is unclear. Moreover, their toxicity is not as obvious as that of traditional narcotics when first taken, which can lead to accidental overdose.

Fortune Teller Sells Drug-Laced Coffee Packets



The Fortune Teller



1630

Georges de la Tour, 1593-1652

oil painting

123.5 x 101.9 cm

Location: Metropolitan Museum of Art

Source: wiki

Georges de la Tour was a 17th century French Baroque artist, known for his religious and genre paintings. The Fortune Teller possesses implied moral meaning. A young man is being robbed by a fortune teller and three accomplices. The man, dressed in resplendent clothing, focused on a Roma (gypsy) woman who is telling his fortune. Behind him and to his left one woman is reaching into his pocket to steal his money bag. Another on his right is cutting a gold chain that he is wearing.

Fortune Teller Sells Drug-Laced Coffee Packets



In this adaptation, the fortune teller is offering the young man a PMMA-laced instant coffee packet with a demon image on it. The women stealing his money bag and gold chain allude to the high cost of a drug habit. In recent years, PMMA, dubbed “super ecstasy”, has been disguised in instant coffee or juice packets. Its toxicity is four times that of ecstasy. As its effects are not quickly felt, users may take a second or third packet or mix it with other drugs. This can lead to an overdose and, due to the high toxicity, the possibility of death.



Foot drop phenomenon in a person who overdosed on PMMA-laced coffee packets

Narcissus Sees Himself After Taking Drugs



Narcissus



1597-99

Caravaggio, 1571-1610

oil painting

110 x 92 cm

Location: Galleria Nazionale d' Arte Antica, Rome

Source: wiki

This story is from Greek mythology. One day, the handsome Narcissus sees his reflection in the water and falls in love with it, drowning as he tries to possess it. After dying, he is transformed into a flower, the narcissus. Today, narcissist means someone with excessive admiration for one's self. Caravaggio portrays Narcissus with skilled and dramatic use of light and shadow. Moreover, the circular composition of Narcissus hovering over the water and his reflection implies a cycle in which there is only love of one's self.



Narcissus Sees Himself After Taking Drugs

In this modified painting, Narcissus is hallucinating after taking drugs. He sees himself as a skeleton rather than his true reflection. Taking drugs impacts on physical health, as drug users often suffer from poor nutrition and abnormal sleep patterns. They appear emaciated, often yawn, have dark circles under their eyes, runny noses, vomiting, and skin lesions. Different types of drugs and methods of taking them, such as orally, inhaling through the mouth, inhaling through the nose, and injection, cause different types of physical harm.

Photo: oregonlive



Changes in the appearance of crystal meth (ice) users

The Scream of the Drug-Addicted Brain (Animation)



The Scream



1893

Edvard Munch, 1863-1944

mixed media

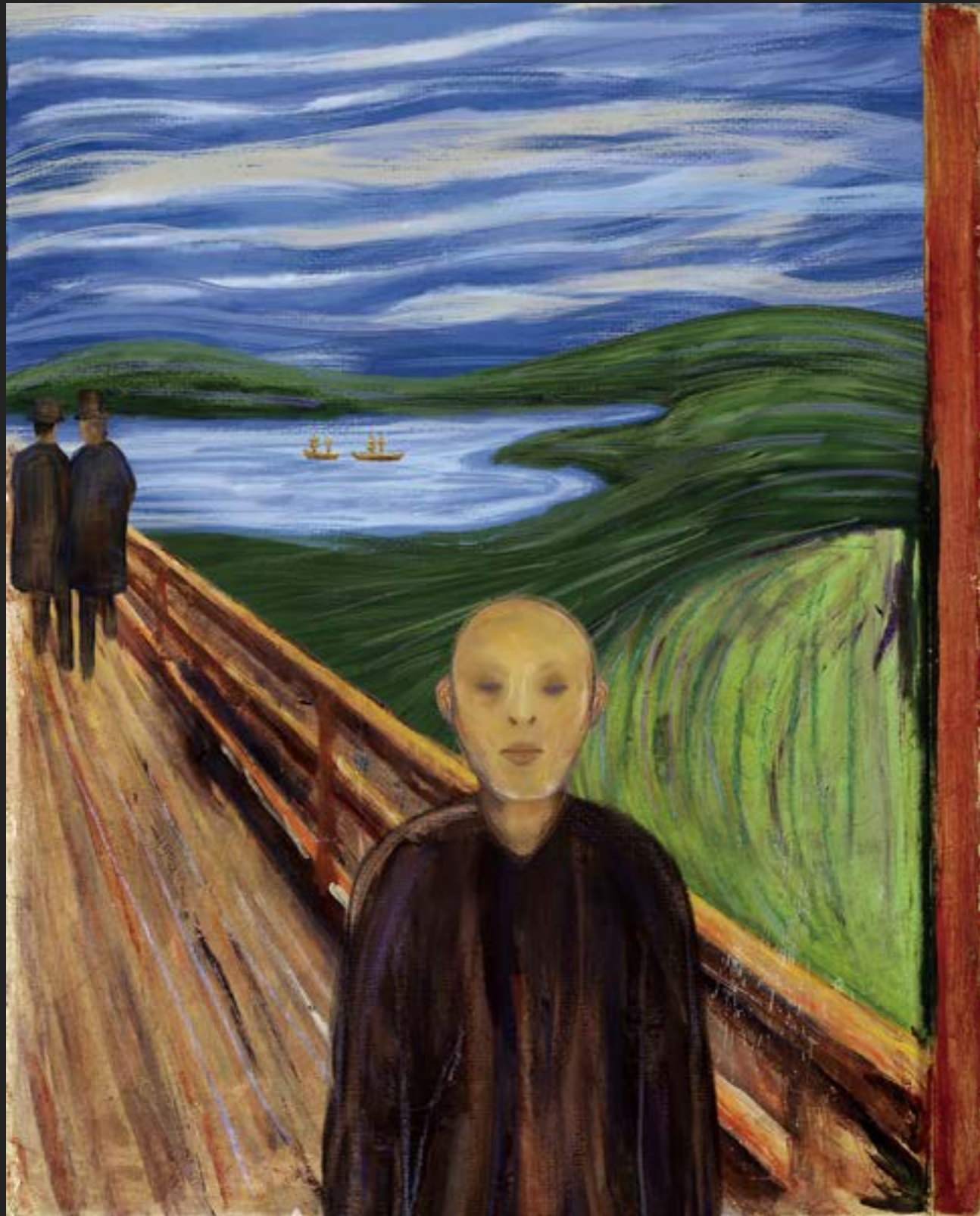
73.5 x 91 cm

Location: Nasjonalgalleriet Norway, Oslo

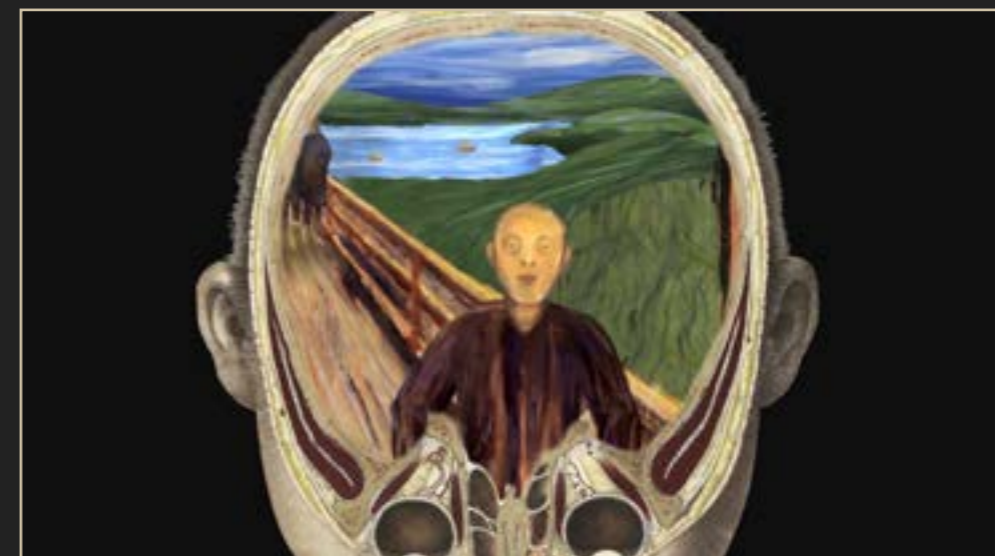
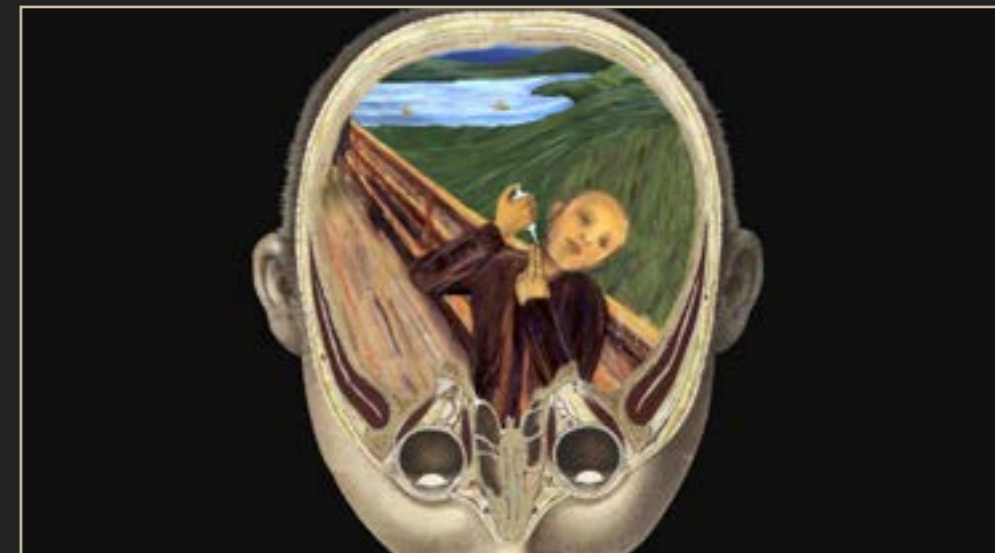
Source: wiki

Edvard Munch was a Norwegian Expressionist artist. This work presents his inner emotions. He often expressed his state of mind through the use of distortion and abstract methods. In *The Scream*, a man is standing on a bridge with his mouth wide open. The straight lines of the bridge and the two passersby contrast with the distorted lines of the man and the background, as well as the fiery red sky, making viewers feel ill at ease.

The Scream of the Drug-Addicted Brain (Animation)



The painting is a derivative work based on *The Scream*, to highlight the dramatic effects of drug use on the brain.



The Effects of Drug Addiction on the Family Film



Family Portrait



17th century
Dirck Santvoort, 1609-1680
Source: pinterest

Dirck Santvoort's Family Portrait is the starting point for a series of works depicting the effects of drug addiction on a family. At first, there may be loss of harmony. This can be followed by separation and even death, resulting in a broken family.

The Effects of Drug Addiction on the Family



Summary: In the best-case scenario, drug addiction interferes with a harmonious family life and causes strained relationships. In the worst-case scenario, there is separation, breakdown of the family, and death.

Return of the Prodigal Son from Drug Addiction



The Return of the Prodigal Son



1660

Bartolomé Esteban Murillo, 1617-1682

oil painting

104.46 x 134.62 cm

Location: National Gallery of Ireland

Source: getdailyart.com

Bartolomé Esteban Murillo based this work on the parable of the Prodigal Son found in the Bible. A father gives his two sons their inheritance. The younger son leaves home and spends his share on an extravagant lifestyle, ending up in poverty. He then returns home to his aging father from whom he receives acceptance. This is just one of a series of six paintings by Murillo depicting this story. This set a precedent in Spain for the painting of series. Moreover, these works show aspects of daily life in 17th century Spain.



Return of the Prodigal Son from Drug Addiction

In this modified version, the Prodigal Son is a drug addict with characteristic dark circles under his eyes and sores on his skin. He regrets his addiction and returns to his father who accepts him. Drug addiction is a treatable brain disorder. However, only if an addict is willing to undergo treatment can he/she stay free of drugs. Acceptance and support of family members are key to an addict's resolve during the recovery process.

Hope for Recovery Inside Pandora's Box



This painting of Pandora was created by Dante Gabriel Rossetti in 1871. In Greek mythology, it was Pandora's curiosity that led her to open a magic box and release all sorts of misfortunes into the world. All that was left was "hope". In this depiction, Pandora has opened the box of drug harms. There is a note on the bottom with the phrase "hope for recovery".

VR Exhibition



Famous Artworks from the Perspective of Drug Addiction Special Exhibition

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