Addiction: A Global Epidemic's Possible Catalysts and Cures

Nora Hussain

AUTHORIZED BY AL-NASSER UNIVERSITY'S RESEARCH OFFICE

جميع حقوق النشر محفوظة لمكتب البحوث والنشر بجامعة الناصر

www.al-edu.com
Abstract: Approaching Addiction from Multiple Perspectives

In order to explore the most commonly cited correlations between socioeconomic status and drug addiction, I sought to determine the nature of addiction in both developing and developed countries. I pulled data and theories from scientific, legal, social, religious, political, economic, and even anthropological sources in my efforts to pinpoint common risk factors and brainstorm likely solutions. I quickly realized that it was necessary to pay special attention to the cyclical consequences of drug criminalization, the current psychiatric and neurological theories about addiction, and the statistical relationships between factors such as economic status, genetics, environmental influences, and social roles or ideologies.

Overwhelming data from both the scientific and humanitarian communities proved in no uncertain terms that criminalization has not and will not eliminate abuse or addiction; in fact, depending on the severity of a given country’s penal codes, it can even exacerbate the problem and ensure that it will be perpetuated by generations to come. Further research efforts should include, but not be limited to, more peer-reviewed case studies and experiments on dependence and abuse, specific crime and health data from every country that keeps these records, and a more intensive look at external attempts to gather current data from those that don’t.

Introduction: A Universal Menace

Drugs kill an estimated 200,000 people every year, but they put millions more in prison cells, hospitals, and homeless shelters (“World Drug Report” 61). Although mind-altering substances have been used and abused throughout human history, addiction didn’t become a global epidemic until very recently, and its impact on 21st century society is impossible to deny.

The World Health Organization defines addiction as “the idea that the user’s control over and volition about use of the drug has been lost or impaired” (WHO 12). This is marked by a clear differentiation between habitual and elective usage patterns, with addicts motivated by physical or psychological necessity, and casual users by temporary desire. They also categorize the harmful effects of drug use according to four criteria: chronic health effects (e.g. cirrhosis among alcoholics or the intravenous transmission of HIV infections), acute or short-term biological health effects (such as drunk driving or overdose casualties), acute social problems (such as arrests or divorces), and chronic social problems (permanent changes in familial or professional roles) (10-11).

As a whole, psychoactive drug users “expect to benefit from their use, whether through the experience of pleasure or the avoidance of pain” (10). Because this coping mechanism is a learned behavior, rather than an instinct, the origins of these emotional needs must first be explored. According to Jeff Measelle and colleagues, “individuals with affective disturbances...
are thought to consume psychoactive substances because they improve mood and provide distraction from adverse emotions” (Measelle 226). If an individual is predisposed to develop a mood disorder – or, even more concretely, has inherited it at birth – then that individual faces an increased risk of abusing whatever mind-altering activities or substances are available to them.

Other approaches focus on the possibility that certain external factors can help accurately predict – or directly cause – addiction. International studies have determined a strong link between the context of alcohol consumption – for example, drinking during meals, parties, or in public – and the likelihood of developing an addiction (7). This disparity between abuse and recreational use is reflected to a heightened degree within the religious and cultural ideology, as well as the legal and penal systems, that socially marginalize some users but celebrate others.

Nature vs. Nurture: Neurobiological and Environmental Catalysts

The recurrence of drug addiction over multiple generations has long been accompanied by the implication that addictive genes can be inherited by the children of addicts. The behavioral and cognitive changes observed in drug users have served to reinforce this notion, suggesting that brains can be both pre-disposed to abuse drugs and permanently altered by long-term abuse.

Andrew Caplin and Mark Dean conducted a research project for the Center for Experimental Social Science, in which they explored the hypothesis that “dopamine encodes the difference between the experienced and predicted ‘reward’ of an event” (Caplin 1). They studied the effect that continued dopamine production can have on long-term cognitive associations; in other words, the biological processes that turn a temporary “high” into an abnormally elevated, long-term desire to re-experience it.

Dr. Emmanuel Onaivi, however, refuted the long-standing assumption that drugs become addictive by “activating the brain’s natural reward system” (Onaivi 192). He explained that this theory stemmed from studies of drugs that released dopamine neurons, which simulate positive emotions by triggering the midbrain production of euphoria and pleasure. However, Onaivi listed barbiturates, inhalants, and benzodiazepines among the highly addictive substances that don’t release any dopamine and therefore must contain addictive properties of a separate origin.

In an effort to explore the possible non-neurological origins for increased risks among family members, Jeff Measelle and his colleagues conducted a study in which they surveyed 496 female middle school students in the Southwestern United States. Among the data they measured and assessed was “perceived social support”, which entailed “companionship, guidance, intimacy, affection, admiration, and reliable alliance” (Measelle 229) from both

www.al-edu.com
parents and peers. While they did not find a conclusive correlation between the usage patterns of parents and those of their children, the study did pinpoint one way in which parental influence increased the risk of substance abuse: emotions. Girls with self-reported histories of substance abuse were far more likely to identify “deficits” in parental supervision, support, or basic interaction. The report suggested that adolescents without positive emotional connections to their parents “may be more likely to use and abuse substances as a means of rebelling against their parents” (230). This would suggest that regardless of whether parents are addicts, their interactions and emotions will determine their children’s chances of developing an addiction.

Galea agreed that shared surroundings and interactions, rather than shared biological traits, could directly determine the effect of drugs on any individual. If the health of drug users is “inextricably bound to their social environment (Galea S136), it’s because the consequences of poverty are also the triggers for drug abuse and addiction. However, incarceration for drug-related offenses also decreases the quality of life and increases the likelihood of suffering from poor health (S 139).

Sarah Bergen and her colleagues sought to settle the debate between genetic and environmental causes by evaluating pairs of twins as sets of “cases” and “controls” who were “perfectly matched for many environmental factors and, in the case of MZ twins, genetic factors as well” (Bergen 267). 54% of the 3969 twins in the study reported using one or more drugs in their lifetime, and 17% met the criteria for “abuse and dependence”, which “can be accounted by a single factor” according to DSM-IV diagnostic criteria (268). However, no causal relationships could be traced to genetic similarities, and researchers ultimately concluded that “drug involvement and at least some SES [socioeconomic status] variables share a common genetic relationship” (270). This perspective encompasses a wide range of contributing factors, and must be explored beyond the realm of neurobiological and genetic risk factors.

**Predicting and Preventing: The Significance of Socioeconomic Status**

Dr. Emmanuel Onaivi penned an editorial in which he called addiction “a worldwide trend in lifestyle that is prevalent in rich and poor countries alike” (Onaivi 191). While different social classes tend to gravitate toward different drugs – and face different consequences – addiction itself is present among all of them.

An individual’s socioeconomic status consists of a multitude of factors, including education level, income, occupation, neighborhood, race, gender, and marital status. Drug use is a high-risk behavior, and risk-taking is shaped by social determinants such as education level and career. Galea surmised that the place that one holds within society was “a fundamental factor, determining power, prestige, and access to resources, and underlying the relation between other social factors and health” (Galea S136). Social constructs may shape
individual narratives, but when addiction itself is treated as a health condition, it simply becomes one of many inter-connected factors.

The social role of addiction has been studied and documented throughout the years by historians and psychiatrists alike. A psychiatric analysis of 1995 census data found that unemployment “almost quadrupled the odds of drug dependence after controlling for other socio-demographic variables” (Murali 217). Unskilled, manual labor is almost exclusive to the lowest economic classes, and among men between 25 and 39, the manual laborers were “10 to 20 times more likely to die from alcohol-related causes than those in the professional class” (Murali 219). Bergen approached this correlation from a new angle, positing a shared origin rather than a causal relationship after observing that “education and job status appear to share genetic influences with drug abuse/dependence” (Bergen 267).

According to the World Health Organization, levels of alcohol consumption have declined in developed countries while rising in developing countries, most notably the Western Pacific Region and former members of the Soviet Union (WHO 6).

While neither socioeconomic status nor race can accurately determine an individual’s chances of developing a drug addiction or even using drugs, both factors do contribute to the potential for damage. The inconsistent enforcement of drug laws has served to further marginalize minorities and grant a dramatic advantage to users in positions of economic privilege. Galea counted “poverty, scant and poorer quality resources, segregation, and discrimination (including racial profiling)… among the adverse social factors that disproportionately affect many minority communities in the United States” (S 136).

Criminalizing Addiction: Counterproductive Results of Drug Prohibition

In January of 2014, President Obama admitted to *The New Yorker* that the United States government “should not be locking up kids or individual users for long stretches of jail time when some of the folks who are writing those laws have probably done the same thing” (Remnick). While alcohol is legally regulated throughout the world and addictive pharmaceuticals are prescribed daily, many other drugs – some of lesser or equal addictive properties – are prohibited by the vast majority of federal governments.

The Global Commission on Drug Policy recently emphasized the importance of approaching drug addiction as a public health, rather than criminal justice, issue. Their annual report in 2012 included an indictment of the United States’ federal War on Drugs, citing evidence that drug law enforcement can increase drug use and that health-based policies can decrease it. Among the links that supported the negative impact of drug criminalization was the fact that “paternal incarceration was significantly associated with adolescent drug use, even after taking into account other factors such as family background and individual characteristics”
(GCDP 16). The commission even drew similarities between current United States drug policies and the failed attempt to prohibit alcohol in the same country from 1920-1933.

The Vienna Declaration of 2010 cited twenty-eight different scientific reports, all of which documented “the negative consequences of approaches that criminalize drug users” (Vienna 18). When drugs are illegal, the lack of public access opens windows of opportunity for drug traffickers by turning addictive substances into an unregulated, highly profitable “black market” commodity. This leads to large-scale violence, including murder and assault, but strict drug laws have an even more immediate effect on individual drug users. The threat of incarceration decreases the likelihood that addicts will seek potentially life-saving resources, such as methadone clinics or emergency overdose treatments, or receive the sufficient information and tools to avoid major risks. For example, “intensive enforcement” of crack cocaine laws “failed to limit the availability of the drug” and instead caused “elevated HIV infection rates” (GCDP 14) in major United States cities throughout the 1990s. On the other hand, countries that have implemented “evidence-based addiction treatment”, including Australia and some western European countries, have successfully achieved the virtual elimination of new HIV infections (GCDP 10).

Decriminalization and even legalization can’t prevent criminals from profiting off of an in-demand substance; however, they can prevent its individual users from becoming criminals too. A turn toward addiction treatment – and away from the mass incarceration of nonviolent offenders — would shrink prison populations, decrease the number of single-parent households, correct inequities between classes and races, and free government funds to focus on the investigation and enforcement of genuinely violent, socially harmful crimes.

**Conclusion: Writing a New Narrative**

Minorities and the socioeconomically disadvantaged are not only more likely to suffer adverse health effects from using drugs; they’re also more likely to serve time for it. While socioeconomic status does not directly determine one’s likelihood of developing an addiction, it does determine risk factors that can increase the frequency of use or the value of the high that it provides.

While drug abuse is a public health crisis in itself, efforts to criminalize addiction have done nothing to alleviate the damage it inflicts, and have instead made it more difficult for addicts to reenter society or regain their agency. Current legal systems serve to empower and reward the participants of organized crime while disempowering society’s most marginalized populations. Criminalizing addiction serves only to diminish the possibility for recovery and double the severity of the consequences that addicts must face. Because drug law enforcement has never significantly decreased drug use, and because of the human rights violations committed as a result of drug trafficking, decriminalizing drug use should be a commonsense solution.

www.al-edu.com
References


Caplin, Andrew & Dean, Mark (2007). Dopamine, Reward Prediction Error, and Economics. (Unpublished research project). Center for Experimental Social Science, New York University, New York.


