

## Commentary

# Sociopharmacology of drug use: initial thoughts

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### Abstract

Psychopharmacological approaches to drug use focus on psychological traits of drug users and chemical traits of drugs. Whether through medicalisation or demonisation, this defines users as the problem, which ignores socioeconomic and other issues that make individuals, neighbourhoods, and population groups vulnerable to harmful drug use. We discuss a concept of ‘sociopharmacology of drug use’ that locates drug use in broader contexts. This discussion suggests that (a) data on drug-related harm point to the ills and contradictions of society. (b) If anything is to be demonised, a sociopharmacological view suggests that it be the social order, not the individual user. (c) Nonetheless, current drug use patterns cause a lot of misery to drug users, their families, and their neighbours. Research and programs are needed to reduce these harms. (d) Laws that punish users and dealers are at best based on misdiagnosis of the roots of the problem, and can serve to scapegoat the vulnerable. (e) Research should trace how social, economic and health policies create conditions that increase harmful drug use, as well as develop better ways to provide resources to individuals and communities with which to ameliorate conditions that lead to harmful drug use and reduce harmful drug use among drug users. (f) The highest-priority research and action should nonetheless probably focus on social change rather than on changing drug users.

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### Introduction

Much research on drug use has focused on individual characteristics of the drug users and the psychopharmacology of drug use. Such research investigates how the psychological traits of drug users and chemical traits of drugs lead to addiction and to its associated problems. At its ‘best’, this research medicalises addiction and its associated problems. At its worst, it legitimates the demonising of drug users and a war on drugs that, in the United States alone, spends \$11 billion annually on law enforcement and interdiction without reducing heroine or cocaine availability or purity or increasing their prices. This drug war approach has, however, helped mask the consequences of social structures based on racial and gender inequality and on economic exploitation by leading millions to see their consequences for local communities and individuals to be the product,

instead, of individual criminality and drug use. Millions of drug users have been incarcerated as a result of this scapegoating policy; and it has not prevented the spread of injection drug use, and its related lethal blood-borne infections such as HIV, hepatitis B and C, and endocarditis around the world (Friedman, 1998a; Schiraldi, Holman & Phillip, 2000; Stimson, 1993; Stimson, Ball & Des Jarlais, 1998).

Whether through medicalisation or demonisation, such research defines the user as the problem, and thus ignores socioeconomic and other issues that create vulnerabilities to harmful and/or chronic drug use among individuals, neighbourhoods, and population groups. We offer the concept of ‘sociopharmacology of drug use’ as a partial contribution to developing an alternative way of thinking and acting on drug-related issues.

Our concept of ‘sociopharmacology’ attempts to locate drug use in a broader socioeconomic context, as it intersects with the histories and physiologies of individuals, the social, political and economic histories and current realities of different populations, commu-

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nities and countries, and the pharmacology of drugs. We thus look at the social ‘causation’ of drug use patterns, where our concept of ‘causation’ is not one of forces with deterministic impact on individuals, but rather one in which social structures and processes effect the likelihood that individuals will use various drugs. Human subjectivity and agency are important; but what Durkheim (1982) called ‘social facts’ nonetheless emerge out of the play of multilevel influences and individual and collective dialectical reactions to these forces. Here, then, our argument parallels those of other students of the social epidemiology of disease, morbidity, and mortality (Armstrong, Barnett, Casper & Wing, 1998; Armstrong & Castorina, 1998; Berkman & Kawachi, 2000; Casper, Wing & Strogatz, 1991; Diez-Roux, Nieto, Muntaner, 1997; Diez-Roux, Nieto, Caulfield, Tyroler, Watson & Szklo, 1999; Elreedy, Krieger, Ryan, Sparrow, Weiss & Hu, 1999; Fife & Mode, 1992; Hu, Frey, Costa, Massey, Ryan, Flemming, D’Errico, Ward, Buechler, 1994; Kaplan, Pamuk, Lynch, Cohen & Balfour, 1996; Kennedy, Ichiro Kawachi & Prothrow-Stith, 1996; Lynch, Kaplan, Pamuk, Cohen, Heck, Balfour, Yen, 1998; O’Campo, Xue, Wang & O’Brien Caughy, 1997; Simon, Hu, Diaz & Kerndt, 1995; Wallace & Wallace, 1999; Zierler & Krieger, 1997), as well as of substance use (Bell, Carlson & Richard, 1998; Brugal, Domingo-Salvany, Maguire, Cayla, Villalbi & Hartnoll, 1999; Faris & Dunham, 1939; Chein, Gerard, Lee & Rosenfeld, 1964; Diez-Roux et al., 1997; Kleinschmidt, Hills & Elliott, 1995; Nurco, 1972; Nurco, Shaffer & Cisin, 1984; Redlinger & Michel, 1970).

This concept of sociopharmacology differs from Rhodes’ (1996) concept of ‘social pharmacology’. Rhodes, like Becker (1977), focuses on how social and cultural forces affect ‘knowledge about the perceived and expected ‘pharmacological’ effects of drugs’. Rhodes’ also discusses the cultural concept of disinhibition due to drug use, and its potential as an excuse for engaging in unsafe sex, in terms of social contexts (or what Mills, 1940 referred to as a ‘vocabulary of motives’). We, by contrast, focus on social causation of drug use patterns in populations and subpopulations rather than on perceptions of drug effects.

Similarly, our concept differs from analyses of small group, role, and folk cultural regulatory mechanisms that shape how drug users use their drugs or that help them maintain controlled levels of use or safer injection practices (Friedman et al., 1998b; Friedman, Curtis, Neaigus, Jose & Des Jarlais, 1999; Friedman, Kang, Deren, Robles, Colón, Andia, Oliver-Valdez, Finlinson, 2002; Neaigus, Friedman, Curtis, Des Jarlais, 1994; Southgate & Hopwood, 2001; Zinberg, 1984). It may have more in common with the way in which Southgate and Hopwood (2001) discuss the social roots of their ‘folk pharmacology’ in the economic and social structures of gay life in Sydney, Australia (see below).

### **To what degree is there drug use that is not socially caused?**

As will be discussed below, our theory of drug use is based on the hypothesis that certain parts of the social order are more likely to use drugs; and, beyond that, the drugs which are used in a given social location will be those which seem to them to produce moods or consciousness that help people deal with problems with which society confronts them. Thus, we posit that much harmful drug use is socially caused by ways in which the social order itself causes pain or other reactions in some people that they attempt to medicate with the drugs. To some degree, however, there is probably a residual degree of drug use, including harmful drug use, which would be present in any social order. One way to think about this is that, even in a truly decent society, many people would use some potentially addictive substances during particular social or cultural events. Some of these people might, as a consequence, become addicted and come to use drugs in ways harmful to themselves or others. In addition, some harmful drug use, including the use of potentially-addictive drugs, would be likely to occur because some substances are fun or otherwise pleasing enough so some people will knowingly risk the dangers. Additional drug use might arise as a form of pain medication by people who have undergone traumatic experiences.

What would be done in such a society to help those who develop drug problems? It is difficult to imagine the details of a decent society—but we suspect that human solidarity, values of human respect and equality, the possibility for a desirable future, science, and love would be mobilized to reduce and prevent such harm. (Similar needs might exist in relationship to the dangers of other dangerous pursuits, such as over-devotion to down-hill skiing).

### **Social factors which may underlie harmful drug use: preliminary thoughts**

Unfortunately, the world as it is seems to be far from ideal. Billions of people have real pressures on them that are almost insupportable, whether as a consequence of living in a poor nation; being part of an oppressed people or community; having been sexually or physically abused as a child; having an uncertain, degrading, boring, or highly risky employment situation; or living with a spouse, child, parent, or other person in a relationship that is fraught with tension or violence. We suggest that such pressures are likely to lead some of those exposed to them to use particular drugs in harmful ways. Other factors will also be involved in determining which individuals among those exposed to the pressures actually take up various forms of drug use. The study of

this aspect of the problem is important, and has been the major focus of prior research in the field to such an extent that these issues of social causation have been inadequately studied.

For the lucky and wealthy, such social pressures are episodic. For the overwhelming majority of the population, however, they are chronic. Members of the blue, pink, or white collar working class generally face more of these problems than do the corporate rich or those of otherwise wealthy family (Mishel, Schmitt & Bernstein, 1999; UNDP, 1999), although other problems, such as sexual abuse, may be more equally distributed among economic categories. Racial/ethnic stratification, such as the subordination of African Americans, Latino/as, and others in United States and, generally, the Americas, or of non-whites in South Africa, or of Catholics in Ulster, is usually associated with worse health and living conditions for the subordinated groups (Geschwender, 1978; Omi & Winant, 1994). Gender relationships are deeply complicated by issues of class and race/ethnicity, but the greater burdens and stresses that women face even if they do not have an explicit history of sexual abuse and/or violation, domestic violence, and/or survival sex work, have been widely documented (Albeda & Tilly, 1997; Folbre, 1993a,b; Goldberg & Kremen 1990; Zierler & Krieger, 1997). Elsewhere, Friedman (1991) suggested that 'dignity-denial' is deeply rooted in such social structures of modern capitalism as the workplace, racial and gender subordination, and organisational structures. One possible result of such dignity-denial is the use of drugs or other substances as a source of solace or self-medication against the pain of not being respected as an equal human being.

Although such pressures may be chronic, their intensity varies over time. Recent decades may have been a period in which these pressures have intensified. Economic conditions worsened during the period from approximately 1970–1999 in a great many countries. Relevant data from a number of countries are presented in Table 1 and in Figs. 1 and 2. These show that profit rates have been decreasing, unemployment increasing, and inequality increasing over recent decades. As described elsewhere (Friedman, 1998a,b; Friedman,

Southwell, Bueno, Paone, Byrne & Crofts, 2001), these economic pressures and their associated politics of scapegoating have contributed to overwork, cutbacks in social and health services, a sense of increasing inequality, widespread imprisonment of scapegoated groups including racial/ethnic minorities and drug users, and the weakening of community social ties all over the world.

We hypothesise that large numbers of people use pharmacologically active substances to help them deal with these pressures and, perhaps, to deal with trauma or with mental illness (which may be derived from these or related pressures). Some use occurs among people who may (also) enjoy using pharmacologically active substances—at least at first. Such substances include marijuana, tobacco, heroin, alcohol, amphetamines, cocaine, and caffeine. Some of these substances, of course, are tolerated, others celebrated, and still others are proscribed. A major focus of a sociopharmacology of drugs should be to study what kinds of socially derived pressures are associated with what kinds of substance use. One potentially important aspect of such research will be to study if and how occupational and industrial characteristics of job are associated with particular kinds of drug use in both formal and informal work sectors. There is some literature suggesting that occupation is associated with use of specific psychoactive substances (Ebie & Pela, 1981; Mongkolsirichaikul, Mookhavesa & Ratanabanangkoon, 1988; Philpot, Harcourt & Edwards, 1989; Roberts & Lee, 1993; Stratford, Ellerbrock, Akins & Hall, 2000; Watts & Short, 1990). Winnick (1964) shows that narcotic addiction among physicians, and perhaps jazz musicians, is associated with the occupational characteristics of their jobs. There has been considerable speculation that caffeine and amphetamines are used to stay alert in some jobs such as truck driving; that other drugs (nicotine, marijuana) are used to deal with boredom in occupations such as routine assembly line work; that opiates are used to cope with painful or otherwise insufferable working conditions such as those associated with sex work; and that steroids and amphetamines are sometimes used to enhance performance in professional sports. Southgate and Hopwood (2001) describe drug use in Sydney as a form of socially regulated pleasure seeking based on the economic and social structures of the gay community. Left implicit in their discussion is the extent to which social stigmatisation of gays, and struggles against this, also structure these mores and behaviors.

Living in a local area that is socioeconomically deprived may be related to substance use and its related harms. Bell et al. (1998) review a number of studies which show that census tract level analysis of drug use and of its potential socioecological causes provide useful insight into drug use (Faris & Dunham, 1939; Chein et

Table 1  
Differences between postwar boom period and since in selected economic characteristics of G-7 industrialised countries

<i>Net profit rates of private business</i>	
1950–1969	18.0%
1970–1990	13.0%
<i>Unemployment rate</i>	
1950–1973	3.1%
1973–1993	6.2%

G-7 countries: Canada, France, Germany, Italy, Japan, United Kingdom, United States; Source: Brenner, 1998, p. 5.

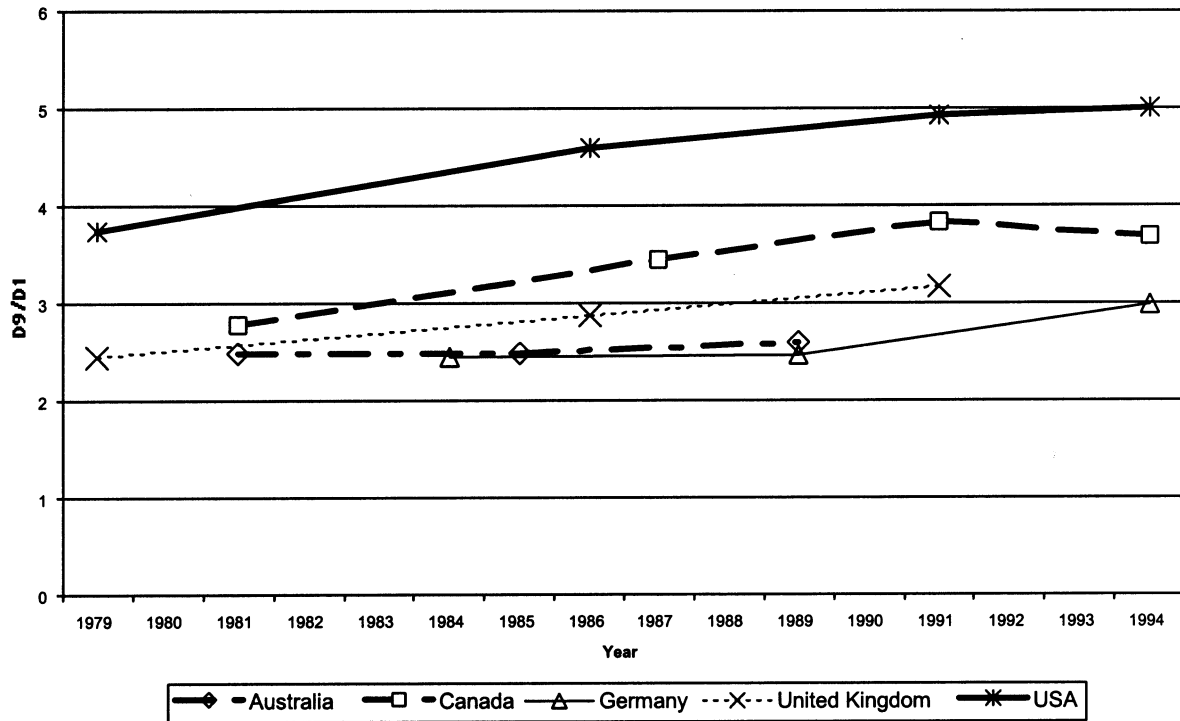


Fig. 1. Income inequality: Deciles D9/D1. Source: Ruiz-Huerta, Martinez, Ayala. Earnings inequality, unemployment and income distribution in the OECD. Working Paper No. 214, LIS. 1999.

al., 1964), heroin or narcotics addiction (Redlinger & Michel, 1970; Nurco, 1972), and multiple indices of social pathology (Nurco et al., 1984). Bell et al. (1998) themselves show that, in Houston, four identifiable

socioecological factors help differentiate census tracts (social disorganisation, economic success, threat of violence, and chronic disease); and that narcotic offenses load heavily (0.50) on a social disorganisation factor.

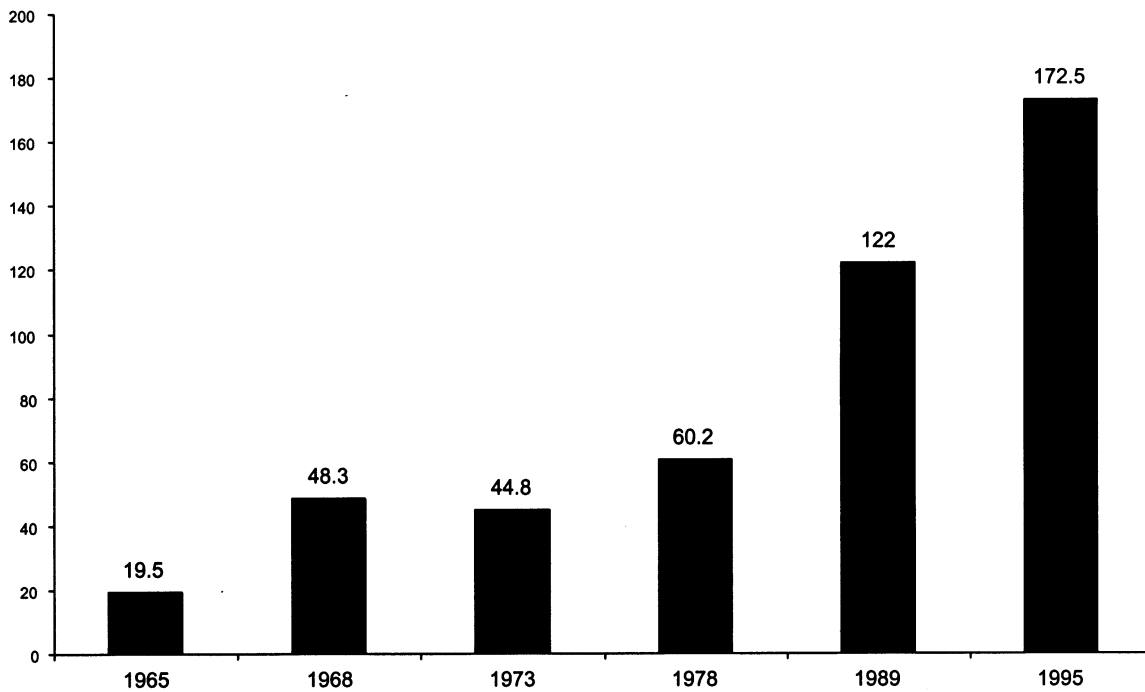


Fig. 2. Ratio of Chief Executive Officer pay to Factory Worker pay, United States of America. Source: Mishel et al., The State of Working America, 1996-97. p. 227.

Brugal et al. (1999) report that unemployment rates in small areas within Barcelona are associated with neighborhood population-prevalences of opiod addiction. Diez-Roux et al. (1997) showed that deprived neighbourhoods have higher levels of smoking, as well as higher cholesterol and body mass index. Kleinschmidt et al. (1995) also showed that smoking is influenced by neighbourhood deprivation.

These data, however, are merely indicative. More research is clearly needed on ways in which social statuses, pressures, and locations are related to drug use and to drug related harm.

There are probably also important cultural and marketing elements in much substance use (in addition to the social and economic ones already discussed). In some areas, psychoactive substances such as coca leaves, mushrooms, or poppy derivatives are part of traditional cultures. In others, these same substances are deeply stigmatised—which may lead them to seem attractive to the rebellious or alienated. Marketing dynamics, as shaped by interactions among producers, distributors, and police forces, affect where which drugs are available at given times. Examples of this are the diffusion of heroin use in Southeast Asia and cocaine use in South America after attempts to disrupt drug trafficking (Friedman et al., 1998a; Stimson et al., 1998; Stimson, 1993). This may help explain why some substances are used more in some localities than in others.

### Implications for theory, research and action

These thoughts have implications for future research that embrace both macro-social issues and the links between the macro and the micro.

First, research is needed to determine the social distribution of the use of various drugs among different social and socioeconomic categories of the populations of different countries. This should include consideration of routes of administration, frequency and patterns of use, and other variables that may affect the likelihood of drug-related harm. These data will allow testing and exploration of the underlying theory of (partial) social causation of drug use.

Second, if the underlying theory is correct, then data on drug-related harm are likely to point to the ills and contradictions of society. Research should be conducted on how such data might identify nations, communities, occupations, and populations whose conditions create vulnerability to drug-related harm. Such data can concomitantly help identify points of social strain or contradiction within populations. The large extent of substance use in the United States probably suggests serious social dysfunction at the macro level. Research is also needed on how social, economic and health policies, or a lack thereof, create conditions that increase demand

for harmful drug use and/or make it more likely that large numbers of people will engage in drug production, distribution, and sale.

Individualistic theories of drug use have been used to stigmatise and even demonise individual drug users as being weak or criminal. The sociopharmacological approach, by way of contrast, suggests that if anyone or anything should be demonised, it should be the social order, not the individual user. Whereas individualistic perspectives have justified blaming and incarcerating hundreds of thousands of people in ways that divert attention from and exacerbate serious socioeconomic problems and contradictions, a sociopharmacological view suggests that action should be focused on social change rather than on blaming the victim. This argument, of course, parallels arguments against ‘blaming the victim’ in other fields of research and action (Chambliss, 1999; Ryan, 1976).

Nonetheless, current drug use patterns do cause misery among drug users, their families, and their neighbors. Although it can be argued that many of these harms are a consequence of legal repression and/or social stigmatisation of drug users, the current pains remain to be addressed. Research and programmes are needed to reduce these harms. Such programmes should help them deal with chemistry-related issues, health-related issues, and issues that concern how they can get along better with family members and neighbours. To the extent that the harmful drug use is the result of social pressures, programs to ameliorate these harms should probably include a mixture of training in ways to more safely deal with these social pressures by personal adjustment and training, and organising for individual and social collective self-defense against these pressures and their causes. Research is needed on how best to provide resources to individuals, communities, and other social groups that they can use to ameliorate both the conditions that lead to harmful drug use and also to reduce harmful drug use among drug users.

To the extent that drug use is the result of social contradictions or occupational necessity, laws that punish users and dealers are at best mistaken efforts based on misdiagnosis of the roots of the problem. However, such laws should not usually be seen as ‘mistakes’ by well-meaning lawmakers but as serving the function of scapegoating the vulnerable. This serves to remove accountability both from the socioeconomic system and also from those people who benefit from the existing social order by dividing and weakening opposition to the nearly insupportable pressures the system puts on most people (Friedman, 1998a,b; Friedman et al., 2001).

Finally, to the extent that drug-related harm stems from basic social structures and processes, the highest-priority research and action should probably focus on social change and how to get it. This might include

research on 'noncompliant elites and ruling classes' and how they can be induced or coerced into needed social changes (or, failing that, replaced). That is, the primary research focus should be on changing society rather than on changing drug users.

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