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RESEARCH DEVELOPMENTS AFFECTING THE ALCOHOL AND DRUG TREATMENT SYSTEM[1]

Robin Room
Addiction Research Foundation
Toronto, Ontario, Canada

The topic for this contribution is very broad, and I must necessarily be selective in what is covered. First I will briefly discuss new drugs of abuse and of therapy; second, I will discuss new approaches in epidemiological studies; third, I will talk a little about new developments in treatment outcome research; and fourth, I will discuss the emergence of treatment system research, and particularly the beginning which has been made on comparative studies.

New drugs of abuse

On the matter of new drugs of abuse, the most discussed development of the last 10 years has been the proliferation of chemical analogue drugs -- the so-called designer drugs. There has been much international and national legislative activity in this area, attempting to control what has not even been thought of yet. But designer drugs have not become an important presence on the mass illicit market anywhere. On the one hand, this may be viewed as a success for the control regime. But on the other hand, the experience of recent years has been that it is materials much more readily at hand, in most cases lying outside the existing international control structure, which have been most successful on the illicit market.

Perhaps the three most significant trends, in an international perspective, have been the emergence of steroids and other performance enhancing drugs as drugs of abuse, the rise in use of volatile solvents, particularly in marginalized populations, and the diffusion of crack cocaine. The idea of drugs as performance enhancers is by no means new, of course. Armies have long issued stimulants and analgesics in wartime, long-distance truckers with schedules to keep have long used amphetamines, and writers have long imagined that alcohol or opium or some other drug enhances their creativity. What is largely new is that this use of drugs not for

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recreation or excitement or solace but rather in instrumental ways has "come out of the closet", become a topic of open discussion and thus both a source of emulation and a politicized problem. The main crucible of this has been competitive sports. But the discussion of drug abuse in this context carries with it some special characteristics. We are concerned about steroid use in sports not only because of the potential harm to the steroid user and those around him or her, but also because it is seen as giving an unfair advantage in competition. The elaborate international regimes which have grown up around drug testing in sports are primarily motivated by this concern for fairness in competition, a concern that differs from our usual concerns about the individual and social harms from drug use.

The diffusion of crack cocaine is an example of a phenomenon well-known to those who market legal commodities: the repackaging and repositioning of an existing product. The chemistry required to transform cocaine to crack is available in any kitchen. There may be an object lesson here in how the main attention in the control system was focused on science fiction scenarios of high technology designer drugs, while the most successful drugs on the illicit market tend to be either a direct agricultural product or a simple chemical transformation of one.

Concerning the rise of glue, gasoline and other solvent sniffing, it is not always clear how much there is a real increase in the problem and how much there is simply increased attention to the problem. In some specific circumstances, solvents are the most significant or the second most significant drug of abuse. This is true, for instance, among Australian aboriginals and among aboriginal Canadians, particularly in rural populations, and it is often said to be true also among Mexicans, particularly poor Mexicans. A common pattern, shared by these three areas, is for alcohol to be the main adult drug of abuse and solvents to be the main problem among teenagers. It is perhaps a mark of our civilization's dependence on gasoline that there have been no very effective efforts to control its supply -- the closest we have come is the armor plating of gasoline pumps and fuel tanks that one finds these days in parts of the Australian outback. There has, however, been an effective if unintentional harm reduction measure: getting lead compounds out of gasoline.

Despite an enormous investment, there has been little change in the last 10 years in our practical inventory of pharmacological aids in drug treatment. Perhaps 10 years from now the receptor research and the genetic identification studies will begin to point to practical therapies, though I believe such therapies will pose strong ethical questions and dilemmas. In the meantime, the main innovations have been in drug delivery systems -- rather simple mechanical and technological innovations. Long acting methadone will put to us in acute form whether the therapy involved in methadone maintenance is mostly the drug itself or whether it is also the showing up each morning and the opportunities for other services which this opens up. Perhaps the most important pharmacological innovation has been pharmacological means for quitting cigarette smoking -- Nicorette and other nicotine chewing-gum, and now the patch. These treatments have an importance extending beyond their direct effects in saving the smoker's lungs; they have brought treatment of tobacco dependence into everyday clinical

practice, giving the doctor something he or she feels comfortable doing. As such, they are part of the long march of tobacco smoking in its cultural position from being a matter of personal habit to being a drug of dependence and abuse.

Epidemiological studies

Let me turn now to new approaches in epidemiological studies. One could say that there used to be two worlds of alcohol and drug epidemiology: clinical epidemiology, which described the demography and other characteristics of populations in treatment, and population epidemiology, which described patterns of alcohol and drug use and problems in the population at large. What has happened in recent years is that we have begun to bridge the gap between these worlds -- to establish, if you like, the social ecology of treatment: how and under what circumstances alcohol and drug users come into particular doors, and how a particular treatment episode fits into the drug use career and the life-cycle.

One thing we have learned from this was mentioned by Harold Demone yesterday: that very little treatment is absolutely voluntary, in the sense that the user just decides all by him or herself to come in. But on the other hand, most of the social control of alcohol and drug use does not happen either in the criminal justice system or in the treatment system. Far more widespread, and far more common, are the comments and suggestions and control efforts which come from family members and from friends and workmates. Entry to treatment which is not legally coerced is usually the culmination of a long process of unsuccessful or partly successful efforts at social control by family and friends. On the other hand, no government has the resources to provide a treatment system which reaches as widely as the network of family and friendship relationships, and those who end up in formal treatment are usually only a small fraction of those who have been subject to these informal social controls. For a number of reasons, cost being only one of them, we are well advised to frame our treatment and criminal justice legislation so that these systems strengthen rather than undercut the network of family and personal relationships which is the most important social control on harmful drug use.

This research also suggests that there are negative aspects of tying the alcohol and drug treatment system too closely to the criminal justice system. In the U.S. these days, this tie is very strong. Nearly everyone in the public drug treatment system in the U.S. is there under court pressure, and this is coming to be true too of the public alcohol treatment system. The criminal justice system is a potentially endless source of alcohol- and drug-related cases; it processes far more cases than the alcohol and drug treatment system. But it is far from clear that the cases which it provides are amenable to treatment. And too close a connection to the criminal justice system places substantial constraints on alcohol and drug treatment. One example of this is given by Jerome Jaffe from his long experience in the U.S. system. At a recent conference, Jaffe noted that a problem with diversion to treatment from the courts is that the courts want the treatment to last longer that the jail sentence would have lasted: if treatment is seen as a softer option than jail, it should at least last as long as jail. This impulse potentially turns the treatment cost per case into a very expensive proposition. It also runs up

against a main finding in the next area of new research I want to mention, treatment outcome studies.

Treatment outcome studies

In the last 10 years, the alcohol treatment outcome literature in North America and English-speaking countries, at least, has gelled into a fairly consistent picture. All treatment does a little good, the literature would say. The chances are only modest that a particular case will benefit from a particular treatment episode. This finding poses an urgent task on us of education of the criminal justice system and of policy-makers: we should not pretend that treatment potentially offers a permanent "cure", and we must seek acceptance of the idea that relapses are to be expected and indeed planned for. While this is more contentious, I would say there is only limited evidence that one treatment modality is better than another. This unpalatable finding has set off a search for a paradigm of "treatment matching", where clients are sorted by what treatment is most appropriate and helpful for them, but I would say there is little evidence yet that we can do better with any research-derived algorithm than we can by offering the client his or her choice from a menu of treatments.

One main implication of the general finding that all treatments work a little and all work to much the same degree is that treatment resources are better spent on less intensive treatments of more cases than on more intensive treatments of fewer cases. This research finding has fuelled a shift towards briefer alcohol treatments and towards outpatient treatment in such countries as Canada, Britain, Australia and the U.S. (in the U.S. fiscal issues of cost containment have also played a role). As I mentioned above, this shift tends to run against the preferences of those staffing the criminal justice system, whose sense of natural justice wants to see even the diverted criminal inconvenienced for a considerable period of time. How this will play out in the U.S. situation of increased court coercion in the public alcohol treatment system remains to be seen.

I have so far been talking about the alcohol treatment outcome research literature. The literature on treatment outcomes for illicit drugs has been quite separate, indeed, and it is past time for these two literatures to be brought together. One remarkable difference can be seen in the two recent reports by the U.S. Institute of Medicine: the drug treatment literature takes as a given that frankly coerced treatment works, while the alcohol treatment literature is very sceptical about this. Given that most illicit drug treatment in the U.S. is under court diversion or court pressure, the trend towards briefer treatments and more outpatient-based treatment seen for alcohol has not been so prominent. I believe an advantage of the combined approach is that it forces us to ask the question why a finding in one literature should not apply in the other.

Increase in treatment system research

The last research development for me to touch on is the rise of treatment system research. This trend is fuelled in the first instance by developments in scientific thinking, but in the second by the fiscal crisis of health and welfare costs in even the wealthiest countries

which has brought a halt to the dynamic multiplication of treatment agencies. One hindrance in the US scene to the development of treatment system research is that scientific policy-makers in the biomedicalized U.S. research context tend not to regard it as "real science", though this attitude is being neutralized by Congressional directives and funding.

The new epidemiology I have already mentioned is one of the contributors to the emerging tradition of treatment system research, with its findings on the conditions of treatment entry and more broadly on the social ecology of treatment. Another strand is provided by studies of what really happens in referral and other relations between agencies -- often, indeed, these turn out to be studies of why referral does not happen very much -- and of the careers of clients in the treatment system. A third strand is the study of the conditions and patterns of growth and decline in treatment provision in particular jurisdictions or societies.

An emergent theme in this third strand, highly relevant to the present project, is the growth of comparative studies of alcohol and drug treatment systems. Until recently, it has been very difficult to get descriptions of national treatment systems in English; such descriptions as there have been have been in the local language and not regarded as having a broader audience. But we have begun to see that much might be learned from cross-cultural comparisons of treatment provision and systems, and from looking at the history of such systems as well as their current patterns. In a recent conference on treatment systems research, for instance, a rough calculation by a Swedish colleague showed that Sweden was spending about 6 times as much on alcohol and drug treatment as the Canadian province of Ontario, though they have about the same population size and similar profiles of alcohol and drug problems -- and though the Ontario system is generally seen as well-developed by North American standards. One big difference, it emerged, was that in Sweden, as in Germany, the normative model of treatment has been an inpatient stay of 3-6 months -- a model almost unknown for professional treatment milieux in North America.