Chapter 1, UDAA HISTORY

Throughout history, there has existed a desire within most human beings to experience other states of consciousness in order to escape the perceived limitations of their lives.

These transformations have been spiritually driven, they have been emotionally driven, and they have been substance driven.

While exploring the historical influence of the substances on these transformations, specifically psychoactive drugs, some common themes become apparent, themes that help explain the enormous influence of drug use on cultural development. These themes also help explain the development of compulsive use, abuse, and addiction.

The 5 basic themes are:

The basic need of human beings to cope with their environment.

The susceptibility of human brain chemistry to psychoactive drugs.

The involvement of business and government in controlling the drug trade.

The development of new methods of refining, synthesizing, and manufacturing drugs,

And finally, the discovery of new methods of using drugs.

For men and women who lived thousands of years ago, heat, cold, blizzards, floods, poisonous snakes, hungry carnivores, deadly neighboring tribes, starvation, disease, and mental illness made their existence a fearful adventure. Anything that could relieve the fear: was welcome.

For example, the peyote cactus was picked by Indians in the Americas and used in sacred ceremonies to induce visions of their gods and to give them courage to fight their enemies and not feel fear.

In ancient Rome and Egypt, opium was used to relieve the physical and emotional pain of living. The need to have a steady supply of this drug encouraged organized agriculture and the creation of towns and cities to protect the poppy and wheat fields.

Mushroom stone effigies date back to 1000 BC and are associated with Mayan mythology and shamanism in Central America. Mushroom use itself dates back more than 7,000 years when shamans would eat the mushrooms and chant for hours, asking their gods for guidance.

The Inca Indians lived high on the slopes of the Andes Mountains in South America and chewed coca leaves to help them survive their high altitude environment. The stimulant effects enabled them to work long hours, added nutrition to their diet, and countered fear.

In the 1800s, opium smoking by some of the 70,000 Chinese workers who were brought over to build the railroads and mine gold in California, countered the poor living conditions and hatred that was stoked by bigoted headlines that screamed about the "yellow peril."

Even in the 2000s, the rave party or techno music club, where ecstasy, nitrous oxide, and other club drugs are available, could be considered the modern version of coping with one's environment. The use of ecstasy which has declined in recent years; is taken to increase empathy and closeness, possibly to counteract the isolation that is more common in modern society.

Psychoactive drugs work because they mimic many natural human brain chemicals. For example, opium mimics endorphins and enkephalins, the brains natural painkillers, which also act as depressants. This sculpture of Morpheus, the Greek god of sleep, has opium poppies strewn at his feet, emphasizing how morphine affects the human psyche.

Sometimes people found their brain chemistry being manipulated by accident. This fifteenth century engraving shows Saint Anthony being assaulted by hallucinations of sexual licentiousness and savage animals, visions similar to those often caused by the ergot fungus found on spoiled rye or wheat cereal grasses. It is nature's version of LSD, a powerful psychedelic with an affinity for acetylcholine, norepinephrine, and serotonin, important brain chemicals.

It wasn't until the 1980s and 1990s that scientists could image the brain's functioning, not just its anatomy. This positron emission tomography, PET scan, of a person's brain on cocaine, shows where cocaine interferes with the brain's use of glucose, a reflection of its metabolic activity. The red color shows the highest level of glucose utilization and blue shows the least.

One measure of the affinity of the human brain for psychoactive drugs is the fact that they are allowed to enter the brain through the blood brain barrier which normally keeps poisons and toxins out.

The pharaohs of Egypt controlled the supply of beer and used it to reward the pyramid builders. They were given beer thrice a day. Wine, on the other hand, was more a drink of the ruling classes being more difficult and more expensive to make.

Over the centuries many psychoactive substances have been controlled and taxed by governments. In ancient Rome, taxes from 793 stores that sold opium, supplied 15% of the city's tax revenue.

Early Incan royalty controlled the supply of coca leaves and carried their own supplies in ornate bags. Later, the Spanish conquistadores took control of the coca plantations and rationed the leaves out to the Incas who toiled in the Spanish-controlled silver mines. Taxes from the coca and silver helped Spain finance its colonies.

The American Revolution was financed through taxes on rum, whiskey, hemp, and tobacco. Tobacco and especially hemp depended heavily on slave labor. After the Civil War, hemp production declined.

In the 1800s, England controlled much of the opium trade through its opium plantations in India, run by the East India Trading company. England vied for the right to sell opium in China, but when the Chinese emperor tried to ban this trade, war was declared and the opium wars resulted in China's defeat. The spoils of the war for the British included Hong Kong along with the right to sell opium in China.

Almost all governments have tried to limit or ban alcohol consumption for moral, religious, or public health reasons. Muslim countries banned alcohol completely because it interfered with their Islamic religious and moral duties. Coffee, tobacco, and occasionally hashish were the acceptable substitutes.

Unfortunately, the desire for tax revenues and for the alcohol itself often overrides limits placed on the sale and use of the drug. For example, alcohol was banned in 1919 in the United States by the 18th amendment, but the public's desire for beer, wine and liquor, coupled with the government's need for tax revenues to emerge from the great depression, overturned the law just 13 years later.

The latest example of government participation in addictions is the involvement of 48 U.S. state governments and many national governments in gambling. State lotteries, slot machines, poker machines, Keno games, and even sport's betting are encouraged in an effort to raise tax revenues and make the voting public happy. Unfortunately this growth of gambling has also vastly increased the number of problem and pathological gamblers.

Use of psychoactive drugs increases as they are made more potent. This can be done by refining the psychoactive substance from the plant, by improving growing techniques, by mimicking the molecular structure of the active ingredient through synthesis in the laboratory, or by creating an entirely new substance.

For example, when distilled alcohol in the form of gin was made readily available in England, a gin epidemic of drunkenness ensued because the strength of the drink led more quickly to intoxication and alcoholism. Only stiff taxes and strict regulation of sales by 1751 brought the epidemic under control.

A modern example of how refinement techniques lead to more problems is the development of the sinsemilla growing technique for marijuana. It increased the THC content of marijuana from 2% or 3% up to 8% to 14%. The greatly increased numbers of those voluntarily seeking treatment for marijuana dependence is testimony to the effects of this increased potency.

Another example; cocaine hydrochloride could not be smoked but street chemists learned how to convert it to freebase cocaine which lowered the melting point allowing it to be vaporized without destroying the psychoactive properties. The subsequent discovery of a "cheaper basing" technique further accelerated the spread of smokable cocaine.

The 20th century has seen the synthesis of LSD, synthetic THC, a whole collection of opioids, several dozen sedative hypnotics, and dozens of steroids.

The birth of the pharmaceutical industry expanded the use of all medications but particularly psychiatric ones. Researchers could design a drug to interact with a specific neurotransmitter. Antidepressants were designed to affect serotonin and norepinephrine. Antipsychotic drugs were designed to affect dopamine. Anti-anxiety drugs were designed to affect GABA.

Besides the traditional methods of use, the development of the hypodermic needle, inhaling volatile solvents, smoking freebase versions of cocaine and methamphetamines, and crushing time-release capsules of Oxycontin broadened the ways drugs could be used and unfortunately, increased the chances of becoming dependent.

Earlier methods of drug use were mostly smoking, eating, mucous membrane absorption, and drinking.

This saddhu (Hindu ascetic) makes a beverage from Cannabis indica, and uses it as part of his religious belief system.

These Aztecs were smoking tobacco in cigars, pipes, and cigarettes long before the arrival of Columbus in 1492.

The cheek of this Incan coca chewer is filled with coca leaves. When chewed, the effects from the juice that contains cocaine are more like an extremely strong cup of coffee rather than a snort of cocaine hydrochloride.

The invention of a cigarette rolling machine in 1885 along with intense marketing and advertising techniques, made smoking the number one method of tobacco use. However, much of the world still uses smokeless tobacco. The availability of tobacco also made it the number one lethal substance in the United States and most of the world.

People have inhaled substances for their psychoactive effect throughout history;

carbon dioxide by the oracle at Delphi in ancient Greece. . . Cannabis smoke in India. The discovery of anesthetics for surgery suggested their use as recreational inhalant drugs. The middle and upper classes had organized gas frolics where for a few pennies, you could get loaded on nitrous oxide. The practice of inhaling a substance to get high set the stage for the explosion in the use of volatile solvents in the 20th century.

The history of drugs is not just a study of the substances themselves. The social, legal, financial, moral, and spiritual contexts of the use, or restriction of use, have to be understood. So the need to escape the environment, the affinity of human brain chemistry, the involvement of ruling classes, governments, and businesses, new methods of refinement and synthesis, and finally the discovery of new methods of use, have all contributed to spread of drug use in the modern world.