

ADDICTION RESEARCH: BELIEVING IN THE FUTURE¹

Robin Room
Addiction Research Foundation
33 Russell Street
Toronto, Ontario M5S 2S1, Canada

In global terms, alcohol research has been a growth industry in recent decades, as Tom Babor has recently documented, and I believe the same could be documented for illicit drugs, for psychopharmaceuticals, and for tobacco research. There is some reason to believe that the period of growth may be coming to an end. The growth has, in any case, been highly uneven. Research on the problems of alcohol, tobacco and other drugs has been largely concentrated in Northern Europe and the English-speaking countries -- the countries that Harry Levine has referred to as "temperance societies". While there has been some growth also in other developed societies, the map of research effort remains highly uneven.

By and large, the research effort has been mission-oriented, that is, funding it has been motivated by the promise that it will point to or test solutions of health or social problems. Certainly in Ontario, and perhaps also elsewhere, there is a greater insistence these days that the research should have a pay-off in useful and usable information. In my view, as researchers we should and indeed must be responsive on the issue of relevance. But I think it is also appropriate for us to insist that some of our effort be directed to longer-term goals, to knowledge which may change how we think about a problem, as well as knowledge which is predicated on existing ways of thinking about the problem.

A discussion of future needs and opportunities in addiction research, then, is appropriately set in a frame of the present situation and trends in alcohol, tobacco and other drug problems. Let me start by enumerating some of those trends. To know how to interpret what you see on the horizon, it helps to know where you stand and where you are heading.

1. We have seen a substantial net growth in the use of psychoactive drugs in recent decades, although for some drugs in some places -- including tobacco and alcohol -- the rate of use has stabilized or is slowly declining.
2. We have seen a substantial erosion of control regimes for psychoactive drugs, particularly for plant-derived drugs.
3. We are witnessing substantial and in some places increasing social responses to drug use. The form of these responses have been varied: at the political level, within the community,

¹Presented at the 1994 National Addiction Centre Scientific Meeting, "Addiction Research Horizons: An International One Day Conference", London, England, 28 April 1994.

within the family, and through mutual help movements.

4. Reflecting an interaction of rates of use and problems with increased social responses, rates of experience of addiction have been rising.
5. There has been a growth in use of harm reduction strategies -- decoupling the use of the drug from the potential harm from drug use -- but these strategies are often in competition with an addiction model of drug use.
6. In many societies, there has been a substantial growth in the provision of treatment specifically for alcohol and illicit drug addiction. There is frequently a coercive element in this treatment.

Now let us consider each of these trends in turn and some of the research agendas which they evoke.

Let us start with the substantial net growth in psychoactive substance use. As I have already noted, the growth has not been everywhere and on all fronts. In particular, tobacco and alcohol consumption have both dropped somewhat in many industrial countries in the last decade. But on a global basis, psychoactive substance use seems to have been growing, and certainly the illicit traffic in substances covered by the international drug conventions has grown.

One issue for research underlined by these trends is the study of interactions and combinations in drug use. There is a striking passage in Marlatt and Gordon's Relapse Prevention where they take one of their clients through his daily round of drug use, titrating against each other coffee, marijuana, tobacco, alcohol and prescription drugs. While we know a fair bit about the overlap of user populations for different psychoactive drugs, we know very little about when and how drugs are used together at the same time or in succession. We know anecdotally that use of one drug may provide a cue for use of another, so that tobacco smoking may be more likely or more heavy in a drinking situation, but it is time that our knowledge of these patterns of interaction and combination is put on a more systematic basis.

Let me turn now to the erosion of control regimes for psychoactive drugs. There are four main methods presently in use for controlling the market in psychoactive drugs. One is outright prohibition, as for example is true in most places for LSD. A second method is through a prescription control system, where particular health professions control and ration access to supply. A third, used mostly for alcohol, is a specific control structure for the drug, with the government sometimes monopolizing some aspects of the supply. And the fourth is a licensing system for manufacture and distribution, often with very little differentiation from the licensing system for food or other commodities. Crosscutting particularly the third and fourth methods may be a pricing policy, where the level of taxes or prices may be set in part to discourage use.

These control mechanisms have been put in place mostly in the last century, and have often

served as effective restraints on a free market in psychoactive drugs. Now many of them are being eroded. In part, the erosion reflects the growth of international travel and trade. This makes, for instance, the operation of the international narcotics control regime less and less successful. In part, the erosion is a byproduct of the triumph of free market ideologies and of the doctrine of consumer sovereignty -- the idea that consumer choice should be limited only by ability to pay. The vanloads of alcoholic beverages now coming back to Britain from Sainsbury's and other supermarkets in Calais are a local example of the erosion of a control regime -- in this case, Britain's high-tax policy on alcohol. In Canada we recently experienced a more dramatic failure of a control policy, when the extent of cigarette smuggling from the U.S. forced the Canadian government to reduce cigarette taxes to a point where the cost of a pack of cigarettes was halved.

We presently understand entirely too little about how, under what circumstances, and to what extent these control systems work. Even with respect to pricing policies, where there is a reasonably strong tradition of economic work on elasticity, too little is known about the differential effects of price on different subpopulations and in different circumstances. The alcohol literature has seen a flowering in the last 15 years of studies of the effects of aspects of alcohol control. Ironically, the strongest studies in this tradition are of the effects of policy changes which weakened controls on availability. Whatever may be the public health significance of the erosion of control regimes, from a researcher's point of view these changes offer unusual opportunities for quasi-experimental studies of the impact of controls. This tradition of studies of the effects of control measures needs to be strengthened and, as opportunities arise, broadened in its application to other psychoactive drugs.

The erosion of control measures also underlines the need for explanatory research on public attitudes to control measures. The erosion of market controls does not necessarily reflect public sentiment. In Ontario, in fact, we have found that public support for the present level of restrictions on availability remains strong even while the ratchet-mechanism of market and fiscal pressures wears them away. But it is clear that in the long run control structures for psychoactive drug markets must be responsive to public opinion, and we need to know more about what lies behind public attitudes in this area, and how such attitudes may be changed.

A third trend for discussion is the substantial and often increasing social responses to drug use. These can take many forms. One form is that of overt sociopolitical movement for changes in criminal laws or government policies, such as Mothers Against Drunk Driving, or the more top-down approach of Gorbachev's 1985 alcohol reforms. Religion-based movements such as Islamic fundamentalism can also be seen as falling into this category. While there has been by now very substantial work on the social history of the 19th and early 20th century temperance movement in a number of countries, there is a need for more social historical research covering a wider range of organizations and movements against drug problems, and particularly a need for more research work on the functioning and social effects of contemporary organizations and movements.

A second form of social response to drug use is directed at self- and mutual help rather

than directly at social change. Since the flowering of the Washingtonians in the 1840s, the experience of addiction to drugs has been a fertile ground for the organization both of lay-organized mutual-help movements and of professionally guided self-help movements. While these movements have conventionally been treated in the research literature as treatment modalities, joining one is usually both less than and more than an episode of treatment. The nature and functioning of the movements and the conditions under which they flourish are properly topics for research in their own right.

A third form of social response to drug use takes the form of informal reactions to problematic drug use by family members and friends of the user. In the U.S., at least, we found evidence that such informal reactions to drinking had increased during the 1980s, in a period in which the per-capita consumption of alcohol had been declining. The task of mapping these informal efforts at social control and understanding the conditions for their effectiveness has only been begun for alcohol, and even more remains to be done for other drugs. A next step will involve experiments in strengthening and backing up these informal reactions to problematic drug use.

A fourth form of social response to drug use lies at the level of community institutions and organizations. Problems of drug use usually impact in the first instance on the family and associates of the drug user, but in the second instance on the peace and wellbeing of the community. There is a nascent tradition of evaluated community action studies, particularly in the alcohol field, which needs to be nurtured and strengthened.

From considering these several kinds of social responses to drug use, let us turn to a fourth trend, towards increases in the rate of experience of addiction. In North America at least, this trend can be seen statistically for alcohol addiction in two forms: in reported rates of dependence-related experiences in general population surveys, and in the increasing membership in groups like Alcoholics Anonymous. There is evidence, also, of an increase in the experience of tobacco addiction, primarily as a result of redefining a tobacco smoking habit as an addiction.

You will notice that my emphasis in defining addiction is on experience and on popular conceptions. In the society at large, it seems to me that addiction has retained a fairly constant core meaning. At the heart of it is an experienced inability to control drug-using behaviour, and also often an experience of inability to control one's life because of this. I think we need to take this experience more seriously and to study and understand it better. With all the clarification that concepts like the dependence syndrome have brought to the field, they have not encouraged us sufficiently to examine the empirical relations between the dimensions the concepts bring together. Empirically, how do withdrawal and tolerance relate to the experience of impaired control of drug use, and how for that matter does continued use despite harm, or the dropping of usual pleasures and activities, relate to it? My plea here is to take the phenomenology of experience seriously as a matter for study.

Addiction is an experience, but it is also a classification assigned to others. One finding

of the WHO study of the cross-cultural comparability of diagnostic terms is how widespread in different societies an extremely negative connotation of addiction or alcoholism is. The social positioning of addiction in the U.S. can be gathered by the current struggle of tobacco manufacturers to avoid their product being defined as addictive -- a more derogated term, in their view, than simply being a prime cause of cancer and other diseases. We still understand too little about the structure of popular conceptions of addiction and their relation to other governing images by which problematic behaviour is defined and understood. Scientific and professional definitions of dependence or addiction should not be constructed in ignorance of or isolation from the structure of everyday thinking in the society.

A fifth trend has been towards the adoption of harm reduction strategies to reduce the levels of problems related to psychoactive drug use. The most noted aspects of this trend have been the adoption of such measures as needle exchanges and methadone maintenance to reduce the risk of HIV infection from opiate use. But the strategy has also been applied in a much wider frame. Nicotine patches and nicotine chewing gum are examples of the application of a harm reduction strategy to tobacco smoking. In the field of alcohol problems, there has been a long history of strategies that reduce the harm from drinking without necessarily changing the drinking behaviour -- of "making the world safer for (and from) drunks". It should be noted that countermeasures which do not attempt to influence the drug use behaviour potentially leave an addiction to the drug in place, and the strength of addiction as a governing image means that harm reduction strategies are always somewhat in question. Nicotine patches, for instance, have been approved in North America only for use in a tapering-off procedure lasting a few weeks, while a straightforward harm reduction perspective would see their indefinite use as preferable to continued cigarette smoking.

A clear imperative for research from a harm reduction perspective is to improve our measurements of drug-related harm. In alcohol epidemiology, there has long been a tradition of direct measurement of the problems related to drinking. But for illicit drugs, asking about and analyzing reports of harm related to the drug use has been rare; the pattern of drug use has been regarded as the problem in itself. Sustained work is needed on the measurement of different kinds of harm in different frames - for the individual, for family members and friends, for the community, and so on - for different drugs and circumstances.

A second need is for research which maps in detail the relation between particular consumption patterns and specific problems or harm, taking into account the circumstances of consumption. Such risk curves for consumption have long been used by medical epidemiology with respect to potential chronic health consequences of consumption, and analogous curves have been used in the drinking driving literature to map the relation between the amount of alcohol in the blood on a specific occasion and the risk of traffic casualties. But such approaches need to be applied systematically on a much broader scale for the whole range of problems and for all classes of psychoactive drugs. From the perspective of developing strategies for harm reduction or prevention, careful attention should be paid to the influence of the circumstances of and following drug use.

The logical further development of this line of work, in fact, is toward controlled trials of harm reduction interventions based on findings about the relations of consumption patterns, circumstances and particular types of harm. Such approaches hold particular promise where the drug user has a vested interest in avoiding the problem -- as with victimization by crime, or with casualties.

The last trend for discussion is the increase in alcohol- and drug-specific treatment. Substantial provision of such treatment has been a relatively recent phenomenon in most societies providing it, a phenomenon of the last 20 or 25 years. By and large, such drug-specific treatment services have been focused on alcohol or illicit drugs or both, while treatment for tobacco or prescription psychoactive dependence or problems, if provided at all, has been primarily a task for general health or therapy services.

While the study of the effectiveness of specific alcohol and drug treatment modalities is well under way, the study of the functioning of alcohol and drug services as a treatment system, and of their relation to other health and social service systems, is not yet well developed. In my view, we need not only to push such research forward, but to use findings from it to inform our further research on treatment modalities.

In a North American context, for instance, it seems clear that referral between agencies and systems occurs much less often than might be expected from treatment ideologies. This poses a challenge for policy and for action-oriented research: either we must develop and infuse into the system effective methods of referral, or we need to rethink the emphasis on a continuum and progression of care in present ideologies of the treatment system.

Another issue posed for treatment research by studying the actual social ecology of treatment is the influence of coercion on the treatment process. We have usually thought about this dimension in terms of a dichotomization between voluntary and compulsory treatment. In fact, however, most people coming to treatment for alcohol or drug problems are under informal pressure from family or friends, and often also more formal pressure from the workplace. In the U.S., almost all in public treatment for drug problems, and probably a majority of those in public treatment for alcohol problems, are there under pressure from the criminal courts, often informally as a condition of probation rather than through a formal diversion procedure. This is less true in Canada, though treatment under court pressure is not uncommon. But most of the alcohol treatment outcome literature, and much of the equivalent drug literature, assumes a voluntary contract between the therapist and the client. We urgently need to infuse into the literature on treatment modalities and outcomes a detailed attention to these real-world conditions of treatment.

In the same vein, there is a need to start on the process of thinking and research concerning the actual use in treatment and prevention of potential breakthroughs in psychopharmacology and molecular biology. Experience with pharmacological agents in alcohol and drug treatment teaches us that establishing the therapeutic efficacy of the agent is only the first

issue of a series to be faced. A drug or other intervention which makes a temporary change in desire for drug use may often not in fact be used by the client. If the intervention makes a more lasting change, there will be serious ethical issues to be faced. Where an intervention detaches continued drug use from the risk of harm, it may be seen as fostering denial, and therapists may thus be reluctant to use it. These cautions are suggested, for instance, by the complex history of use -- or nonuse -- of disulfiram for alcohol dependence, of methadone for opiate dependence, and of propylthiouracil (PTU), a thyroid drug, for alcoholic liver disease. These experiences suggest that future research efforts in psychopharmacology and molecular biology need to be coupled with work on the eventualities of use of the innovations in human societies.

In this presentation, I have briefly considered a variety of research questions raised by some current trends in alcohol, tobacco and other drug problems. In terms both of societal needs and of interesting research questions, addictions research has a promising future. In a field which operates at the interstices of many important social issues and institutions, we have the opportunity to build a science which addresses significant scientific questions, and at the same time contributes to the solution of pressing practical problems in our societies. As scientists, we could not ask for anything more.