MINIMIZING ALCOHOL PROBLEMS

Robin Room

ABSTRACT

The concept of the prevention of alcoholism derives from clinical thought and experience and carries with it assumptions of the entitativity of alcoholism and of a moral imperative to eradicate the disease. These assumptions do not hold up in nonclinical populations, nor for the prevention of problems associated with voluntary human behavior. It is suggested that we should talk rather of the minimization of alcohol problems. A list of general strategies of minimization is discussed, with detailed attention to measures which insulate drinking behavior from adverse consequences. Such measures ameliorate social problems from drinking but may increase health problems, while measures which decrease health problems may increase social problems from drinking by lowering tolerance for the drinker's behavior. It is noted that preventing alcohol problems is not easy or cheap, since possible preventive measures tend to run up against cherished beliefs or interests. But a serious preventive effort must take account of the awkward realities.

The concept of prevention of alcoholism derives essentially from clinical thought and experience. The concept directs attention outside the clinic door to the population at large and, in principle, covers all efforts which have an eventual aim of stopping the flow of patients entering or reentering the clinic door. Logically enough, what is to be prevented is defined by the nature of the cases who have ended up in the clinic; in our field, it is most commonly defined by the ideal-type characterization of alcoholism as a single clinical entity drawn by Jellinek (1952) from clinical and A.A. experience.

Robin Room, Research Sociologist, Social Research Group, School of Public Health, University of California, Berkeley, California 94720.

Because of this clinical provenance, when we apeak of preventing alcoholism we tend to fall into a number of assumptions about the nature of our concerns, which are normally taken for granted in clinical and epidemiological thought. First of all there is the assumption that there is an "it." To speak of alcoholism at all very strongly implies that there is a single definable entity, however we choose to define it, which is the object of our attention (Room, 1970). In line with experience with those who show up in clinics, the entity is usually seen as being characterized by a very strong clustering of physiological, psychological, and social "symptoms," so that there tends to be a presumption that a showing of one of these "symptoms" very strongly implies the presence of other "symptoms." Thus alcoholism programs are often justified not so much in terms of their effect on the alcohol problems apparent in clinic patients (e.g., absenteeism and other job problems, or drunk driving), as in terms of the other alcohol problems the programs are presumed to "catch" or prevent.

There is no doubting the reality in clinical populations of multiple overlapping and lengthy histories of drinking problems. When we look at the pattern of drinking problems in the general population, however, a different picture emerges. Our recent studies of drinking practices and problems in the general population suggest that, among the substantial proportion of the population which at one time or another gets into problems with drinking, having a particular drinking problem at a particular time is only a modest predictor of having other particular drinking problems at the same time or of having the same problem at another time (Clark, 1966; Cahalan and Room, 1974; Clark and Cahalan, 1973). Thus it cannot be assumed that preventive efforts directed at a segment of the population with one kind of drinking problem will automatically reach populations with other kinds of drinking problems. In discussions of prevention, then, we need to disaggregate "alcoholism" and talk about the prevention of the specific kinds of problems which are included under that label. More generally, the fact that general population reality differs from clinical reality suggests the need for emancipating discussions of prevention from their clinical matrix, since such discussions by their nature must focus on realities in the general population.

Another result of the clinical provenance of the concept of the prevention of alcoholism is the assumption that there is a consensus that what we seek to prevent, however it is defined, is an undesirable state which people wish to avoid. This assumption of course makes sense in the classical territory for discussions of the prevention of disease; few of us wish to contract smallpox, cholera, or rabies, and it can usually safely be assumed that only ignorance and negligence lie in the path of preventive efforts. Even when applied

to psychological states and human behaviors rather than physiological afflictions, the assumption usually makes sense for a clinician dealing with voluntary patients, who bring themselves in the clinic door precisely because they see themselves as "having a problem." But the assumption is simply untenable when we turn to discussing the *prevention* of human behaviors or psychological states. When we are talking about alcohol problems in the general population, we are talking about problems associated with voluntary human behavior, behavior which many people find pleasurable, and which many have ethical, economic, or personal interests in continuing.

In these circumstances, the clinical and epidemiological assumption of consensus on a strong moral imperative to eradicate disease (Room, 1973a; 1974) tends to become a kind of moral entrepreneurship (Becker, 1963) proposing to enforce a standard of behavior on people because it is good for them (Young, 1971; Szasz, 1966-67). In fact, it seems both unrealistic and tendentious even to speak of the prevention of alcohol problems, because it suggests that alcohol problems can conceivably be eradicated or reduced, say, to the dimension of the smallpox problem in the United States, and because it implies a consensus that this goal has priority over other considerations about drinking behavior. There is indeed a contemporary example of a society where it is reported that preexisting alcohol problems have been eradicated and their recurrence prevented; but it seems clear that the U.S. polity is not prepared to pay the "cost" in terms of reorientation of the social and economic system, personal liberties, and daily life involved in following this example, set by the People's Republic of China.

It might be a good idea, then, to forget about the "prevention of alcoholism," and to speak instead of the minimization of alcohol problems (Bruun, 1973). "Minimization" implies a kind of calculus of costs and benefits, and such a terminology might well have the salutary effect of inducing us to recognize and take into account the benefits as well as the costs involved in potentially problem-causing situations. It might be noted that we can readily recognize both the benefits and the problems for the individual in his drinking behavior, but can easily overlook the fact that there are also collective and indirect benefits, as well as costs, from the individual's drinking and his behavior while drinking.

For instance, considering only the economic benefits, and ignoring the equally important intangible benefits, consumers of alcohol not only support the alcoholic beverage industries and many of the allied industries such as bottlemaking, but are also a large source of government revenue—in fact, one of the oldest and most lucrative

sources of revenue. The 5 to 10 percent of the population who are the heaviest consumers provide half of this support. U.S. consumers provide a substantial part of the dollar export earnings of countries like Britain. The problems created by drinking not only absorb the energies of a large cadre of treatment, corrections, education, and research professionals, but also provide partial support for many industries; casualty insurance, car bodyworking, and pharmaceuticals, to name just a few.

Recognizing and taking into account the economic and moral forces that support the status quo, as well as those who seek to change it, will bring a welcome air of reality to discussions of "prevention." We often talk as if preventing problems is easy and cheap, easier and less costly than treating them after they occur, when in fact preventive efforts are likely to be welcomed or even tolerated by all concerned only so long as they do not clash with substantial economic or moral interests—or, roughly speaking, so long as they are not effective. To give a few random examples: a schoolteacher who recognizes the realities of drinking and drunkenness among teenagers and attempts to give them practical hints on staying out of trouble when drinking is likely to get into trouble with school authorities and the adult community for condoning illegal and immoral behavior. State legislators will tell you that attempts to alter alcohol-control laws are very unlikely to succeed if the interests of the alcoholic beverage industry are adversely affected. Existing laws forbidding alcohol to be sold to a "habitual or common drunkard" are not enforced, at least partly because these laws are seen as violating fundamental civil liberties. A proposal to keep the speed limit at 55 miles per hour or lower on purely safety grounds—one might say, half seriously, to prevent crashes or diminish their severity by slowing the rest of us down to the slower speeds at which much drunk driving is done—is certain to meet strong opposition from long-distance truckers, whose earnings are based in part on piecework rates and a literal speedup.

These are but a few examples of the ways in which possible preventive measures tend to run up against beliefs and interests which one or another of us cherish. The potentially most effective measures are especially likely to be blocked off in this way—or they would long ago have been put into effect in this country's 150-year history of experimenting with solutions to "the drink problem." The classical answer to the clash between these realities of everyday life and the clinical and epidemiological tradition of a moral imperative on prevention at all costs has been a social movement, with clinicians often among the leaders, aimed at declaring a crisis and suspending the rules of everyday life. Thus the major advances in

establishing public health activities in this country often came into
being in the crisis situations of major epidemics (Rosenberg, 1962).
In the area of human behaviors, we have seen such movements with
respect to opiates at least twice in this century, once during the last
few years, and of course in the alcohol field we are heirs to the
various social movements over an 80-year period which culminated
in Prohibition. But in the absence, at least to date, of any modern
social movement on alcohol policies, the result of the clash between
everyday realities and the moral imperatives on prevention has
been rather a kind of selective attention in much preventive think-
ing and activity. The stance of moral imperativity is kept intact by
the tendency to limit preventive efforts to directions which offer
the least threat to the status quo.

Thus efforts at preventing alcohol problems in the United States,
other than through treatment and rehabilitation, have tended to
gravitate into three major strategies: (a) alcohol education for
school children; (b) public information campaigns, primarily in the
mass media; and (c) outreach or casefinding, efforts to find
"hidden" or prealcoholics and get them into treatment. These are,
of course, all essential activities. But as major strategies of preven-
tion, they have in common a minimal impact on the status quo and
a minimal "cost" for the ordinary citizen. They offer no serious and
direct threat to the alcoholic beverage industries; they do not
threaten the hegemony of clinical thought in alcohol policymaking;
and they do not impose on the time or the 30-second spot, which
the citizen may use to get a beer from the refrigerator. They are not
even particularly likely to threaten the citizen's equanimity: we are
accustomed to making our children surrogates and captive audi-
ences for moral and health standards which we do not hold to
ourselves, and most of us are likely to assume that public-service
announcements are aimed at doing something to or for the other
fellow rather than for ourselves (Room, 1972).

In making these somewhat provocative comments, I am not
proposing that preventive efforts be diverted to tilting at windmills,
to an emphasis on strategies which directly confront major values or
interests. Nor am I calling for a new crusade organized around the
prevention of alcohol problems, since it seems to me that such
movements tend to bring cures worse than the disease. But I am
suggesting that preventive activities have till now tended to be
confined to a relatively narrow range, and that shifting to a con-
sideration of means of minimizing each of a list of alcohol problems
might help to open our deliberations to new possibilities. Para-
doxically, lowering our expectations of the possible sweep and
efficacy of preventive measures may increase our effectiveness;

since, as Griffith Edwards remarks, in the field of alcohol problems "there is no Broad Street pump" (Edwards, 1973), no single efficacious preventive measure, a conceptualizationlike minimization, which legitimizes small steps and half-measures, will tend to be more useful than a conceptualization which implies the total eradication of the whole congeries of problems.

A useful beginning to a consideration of the minimization of alcohol problems is a listing of possible means of minimization. It is worth keeping a few things in mind as I spell out this list: first, the list is neither exhaustive nor overly systematic and tends to stress measures aimed at the individual drinker and his immediate environment rather than at problems which are seated in collectivities (Room, 1973c); second, the emphasis is on governmental measures, although it may be that interpersonal and informal measures are the most prevalent and effective in minimizing problems; and third, many of the strategies can serve other functions besides the minimization of the problems on which we are concentrating here.

Measures To Restrict and Redistribute General Consumption

These measures aim to control the availability of alcohol. The control may be direct, through controls on hours and conditions of sale, controls of production, controls on general classes of consumers such as children, etc.; or it may be indirect, through manipulation of prices by taxes, production subsidies, price controls, etc. Such measures are thoroughly traditional, and there is by now considerable literature on the conditions of their effectiveness (Wilkinson, 1970; Room, 1971; Popham et al., forthcoming)—but much less discussion of the ethics of their use.

Measures Which Deter or Control Specific Behaviors

There are a wide variety of criminal laws applicable to drinking behavior and behavior after drinking. It is worth bearing in mind that there are also many extracriminal sanctions in law or custom: cancellation of driver's licenses and licenses to practice occupations, manipulation of rules for insurability, barring from alcohol purchases, etc. These measures differ from the general control measures in their emphasis on control of the individual drinker rather than on the supply of alcohol as a consumer commodity; accordingly, if they fail to deter, they require selecting individuals out of the general population and labeling them as they are processed for punishment, rehabilitation, or treatment. Research on the effectiveness of these measures for alcohol problems has been confined mostly to drunk driving (Ross et al., 1970; Robertson et

Measures Which Identify and Treat Behaviors or Conditions

In addition to health and mental health treatments and cures, this category would include vocational and other rehabilitation and adjustment programs, as well as programs of corrections, of behavior modification, and of "constructive coercion" in industrial alcoholism programs. Treatment has to be looked at as a form of prevention. Of course it is more than just that: for most of us, helping the afflicted is an ethical imperative, irrespective of whether it saves money or prevents future problems. The preventive and moneysaving aspects of treatment are not its sole justification, and, in fact, arguing for support of treatment primarily on these grounds is a potentially risky tactic (Room, 1973b). But treatment programs need to be taken account of in any overall prevention plan.

Treatment and allied measures operate by singling out individual clients from the general population and usually by assigning them a diagnosis, establishing eligibility, or otherwise defining the individuals into a special category. There is by now a substantial sociological literature on the equivocal effects of this process (Rubington and Weinberg, 1968), which can often result in confirming people in the behaviors for which they are being treated rather than "curing" them. Although many evaluations of treatment programs are relevant to the limited issue of their effectiveness in preventing recurrences, there are few discussions which explicitly consider the proper role of treatment in an overall plan of minimizing alcohol problems. Such discussions have been more common in the narcotics literature, although not in terms likely to appeal to alcohol treatment personnel: the 1973 Federal Strategy on drug abuse prevention presents as a major argument for the widespread provision of treatment that the courts will then be less likely to excuse untreated offenders (Strategy Council on Drug Abuse, 1973).

Education and Persuasion

When we speak of education, there is a tendency to think only of formal school curricula. But there are, of course, many other forms of education and persuasion: public education, mass and special media messages, honorific and symbolic actions, community organization and consciousness-raising, and various forms of "propaganda of the deed." Most possible measures of minimization in fact have an educational aspect, and in particular much lawmaking and other political activity has a strong symbolic aspect (Gusfield, forthcoming) which seeks, as it might now be put, to "clarify values".

Unlike legal sanctions or treatment efforts, education does not necessarily single out and identify individuals from its target population. It tends to differ from the three strategies that we have already mentioned in that it can be aimed either at the problem-causing drinking behaviors themselves or at the general matrix of social norms and values in which the behaviors occur. Thus the classic slogan that "alcoholism is a disease" was aimed at softening societal reactions to the problem drinker rather than at the problem drinker himself, while more recent ASAP campaigns, ironically with a related content, were aimed at hardening public attitudes (Swinehart and Grimm, 1972).

As Blane (forthcoming) and Gusfield (1973) note in their recent review articles on the prevention of alcoholism, there have been very few evaluations of effectiveness of educational approaches to prevention.

Provision of Alternatives to Behavior

The most common kinds of alternatives are the encouragement of alternative drinks or drugs, the encouragement of alternative styles of drinking, and the provision of such alternative foci of recreation as gymnasiums, athletic programs, parks, community centers, etc. Although in many ways this kind of strategy raises the fewest problems of the ethics of intervention, it tends to be hard to justify to budgeting people: the alternative facilities often appear to be a dissipation of resources or even a boondoggle. Encouragement of alternatives often tends in the short run simply to add to existing behavior rather than to replace it (Mäkelä, 1972), and such measures are in any case not easily evaluated for effectiveness.

A great deal of energy was expended on the provision of "substitutes for the saloon" (Calkins, 1901) by temperance workers around the turn of the century, and it would be instructive to take a detailed look at that history. Contemporary observers often found the results discouraging: for instance, temperance coffeehouses which depended solely on self-generated revenues regularly failed. Yet in the long run, these efforts wrought significant and enduring changes in the American social landscape. Many institutions we take for granted today—for instance, the soft drink industry and YMCA—appear to owe at least part of their inception to efforts to provide alternatives to drinking. Temperance sentiments also figure in the successful efforts in this period to provide such basic social amenities as parks and libraries. In many ways, these positive tactics of the temperance movement, which often seemed futile at the time, outlasted the more immediately successful but negative tactics

Provisions of Insulations on Behavior

Even for relatively heavy drinkers, drinking tends to be very heavily influenced by situational factors, to be carried on at particular times and places; and there is a very large measure of agreement between heavy drinkers, light drinkers, and abstainers in the United States on exactly what are the permissible situations for drinking and for drinking heavily (Roizen, 1972). Drinking behavior, and particularly heavy drinking, is very largely an enclaved behavior, centering on times and places which are a "time-out" from serious behavior (Cavan, 1966) and where the drinker is protected from untoward consequences. Drinking behavior is thus carried on largely within well-defined social boundaries, and often with insulations around the drinking situation—including notably insulations in terms of time, since the effects of alcohol, unlike some other drugs, linger on well after the conclusion of the drinking session.

Let me take a minute to illustrate a little of what I mean by boundaries or insulations. Many bars have no windows in front or an obscured view inside from the street. The effect is quite different from the European café, where often everything is either going on on the sidewalk or in clear view of it. The obscured view in the American bar is clearly a kind of insulation, in a literal and physical sense: passersby are spared any sights of behavior or demeanor inside the bar that might offend, and the patrons of the bar are accordingly free to engage in behavior, in what is after all a place of public accommodation, that is nevertheless acceptable in the bar but might be problematic on the street. The temperance movement was quite aware of this issue of insulation, even though it could not maintain a consistent position on what to do about it, sometimes proposing legislation that forbade any view from the street in order to protect innocent eyes and to underline the isolated, furtive, and disreputable nature of drinking behavior, and sometimes legislating for a full and open view from the street to eliminate any sanctuary for loose behavior and to expose the bar's customers to public gaze and censure. The same conflicting impulses can sometimes be seen today in legislation regarding pornography and "adult" bookstores. The obscured view of the inside of the bar is but one example of the spatial and temporal boundaries and insulations around drinking behavior that are a part of everyday life. Often without thinking of it in those terms, we place boundaries or insulations around our drinking occasions that protect the drinking from problematic consequences. Our ability to set up such boundaries or insulations is affected by our social status and other characteristics. The more social and financial resources we have, the more likely we are to be

able to control knowledge or reporting of our behavior, and the greater the physical and temporal barriers we can manage. Thus, J. K. Galbraith remarks in his novel *The Triumph* that there is nothing over which history draws so dense a curtain as the effect of alcoholism on modern statecraft, and Trice and Roman (1972) remark on the ease with which executives can shield their drinking from any social effects over a long period of time. At the opposite extreme, perhaps the distinguishing mark and the "social problem" of skid row drinkers is their tendency, whether by choice or necessity, to appear drunk and to drink in public and open places.

Many drinking problems arise from breaches of these boundaries or insulations around the drinking situation. A possible solution to many of the social problems of drinking, then, is to increase the insulation or strengthen the boundaries surrounding the behavior. Since this strategy of minimization has not had much explicit discussion, it is worth spelling out a few examples. It appears that some of the social problems of skid row would be ameliorated by providing sheltered places for the men to drink and be drunk. Thus skid row studies suggest that when they have sufficient cash, the men generally prefer to drink in bars, and only resort to the bottle gang in a public place when they do not have the means to "rent" a bar stool.

Perhaps the most common "insulation" problem in contemporary American drinking is the strain between the social expectations of relatively heavy drinking at a party and of sobriety when subsequently driving home. There has been some discussion of means of restoring this insulation by the provision of taxi services or public transportation. A less expensive solution is for the guests to sleep over. But of course this raises the issue of "cost"—intangible, in this instance—as in the letter to a newspaper advice column from a shocked parent recently when a teenager invited all the guests to bring sleeping bags to a graduation party involving drinking.

One of the most common factors in loss of production is the pattern of sleeping-in with a bad hangover. For a blue-collar worker, this commonly necessitates taking the whole day off and getting a slip from a doctor to legitimize the absence. Some companies have recently been experimenting with *Gleitzeit*—gliding time—a reform in working conditions that allows a worker to choose his work hours within broad limits as he goes. Gliding time obviously offers the worker more flexibility in how he insulates his work from the rest of his life and seems to offer a partial solution to alcohol-induced loss of production. Thus in one factory, one-day absenteeism was reported to have declined 60 percent—"no calling in sick just because one's late" (Gonzalez, 1972).

These few examples will suffice to suggest the kind of measures which fit under the heading of "provisions of insulations on behavior." It will be noted that all the examples deal with social problems or acute health problems associated with drinking. For long-term health problems and for what we might call existential problems such as loss of control over drinking, insulating measures are conceivable, but much less likely to be effective. As I have noted, the clinical frame of mind with which we have tended to approach the minimization of alcohol problems has focused on these long-term health and existential problems as the heart of a single complex of problems. This is a partial explanation of why strategies which insulate behavior from its consequences have received so little attention: the problems which are most easily prevented by insulation were seen as mere symptoms of an under-lying clinical problem.

For a fuller explanation, we must examine in greater detail the differences between the two classes of drinking problems—broadly speaking, the social and the clinical. Unlike many physiological and psychological problems with drinking, social problems with drink-ing are not inherent in the individual's drinking and associated behaviors, but rather arise out of an interaction between the individual and his social environment. Obviously then, a social problem with drinking can be minimized either by changing the individual's behavior or by modifying the reactions of the individual's environment to his behavior. In homey terms, we can ameliorate a marital problem involving a husband's drinking either by getting the husband to behave differently or by desensitizing the wife to his drinking, by getting her to see it as not a problem, or by insulating the behavior from her reactions. In an individual practical situation, we all would probably make ethically based judgments on which course we thought advisable without too much difficulty. If the husband beat the wife while drunk, most of us would work on him; if the wife was complaining about the fact of his drinking at all, many of us would work on her. In the aggregate, in setting social policies and deciding on preventive programs, the judgment is far less certain. As we have implied, the general assumption of present prevention programs, based as they are on clinical perspec-tives, tends to be toward paying attention to the behavior rather than to the reactions to it. Thus the basic approach to the "hidden marital problem with drinking" is casefinding, as in the classic lists of symptoms which offer ammunition to the "nonproblem" spouse in identifying and labeling the behavior of the partner as the seat of the problem. But in our national survey data (Cahalan and Room, 1974), we find a relatively high proportion of men reporting

"spouse problems"—in the sense of complaints from wives about their drinking—who report in fact not drinking very much. This pattern is concentrated in two segments of the population where it would be reasonable to expect what many of us might regard as an oversensitivity on the part of the wife to the husband's drinking: in the areas of the country which have traditionally been the strongholds of dry sentiment, and in marriages where the husband has a past but not a current history of heavy or binge drinking and legal or job problems associated with it.

These findings suggest that there may in fact be a place in prevention programs for reassurances aimed at diminishing problems by diminishing reactions to tolerable behavior. Yet from a clinical perspective, such a reassurance is likely not even to be recognized as a general strategy of preventive activity, since it violates several clinical presumptions about the nature of what is to be prevented. It implies that "the problem" is seated in an interaction or collectivity, whereas clinical thought tends to assume that "the problem" is seated in an individual (Room, 1973c). It implies that "the problem" can be dealt with at the surface level of daily interaction, ignoring the underlying realities which clinical thought tends to assume—in line with Platonic assumptions (Room, 1972a)—should be explored and exposed. And it redefines the presenting problem of the individual's drinking behavior as a nonproblem, whereas clinical thought tends rather to err on the side of inclusiveness in differentiating disease from nondisease (Room, 1972a).

Measures which minimize the social problems of drinking by environmental manipulation, then, are somewhat shocking to conventional definitions of our task. It has, in fact, been a very strong theme in the field to encourage rather than diminish the social frictions associated with drinking, as a way of enhancing what is seen as a distant early warning system for alcoholism. As we have implied, finding the worker who drinks on the job or the drunk driver, and *creating* work or police problems for them, is seen as a double step forward: not only does it affect the immediate problem—work efficiency or road safety—but it is also seen as an effective, perhaps the most effective way of finding new cases with potential existential or long-term health problems with drinking. Thus, the health problems are to be solved by the creation of social problems. Conversely, solutions to social problems by environmental manipulation have the effect of removing constraints on the individual's drinking which might keep him from physiological or existential problems. To some extent, then, overall policymaking on the minimization of alcohol problems must involve a balancing

between the competing demands of strategies to limit the health problems and those to limit the social problems associated with drinking.

In the past, discussions of the prevention of alcohol problems have primarily been occasions for the expression of pious hopes. So long as our actions on prevention were limited to rhetorical flourishes, assumptions about the ease and economy of prevention efforts could do little harm. But now that we are moving into an era of serious discussion and work, we must reorient the discussion around a firm grounding in the real and the possible, however awkward they may prove to be. A successful policy of the minimization of alcohol problems must be based on a detailed understanding of the empirical realities which it seeks to affect. It must include a straightforward consideration of the difficult ethical and political questions involved in trying to manipulate human behavior. It must develop realistic appraisals of the likely short- and long-term effects of preventive measures, considering the full range of possible measures. Given our present state of knowledge, this seems likely to require considerable further analysis on patterns in the general population, and a number of small-scale experiments in the effects of various measures to minimize alcohol problems. One thing is clear: preventing alcohol problems is not easy or cheap, or else it would long ago have been accomplished.

REFERENCES

Becker, H. *Outsiders: Studies in the Sociology of Deviance.* New York: The Free Press, 1963.

Blane, H.T. Education and the prevention of alcoholism, *In:* Kissin, B., and Begleiter, H., eds. *The Biology of Alcoholism. Vol. IV: Social Biology.* New York: Plenum, forthcoming.

Bruun, K. The minimization of alcohol damage. *Drinking and Drug Practices Surveyor,* 8:15 and 47, 1973. Abstracted from "Alkoholihaitat mahdollisimman vähäisiksi." *Alkoholipolitiikka,* 35:185-191, 1970.

Cahalan, D., and Room, R. *Problem Drinking Among American Men.* Monograph No. 7. New Brunswick, N.J.: Rutgers Center of Alcohol Studies, 1974.

Calkins, R. *Substitutes for the Saloon.* Boston: Houghton Mifflin, 1901.

Cavan, S. *Liquor License: An Ethnography of Bar Behavior.* Chicago: Aldine, 1966.

Clark, W.B. Operational definitions of drinking problems and associated prevalence rates. *Quart J Stud Alc,* 27:648-668, 1966.

Clark, W.B., and Cahalan, D. Changes in Problem Drinking Over a Four-year Span. Presented at the annual meeting of the American Public Health Association, San Francisco, November 1973.

Edwards, G. Epidemiology applied to alcoholism: A review and an examination of purposes. *Quart J Stud Alc,* 34:28-56, 1973.

Gonzalez, A.F. Gleitzeit: Wage slaves liberated by an old archenemy, the time clock. *TWA Ambassador,* 5(9):31-34, 1972.

Gusfield, J. *Symbolic Crusade: Status Politics and the American Temperance Movement.* Urbana, Ill.: University of Illinois Press, 1963.

Gusfield, J. The prevention of drinking problems. *In:* Filstead, W.J.; Rossi, J.J.; and Keller, M., eds. *Alcohol: New Thinking and New Directions.* Chicago: Ballinger Publishing, forthcoming.

Jellinek, E.M. Phases of alcohol addiction. *Quart J Stud Alc,* 13:673-685, 1952.

Mäkelä, K. Consumption Level and Cultural Drinking Patterns as Determinants of Alcohol Problems. Presented at the 30th International Congress on Alcoholism and Drug Dependence, Amsterdam, 1972.

Popham, R.E.; Schmidt, W.; and de Lint, J. The effects of legal restraints on drinking. *In:* Kissin, B., and Begleiter, H., eds. *The Biology of Alcoholism. Vol. IV: Social Biology,* New York: Plenum, forthcoming.

Robertson, L.; Rich, R.F.; and Ross, H.L. Jail sentences for driving while intoxicated in Chicago: A judicial action that failed. *Law and Society Review,* forthcoming.

Roizen, R. "Social Drinking": A Partial Test of a Drinking Practices Folk Theory. Social Research Group Working Paper F24. Berkeley, Calif., 1972.

Room, R. Assumptions and Implications of Disease Concepts of Alcoholism. Presented at the 29th International Congress on Alcoholism and Drug Dependence, Sydney, Australia, February 1970.

Room, R. The Effects of Drinking Laws on Drinking Behavior. Presented at the annual meeting of the Society for the Study of Social Problems, Denver, August 1971.

Room, R. Drinking and disease: Comment on "The alcohologist's addiction." *Quart J Stud Alc,* 33:1049-1059, 1972a.

Room, R. Strategies of prevention and alcohol opinion campaigns. *Journal of Aicohol and Drug Education,* 18:6-8, 1972b.

Room, R. The epidemic model and its assumptions. *Drinking and Drug Practices Surveyor,* 8:16-21, 1973a.

Room, R. Saving money vs. reducing suffering. *Drinking and Drug Practices Surveyor,* 7:31-32, 1973b.

Room, R. The social psychology of drug dependence. *In:* The Epidemiology of Drug Dependence: Report on a Conference: London 25-29, September 1972. Copenhagen: Regional Office for Europe, W.H.O., 1973c, pp. 69-75.

Room, R. Governing images and the prevention of alcohol problems. *Preventive Medicine,* 3:11-23, 1974.

Rosenberg, C. *The Cholera Years.* Chicago: University of Chicago Press, 1962.

Ross, H.L.; Campbell, D.T.; and Glass, G.V. Determining the social effects of a legal reform: the British "Breathalyser" crackdown of 1967. *Amer Behav Scientist,* 13:493-509, 1970.

Rubington, E., and Weinberg, M.S. *Deviance: The Interactionist Perspective.* New York: Macmillan, 1968.

Strategy Council on Drug Abuse. *Federal Strategy for Drug Abuse and Drug Traffic Prevention 1973.* Washington, D.C., 1973.

Swinehart, J.W., and Grimm, A.C. *Public Information Programs on Alcohol and Highway Safety.* Ann Arbor: University of Michigan Highway Safety Research Institute, 1972, pp. 65-68, 93-95.

Szasz, T. Alcoholism: A socio-ethical perspective. *Washburn Law Journal,* 6:255-268, 1966-67.

Törnudd, P. Fines for drunkenness: A problem of criminal policy. *Alkoholpolitik,* 1:3-8, 1967.

Trice, H.M., and Roman, P.M. *Spirits and Demons at Work: Alcohol and Other Drugs on the Job.* Ithaca, N.Y.: Cornell University, New York State School of Industrial and Labor Relations, 1972.

Wilkinson, R. *The Prevention of Drinking Problems.* New York: Oxford University Press, 1970.

Young, J. *The Drugtakers.* London: Paladin, 1971.