White, W. and Webber, R. (2003). The future of drug use in America. *Counselor*, 4(4):18-20.

## The Future of Drug Use in America

William L. White, MA and Randall Webber, MPH

- "We don't like their sound, and guitar music is on the way out."
- --Decca Recording Co., rejecting the Beatles, 1962.

Making predictions is a risky business. Many past predictions stand as monuments of their creators' foolishness. Time may also cast us among these defamed guessers, but after describing in our last article how history can be used to interpret and anticipate drug trends, we couldn't resist offering some informed speculations about what lies ahead.

We wish to begin and end this article by noting the potential of what could be the most important milestone in the history of mood alternation. Scientists have known for almost half a century that stimulation of certain parts of the human brain can produce feelings of intense euphoria similar to those reported by users of cocaine, alcohol and heroin. Creating such feelings through direct brain stimulation is, to date, a complex, expensive and risky process, but a day may come when new technologies are available to self-stimulate these reward pathways without mediation by drugs. We will later speculate on the potential meaning of such a technological revolution.

In the meantime, join us in thinking about the about the future of drug use. Here are our top predictions for the next twenty-five years.

**Historical Continuity** In the arena of psychoactive drug consumption, much of what has been will be. We will continue to have celebrated drugs (alcohol and caffeine) and instrumental (prescription) drugs that form the core drug menu for most Americans. Preferences beyond these core choices will continue to evolve and recycle. The shift of nicotine from a celebrated drug to a (barely) tolerated drug will continue to accelerate, and battles over the cultural, medical and legal status of cannabis will intensify. The focus on tobacco and illicit drugs will continue to mask changes occurring in the consumption of alcohol and prescribed psychoactive drugs. We will continue individually and collectively to go through cycles of introspection, stimulation and anesthesia, and our evolving appetite in drugs will mirror our desire for these experiences.

Short Term Predictions There are several near-future predictions we would offer: a) stimulant use will move from its past cyclical pattern to an endemic pattern, b) communities experiencing high levels of cocaine and methamphetamine dependence will witness a rise in alcoholism, sedativism, and narcotic addiction, c) alcohol, cannabis, sedative, and narcotic use will rise in the larger society as a personal side effect of geopolitical and economic distress, d) drug choices will become less demarcated by gender (as gender role socialization dissipates), but will become more demarcated by age, education and social class, e) youthful binge drinking will increase due to decreased supervision, increased leisure time (4-day school week) and the cumulative effects of alcohol advertising.

Early Onset of Drug Use The declining age of onset of regular alcohol, tobacco and other drug use will emerge as a major public health and political issue in the next decade. This issue will intensify as research confirms the role of early age of onset in the risk for adult substance use disorders, the speed of progression and severity of such disorders, and the compromised prognosis for long-term recovery. Investigations into the source of this change will spawn new allegations of sustained targeting of youth by the alcohol, tobacco and pharmaceutical industries

**Drug Use as a Rite of Passage** Experimentation with alcohol, tobacco and other drugs will move from a rite of passage from adolescence into adulthood to a rite of passage from childhood into adolescence. Adolescent drug use will be greatly influenced by the culturally defined duration of adolescence and the changing value of drug use as a symbolic rite of passage into adulthood. Other rites of passage (sexual intimacy, pre-marital cohabitation, and full time employment) will come to replace alcohol and other drug use as symbols of family emancipation and the acquisition of adult status.

Late Onset Drug Use Increased life expectancies and shortened work careers will influence the development and popularity of drugs that simultaneously blunt physical and emotional discomfort and stimulate personal, interpersonal and spiritual growth. Psychoactive drug use by those over age 50 will emerge as a significant social issue. By the year 2050, socially approved periods of tranquilization and euphoria will be widely available as a therapeutic and recreational experience and as a medium of personal development and spiritual/religious enlightenment. Paradoxical effects of late onset drug use and greater cumulative lifetime doses will require rethinking the effects of many psychoactive drugs. The treatment of late onset substance-related problems will grow as a specialty within the substance use field.

Globalization of Drug Trends Increased contact between all of the countries of the world will lead to: a) an enlargement of America's psychoactive drug menu, b) the globalization of drug tastes, and c) a breakdown in drug-related

social policies historically rooted within unique political, economic and religious contexts. Knowledge of the global diversity of psychoactive drug use and alternative drug control policies will weaken the American dichotomy of "good" drugs and "bad" drugs and exert pressure for changes in American drug policies.

America, The Drug Pusher. The massive exportation and promotion of American tobacco products to Asian, African, and Eastern European countries (to offset the decline in our own consumption) will create great harm to America's world image and create a political backlash of unprecedented proportions when tobacco-related diseases and deaths reach epidemic proportions in these countries. America will be accused of being the most unconscionable drug pusher in the world—a predatory nation that for the sake of financial gain promoted tobacco use worldwide with full knowledge of its devastating long-term effects.

**Technology Innovation** New technologies will accelerate the introduction of more potent psychoactive drugs, new methods of drug administration, and new medications designed to reverse the acute and chronic untoward effects of particular drugs, e.g., the long-sought amythestic agent (sober pill) for rapid reversal of alcohol intoxication. New methods of drug administration will allow substances currently administered only through smoking or ingestion (e.g., cannabis) to be administered by vapor, decreasing respiratory illness but greatly increasing the potential for addiction.

**Safer Intoxicants** There will be a growing call for the development of safer intoxicants. New generations of psychoactive drugs will force a redefinition of our understanding of who is vulnerable to drug addiction from one of selective vulnerability to universal vulnerability. These new drugs will challenge traditional definitions of addiction by targeting reward centers in the brain (producing euphoria) without tissue tolerance, withdrawal, or prolonged untoward effects. Such products will become highly celebrated drugs for those who can afford them.

**From Pain and Pleasure to Performance** New drugs that enhance and expand human performance and experience will mark a third pharmacological revolution (the earlier eras having been marked by relief from physical and emotional pain and the quest for pleasure).

**Drugs and Social Control** The same new drugs that bring us the potential to enhance performance will also be used as mechanisms of behavioral control. The use of mandatory chemical restraints will come into increasing vogue in the next century as a cost-effective alterative to incarceration. There will be new longacting drugs of control and new methods of administration (e.g., surgical implants) that do not require voluntary self-administration. Both the soma of Huxley's *Brave New World* and the Moksha medicine of Huxley's utopian *Island* will be technically possible in the next century. Human rights issues involved in the use of such substances will stir great debate.

**Planned Synergism** A major trend of the next century will be the planned, simultaneous administration of two or more drugs to achieve an effect different than and greater than their independent effects. Such strategic synergism challenges centuries of knowledge based on studying the effects of each drug in isolation and poses the potential of two drugs, which in isolation have a low potential for misuse, having a high potential for misuse when combined. Such planned synergism will challenge our current schema for legally classifying drugs.

**Designer Drug Disaster** There will be a major designer drug disaster during the first half of the 21<sup>st</sup> century. Minor changes in the molecular structure of a drug can provoke devastatingly different effects. A dramatic illustration of this principle occurred during the illicit manufacture of MPPP-an analogue (chemical cousin) of the synthetic narcotic, meperidine (Demerol). A missynthesized analogue (the neurotoxin MPTP) of MPPP (sold illicitly as "China White") induced a severe Parkinson's-like condition in those who injected it. The authors' worst fear is a chemical time bomb planted in the brain of thousands: the introduction of a new designer drug whose desirable short term effects (which generate widespread experimentation) mask devastating long term consequences that only appear years after initial drug exposure. This same effect might also result from accidental or planned synergism.

**Drugs and Religion** The effects of new generations of drugs will be so profound in their alteration of human consciousness that new religions and social movements will spring up around their use. These movements will spawn a counter-movement via a growing number of American subcultures that adhere to radical abstinence as a personal lifestyle or political choice.

**Drugs as Weapons** Intoxicants have a long history as weapons of interpersonal, political and economic exploitation and will continue to be used for this purpose in the coming century. New psychoactive agents will find increased use in the immobilization of military and civilian populations. Psychoactive drugs will be increasingly used as terrorist and anti-terrorist weapons via the disablement of targeted individuals and groups.

**Beyond Drugs** Technologies to produce direct stimulation of the reward circuits of the brain will render drugs obsolete by the end of the 21<sup>st</sup> century. New non-psychoactive drugs or other forms of neurochemical stimulation will be used to trigger the bodies production of psychoactive enzymes. Through such technological breakthroughs, the psychoactive substance would come from within rather than from outside the body. This will trigger considerable social debate about whether the ultimate authority to regulate human neurochemistry is the right and responsibility of the individual or resides with the state.

These are some of our predictions. We'd love to hear yours. Send us your

predictions by email or via a letter to the editor of Counselor.

William L. White (bwhite@chestnut.org) is a Senior Research Consultant at Chestnut Health Systems and the author of Slaying the Dragon: The History of Addiction Treatment and Recovery in America.

**Randall Webber** (rwebber@chestnut.org) is the Director of Training and Publications at Chestnut Health Systems and a training project manager at the School of Social Work, Illinois State University.