

Recent Research on the Effects of Alcohol Policy Changes¹

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ABSTRACT: As the agenda of alcohol problems prevention has broadened, new traditions of research have emerged: of experimental studies at the community or the societal level, of "natural experiment" studies of the effects of sudden changes such as strikes or new legislation, and of sophisticated time-series analyses of the effects of sudden and of long-term changes. While it has been shown that control measures can influence alcohol problems rates, substantial change seems to require changes in the political status quo, often also involving popular movements. Except for taxes, raising the drinking age and drinking-driving countermeasures, the political will to restrict availability has been lacking in market-oriented industrial societies in the modern era, so that the modern experience of the effects of other control measures is based on centrally-planned or non-industrial economies.

A Reorientation: From Alcoholism to Alcohol-Related Problems

Recent years have seen big changes in the literature on the evaluation of programs for the prevention of alcohol problems. The changes reflect developments in two directions: in the scope of prevention programs in the field, and in the technology and conceptualization of evaluation studies. A few years ago, the modal evaluated prevention program in the United States, for instance, would have had a target audience of schoolchildren, a classroom curriculum as the intervention, and before-and-after pencil-and-paper tests as the measurement of success. Primary attention would have been focused in the evaluation on changes in knowledge and perhaps also in attitudes about drinking; the test might not even have attempted to measure any changes in actual behavior.

Many such studies are certainly still being done, with increasing methodological sophistication, and for that matter with increasing attention to change in behavior as a criterion (Goodstadt, 1985), but in recent years there has been a substantial expansion in the scope of the literature on alcohol problems prevention. This change reflects a major reorientation in thinking

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about prevention in the alcohol field, in the United States and in a number of other countries (Room, 1984a). The opening up in prevention approaches and methods in recent years reflects the shift away from a perspective that sees alcohol problems only in terms of alcoholism or alcohol addiction, and the adoption in its place of a "disaggregated" perspective. This broadened approach in terms of a diverse spectrum of alcohol-related problems has opened up the possibility of new approaches to the prevention of alcohol-related problems (Room, 1975; 1981). In the United States until 10 years ago, for example, alcohol problems prevention programs were thought of mainly in terms of three strategies: educational programs, primarily directed at schoolchildren; public service advertising on mass media, often oriented around "warning signs" of alcoholism; and outreach efforts to find and get incipient alcoholics into treatment. Now a much wider set of strategies are used in alcohol problems prevention programs. Let me give a few examples from recent experience in North America.

* In the last few years, "server intervention programs" have become quite common. These programs involve training bartenders, waitresses and others who sell drinks or alcohol how to recognize that a customer is already intoxicated and to cut them off from further drinking gracefully.

* Prevention specialists have worked with those with jurisdiction over public spaces -- city parks, university campuses, military bases -- to make regulations and design prevention programs which will minimize the possibility of alcohol-related disruptions and accidents in those spaces.

* Agencies like the U.S. Coast Guard with jurisdiction over pleasure boating have mounted campaigns to warn boaters of the dangers of intoxication-related accidents and drownings, following studies which revealed that a high proportion of drownings were related to intoxication.

* There have been various public and private efforts to provide alternate transportation for those who otherwise might drive while intoxicated. For instance, some city transit systems have continued to run all night on New Year's Eve, and some private companies have offered free taxi rides home as a public relations gesture.

* Responding in part to shifts in public sentiment, and in part to findings that traffic casualties among youth had increased when many states lowered the minimum legal drinking age in the early 1970s, the minimum age for drinking has now been raised to 21 in all American states.

* A variety of educational approaches have been used to seek to prevent the fetal alcohol syndrome (FAS) and fetal alcohol effects (FAE). In addition to mass-media campaigns to warn pregnant women about the dangers of heavy drinking for the fetus, these efforts have included education and training for professionals whose clients include pregnant women, and city ordinances or state regulations requiring that warning signs about FAS be posted in liquor stores.

An important element in the adoption of the new perspectives has been the cumulation of new evidence that alcohol policies and prevention programs could, in the right circumstances, have major effects on the rate of alcohol problems. In the older perspective which focused only on alcoholism, it was commonly assumed that alcohol controls and other policy measures would have no preventive effect, since, it was thought, alcoholics would continue their drinking irrespective of any controls or incentives. More recently, researchers have turned these assumptions into questions for research, and have found them seriously deficient. The tone of the new perspective was set by an international report published in 1975:

Changes in the overall consumption of alcoholic beverages have a bearing on the health of

the people in any society. Alcohol control measures can be used to limit consumption: thus, control of alcohol availability becomes a public health issue (Bruun et al., 1975). Behind these statements lay the increasing evidence, at the time of publication of the book, that rates of cirrhosis mortality and other long-term consequences of heavy drinking, at least, were affected by the overall level of drinking in a population. Broadly speaking, this finding has stood up through the intervening years, and has even been extended to the conclusion that rates of other alcohol-related problems -- alcohol-related casualties and crimes, for instance -- in a given population often vary with the level of consumption (Mäkelä et al., 1981).

Along with this conclusion have gone two corollaries.

(1) Although the heaviest drinkers, and those addicted to alcohol, account for a disproportionate share of alcohol-related problems, there are so many more less extreme drinkers at some risk of problems in any society that the bulk of problems are accounted for by this group (Moore and Gerstein, 1981). This conclusion is sometimes known as "the preventive paradox" (Kreitman, 1986).

(2) The drinking patterns of even the heaviest drinkers can be affected by general social measures such as increased alcohol taxes. The evidence of this is now quite clear (Room, 1984a), although it goes against the presumptions of a view that alcoholic drinking is intrinsically different from "normal" drinking, and not affected by such general control measures.

Emerging Traditions in the Evaluation of Prevention Policies and Programs

The new perspectives have opened up a much wider field for evaluative studies. In the meantime, the field of evaluation of alcohol problems prevention programs has also matured and drawn on new technologies. On the one hand, this has meant the use of sophisticated statistical paradigms such as Box-Jenkins time-series analyses. On the other hand, it has also meant a new emphasis on relatively simple methods and on qualitative observations, in the effort to understand the meaning of any changes found.

The new prevention evaluation literature has taken several directions. One direction has been the development of a literature of experimental studies operating on a much broader level than a classroom. This literature was initiated and has been most developed in the Nordic countries, where there is a long tradition of social experimentation, planning and evaluation. As early as the 1950s, Finnish alcohol research, conducted in close conjunction with alcohol control and policymaking, moved to an experimental model of alcohol policymaking (Room, 1986). Pekka Kuusi's classic study (1957) of the effects of opening state alcohol shops in Finnish rural towns has served as a model for such studies. The study, with two target communities and two control communities, included before/after surveys of the populations, tracking of sales and other official statistics, and a good deal of process data. There have been a number of such studies of the effects of particular changes in legal availability, especially in Scandinavia (Room, 1984a). Several studies have focused on the effects of introducing Saturday closing of liquor stores. Australian studies have examined the effects of introducing price differentials favoring low-alcohol beer (Smith, 1987). As is suggested by these examples, a major limitation on experimental studies of policy changes has been the restricted range of changes, at least in the direction of increasing alcohol controls, which have been within the reach of experimental studies, particularly in recent years. The political constriction of such changes is particularly underlined by the Norwegian experience with Saturday closing, where the results of the

experiment were not really determinative of the policy eventually adopted.

Another tradition of experimental studies has been broadly based on the model of the "Stanford Heart Disease" study, with a three-community design (Maccoby et al., 1977). In these designs, both community organizing and mass media approaches to preventing alcohol problems are used in one community, media approaches only are used in a second community, and trends in the two communities are compared with those in a third, control community. The design was first applied in the alcohol field in the California Alcohol Problems Prevention Demonstration study, although the design and process of the study were seriously flawed (for an evaluation, see Wallack and Barrows, 1982/3). Preliminary reports are now appearing from a recent well-designed and executed study in this tradition, carried out in six communities in New Zealand (Casswell, 1986). Another study directed by Norman Giesbrecht in Ontario, with a somewhat analogous design, is currently being analyzed.

While these studies have an apparently simple design, the analysis is complicated by the inevitable convolutions of the history of the projects. In the case of both the California and New Zealand projects, political considerations interfered with the planned schedule of media dissemination -- but ironically the resulting furor drew heightened attention to the study's purposes and message. A lesson of the experimental studies, from Kuusi's on, has been the unpredictability and uncontrollability of conditions in a large-scale social experiment. This gives a special value to the documentation of the process of the studies and to recording the experiences involved in carrying out the study.

A second new direction has been the development of traditions of "natural experiment" studies, as they are often called in the alcohol literature. In other fields, such studies have other names, such as "legal impact studies". By a "natural experiment" is meant in this context simply a change in policy or situation which was not planned with the researcher or an evaluation in mind. Usually, such studies study the effects of a particular discontinuous change, if possible in comparison with a control site with no such change. Where the researcher has sufficient notice of impending change, the design can be indistinguishable from that of a controlled experimental study. The studies by Hingson and his coworkers of the effects of raising the drinking age (Hingson et al., 1985), or of new drinking-driver legislation (Hingson et al., 1987), offer examples of such studies. Again, a strength of these studies is their use of multiple measurement methods.

A strong subtradition in this area has been the "strike studies" -- studies of the effects of temporary disruptions of the supply of alcohol. Again, this tradition has been especially strong in Nordic countries, with the earliest such study reported from Sweden, and model studies being undertaken in Finland (Mäkelä, 1980; Österberg, 1988) and Norway (Horverak, 1983). The salient contribution of these studies has been to underline that relatively small changes in availability can have a large impact, at least in the short run, on problem indicators. It seems to be particularly relatively poor heavy drinkers who are the most affected.

One of the most influential studies of the effects of "natural experiments" of changes in availability has been an analysis of the effects of price increases in Scotland (Kendell et al., 1983). More recently, studies of the effects of rationing alcohol in Poland and Sweden have found suggestions of a focused effect on drinkers with the heaviest and riskiest drinking (Wald and Moskalewicz, 1984; Norström, 1987).

A third direction, partially overlapping the second, has been a growing literature of time-series analyses of the correlation of changes over time. Graphic demonstrations of temporal

correlation can be found going back a long way, and some such correlational studies played an important role in the shift to a view of controls as influencing consumption (Terris, 1967; Seeley, 1960). Regression correlations can be found in the alcohol literature as early as 1932 (Warburton, 1932). In recent years, technology has become much more advanced in this field, with the advent of Box-Jenkins and other sophisticated methods of analysis. These models, which take account of such factors as autocorrelation in a temporal series, have been applied by Skog and others to a variety of problems linking historical consumption data both with economic development and with rates of consequences of drinking (see, for example, Skog, 1986). In the U.S., the techniques have been applied to study the effects of discontinuous changes such as changes in the minimum age law (Wagenaar, 1983), in on-premises availability of distilled drinks (Holder and Blose, 1987) or in the drinking driving laws (Hilton, 1984).

Broadening the Scope of Measurement and Assessment

Out of these various traditions of studies, primarily carried on in Nordic and English-speaking countries, have come a pair of apparently contradictory conclusions. On the one hand, the studies have clearly shown that control measures can influence drinking patterns, and in turn the rate of drinking problems (some studies, e.g. Cook, 1981, test the direct connection between the control intervention and the alcohol problems rate). On the other hand, the studies suggest that the effects of single measures are often minor: it is rather a pattern of changes acting synergistically which often lies behind large-scale changes.

Such conclusions pose a dilemma for the measurement of the effects of change: evaluation designs tend to yield the most unambiguous results when they focus on single interventions occurring in isolation, but substantial change is most likely to occur when the interventions are multidimensional and interconnected. Furthermore, short-term effects are more easily measured than long-term effects in most evaluation study designs, while from a policy perspective the long-term effects may be seen as more important. While there are no simple solutions to these dilemmas, they do point to the importance of qualitative as well as quantitative documentation and measurement in evaluation studies. Descriptive material on the process of the interventions and on responses to them often provides invaluable insights on how and under what conditions particular prevention strategies are effective. The Finnish strike studies, for instance, included observational counts of public drunkenness, material on illegal sales patterns, and inquiries on the impact on the drinking patterns of homeless men, as well as public opinion polls and newspaper content analyses, along with a variety of social and health statistical series (Mäkelä, 1980; Österberg, 1988).

Taken together, the results of the various study traditions outlined above have also underlined the limits of purely technocratic solutions to alcohol problems. Some alcohol problems indeed can be diminished by "making the world safer for (and from) drunks", although even this may draw opposition from those who wish to deter drunkenness by raising the risks associated with it. But major changes in the rate of alcohol problems normally involve changes in the political status quo. Large changes in social mores, often initiated by social or religious movements of renewal or change, are in fact often a prerequisite of change. It is in such circumstances that educational efforts, for instance, may really make a difference. In the U.S., for example, the last 20 years have seen the beginning of a great reversal in popular attitudes concerning cigarette smoking. In this circumstance of social change, educational programs for

schoolchildren are now often able to show an added effect in persuading children not to start smoking. We may suspect that the same program 20 years ago would have been much less likely to show an effect. The lesson of the new research, therefore, is that the means are available to make substantial changes in the rates of alcohol problems, but that using these means will not be politically easy and may require the efforts of substantial social movements. Such social movements must probably be genuinely grass-roots efforts; in the U.S., at least, government-sponsored attempts to change social mores have often offered a tempting target against which the next generation can rebel (Room, 1984b). In terms of litres per capita, it was not the adoption of Prohibition which brought the largest decrease in alcohol consumption in the U.S. -- even though consumption is indeed estimated to have fallen by two-thirds in the early years of Prohibition (Warburton, 1932). Rather, the largest decrease -- from about 27 litres to 7 litres of ethanol per inhabitant 15 years and older (Rorabaugh, 1979, p. 233) -- occurred from 1830 to 1845, without any governmental controls or actions, in connection with the spontaneous autonomous organizing and mutual help of the early temperance movement.

The Cultural Politics of Alcohol Policy Evaluations

The idea that programs or laws should be formally evaluated, which seems quite well entrenched in Scandinavia, has been advancing in countries like the United States in the last 20 years, but is not necessarily fully accepted. U.S. policymakers on illicit drugs in the 1980s, for instance, do not seem to have been interested in or responsive to evaluative studies, except within a narrow criminological frame. In the alcohol field, English-speaking governments have often been quite resistant to the conclusions of the new research literature; for instance, the British government suppressed a Central Policy Review Staff report on alcohol policies drawing on this literature, which finally found publication in Sweden, beyond the reach of the British Official Secrets Act (Anonymous, 1982; Bruun, 1982). It might be added that, from a politician's perspective, a major purpose of commissioning evaluation and other studies is often to defuse or postpone contentious decisions.

Alcohol policy evaluations of course take place within a more general context of alcohol research. One clear limitation of the current policy evaluation literature is its restriction to societies that historically have both drunk a lot and worried a lot about drinking. Alcohol research is the residual legatee of a formerly strong temperance movement: the correlation between temperance movement strength in 1900 and current societal expenditure on alcohol research must be quite high. This means, for instance, that we know little about the effects of alcohol policy changes in winegrowing countries of southern Europe, or for that matter in Moslem societies.

A major limitation on the present literature is that studies of change, whether in the form of planned or of "natural experiments", are dependent on the political will to try out the change. Despite increased concerns about alcohol-related problems, almost no market-oriented industrial societies have so far proved willing to reverse in any substantial way the postwar loosening of general controls on alcohol availability (Mäkelä et al., 1981). The ideology of full and equal access of adults to consumer goods (constrained, of course, by economic status) is applied even to products with adverse public health effects; thus controls on such products are resisted, for instance, in the Australian mass media with sarcastic talk of the "nanny State". As a consequence, we have many more evaluations from such societies of the effects of loosening general alcohol

controls than of the effects of tightening them (see, for instance, Smith, 1988). The one exception is for studies of the effects of alcohol tax increases; such increases have usually been motivated by fiscal rather than public health concerns.

This means that our understanding of some general control measures which seem technically promising comes only from history or from outside these societies. Alcohol rationing, for instance, may be a relatively effective way of limiting the consumption of heavy drinkers without impeding lighter drinkers, since the heavy drinkers will at a minimum pay a surcharge for consumption beyond their ration. But our evidence on the effects and side-effects of such a measure comes from historical analyses (Norström, 1987; Franberg, 1987) or from centrally-planned (Morawski et al., 1987) or non-industrial (Schechter, 1986; Brady and Palmer, 1984) economies. Except in Sweden, even a public discussion of alcohol rationing is politically inconceivable in any society in Western Europe, North America or Australasia.

There are two areas of more specifically-targeted measures in which studies do exist on restrictive alcohol policy changes in market-oriented industrial societies. The effects of raising the minimum legal drinking age have been well studied (Hingson et al., 1985; Wagenaar, 1983) although the data is entirely from North America, since a political willingness to take this step seems so far to be a North American specialty. There is also a substantial international literature on the effects of various countermeasures on drinking-driving (Hingson et al., 1987; Ross, 1984). The general message of this literature is that raising the perceived certainty or quickness of punishments for drinking-driving can have a substantial effect, but that the effect usually decays quite quickly, since the perception of increased risk of punishment usually proves false. Raising the severity of the punishment does not seem to have a big effect, perhaps because, in legal systems like that of the United States, raising the severity of the punishment tends to reduce its certainty and quickness. In Australia, where uniquely intense and sustained programs of random breathtesting have been instituted, there is evidence of a sustained effect of increasing the certainty of punishment (Homel et al., 1988). In view of the reluctance of other societies to adopt random breathtesting, one interesting aspect of the Australian experience has been the rise in the proportion of the public supporting random breathtesting -- in one state, from 42% in 1973 to 64% at its adoption in 1982 and to 97% in 1987 (Room, 1988).

The fact that alcohol control systems in market-oriented industrial societies have moved generally in the direction of greater availability explains the importance in the literature of the "strike studies", since these studies offer rare glimpses of what happens in those societies when there is a substantial decrease in alcohol availability. Those reporting such studies have been careful, however, to point out the ways in which their results are special: (1) they only deal with short-term effects; typically, for interest, an illicit market is only just getting organized when the strike ends; and (2) they occur in a very different environment of public debate than would a change in availability which was adopted as an alcohol policy measure. While the strike studies are thus interesting and useful tests of the causal relationships of drinking and social and health problems, they offer little guidance on the social processes which would accompany long-term and purposive policy changes.

This is why researchers from many societies have been so interested in the developments in Poland since 1980 and in the Soviet Union since 1985. While the Polish case has many twists and turns, the new policy period starting in 1980 had two elements which have been lacking in other societies: genuine popular initiation and support, at least for a while, of restrictive policies

(Bielewicz and Moskalewicz, 1982); and experience with a substantial and continuing reduction in the alcohol supply (Morawski et al., 1987). The Soviet experience in the wake of the comprehensive alcohol policy changes of 1985 is also of substantial interest internationally. As Partanen (1987) has intimated, one has to go back before 1920 to find an industrial society which initiated such radical measures affecting alcohol production and availability as well as the societal response to alcohol problems. Early reports on the experience show a substantial drop in the rates of alcohol-related problems (Anokhina et al., 1987). But the emergence of a very substantial illicit market in alcohol, and the diversion of sugar and other commodities to it, led the authorities in late 1988 to order a substantial increase in availability on the legal market.

REFERENCES

- Anokhina, I.P., Koshkina, E.A. and Shesterneva, S.B. (1987). Medico-social aspects of antialcohol policy in the USSR, presented at a research conference on Statistical Recording Systems of Alcohol Problems, Helsinki, September.
- Anonymous (1982). Public interest, British Journal of Addiction, 77, 1-2.
- Bielewicz, A. and Moskalewicz, J. (1982). Temporary prohibition: The Gdansk experience, August 1980, Contemporary Drug Problems, 11, 367-381.
- Brady, M. and Palmer, K. (1984). Alcohol in the Outback. Darwin: Australian National University, North Australia Research Unit Monograph.
- Bruun, K., Edwards, G, Lumio, M., Mäkelä, K., Pan, L., Popham, R.E., Room, R., Schmidt, W., Skog, O.-J., Sulkunen, P. and Österberg, E. (1975). Alcohol Control Policies in Public Health Perspective, Helsinki: Finnish Foundation for Alcohol Studies.
- Bruun, K., ed. (1982). Alcohol Policies in United Kingdom, Stockholm: Studier i svensk alkoholpolitik, Stockholm University.
- Casswell, S. (1986). An evaluated community action project on alcohol, presented at the annual meetings of the Alcohol Epidemiology Section, International Council on Alcohol and Addictions, Dubrovnik, June 9-13.
- Cook, P. (1981). The effect of liquor taxes on drinking, cirrhosis, and auto accidents, pp. 255-285 in: Mark Moore and Dean Gerstein, eds., Alcohol and Public Policy: Beyond the Shadow of Prohibition. Washington: National Academy Press.
- Franberg, P. (1987). The Swedish Snaps: A History of Booze, Bratt, and Bureaucracy -- A summary, Contemporary Drug Problems, 14, 557-611.
- Goodstadt, M.S. (1985). Shaping drinking practices through education, pp. 85-106 in: J.P. von Wartburg et al., eds., Currents in Alcohol Research and the Prevention of Alcohol Problems. Berne etc.: Hans Huber.
- Hilton, M.E. (1984). The impact of recent changes in California drinking-driving laws on fatal accident levels during the first postintervention year: An interrupted time series analysis, Law and Society Review, 18, 605-627.
- Hingson, R., Merrigan, D. and Heeren, T. (1985). Effects of Massachusetts raising its legal drinking age from 18 to 20 on deaths from teenage homicide, suicide, and nontraffic accidents, Pediatric Clinics of North America, 32, 221-233.
- Hingson, R., Heeren, T., Kovenock, D., Mangione, T., Meyers, A., Morelock, S., Lederman, R. and Scotch, N. (1987). Effects of Maine's 1981 and Massachusetts' 1982

- driving-under-the-influence legislation, American Journal of Public Health, 77, 593-597.
- Holder, H.D. and Blose, J.O. (1987). Impact of changes in distilled spirits availability on apparent consumption: A time series analysis of liquor-by-the-drink, British Journal of Addiction, 82, pp. 623-631.
- Homel, R., Carseldine, D. and Kearns, I. (1988). Drink-driving countermeasures in Australia, Alcohol, Drugs and Driving, 4, 113-144.
- Horverak, Ø. (1983). The 1978 strike at the Norwegian Wine and Spirits Monopoly, British Journal of Addiction, 78, 51-66.
- Kendell, R.E., de Roumanie, M. and Ritson, E.B. (1983). Influence of an increase in excise duty on alcohol consumption and its adverse effects, British Medical Journal, 287, 809-811.
- Kreitman, N. (1986). Alcohol consumption and the preventive paradox, British Journal of Addiction, 81, 353-363.
- Kuusi, P. (1957). Alcohol Sales Experiment in Rural Finland, Helsinki: Finnish Foundation for Alcohol Studies, vol. 3.
- Maccoby, N., Farquhar, J.W., Wood, P. and Alexander, J. (1977). Reducing the risk of cardiovascular disease, Journal of Community Health, 3, 100-114.
- Mäkelä, K. (1980). Differential effects of restricting the supply of alcohol: Studies of a strike in Finnish liquor stores, Journal of Drug Issues, 10, 131-144.
- Mäkelä, K., Room, R., Single, E., Sulkunen, P. and Walsh, B., with 13 others (1981). Alcohol, Society, and the State: 1. A Comparative Study of Alcohol Control, Toronto: Addiction Research Foundation.
- Moore, M. and Gerstein, D., eds. (1981). Alcohol and Public Policy: Beyond the Shadow of Prohibition. Washington: National Academy Press.
- Morawski, J., Moskalewicz, J. and Wald, I. (1987). When unthinkable becomes reality, presented at a conference on Statistical Recording Systems of Alcohol Problems, Helsinki, September 14-18.
- Norström, T. (1987). The abolition of the Swedish alcohol rationing system: Effects on consumption distribution and cirrhosis mortality, British Journal of Addiction, 82, 633-641, 1987.
- Österberg, E. (1988). The 1972 and 1985 Finnish alcohol retail outlet strikes, presented at the 14th Annual Alcohol Epidemiology Symposium, Berkeley, California, June 6-10.
- Partanen, J. (1987). Serious drinking, serious alcohol policy: The case of the Soviet Union, Contemporary Drug Problems, 14, 507-538.
- Room, R. (1975). Minimizing alcohol problems, pp. 379-393 in: Morris Chafetz, ed., Proceedings of the Fourth Annual Alcoholism Conference of the National Institute on Alcohol Abuse and Alcoholism: Research, Treatment and Prevention. DHEW Publication No. (ADM) 76-284, Washington: USGPO.
- Room, R. (1981). The case for a problem prevention approach to alcohol, drug and mental problems, Public Health Reports, 96, 26-33.
- Room, R. (1984a) Alcohol control and public health, Annual Review of Public Health, 5, 293-317.
- Room, R. (1984b). A `reverence for strong drink': The lost generation and the elevation of alcohol in American culture, Journal of Studies on Alcohol, 45, 540-546.
- Room, R. (1986) Kettil Bruun, 1924-1985: An appreciation, Drinking and Drug Practices

- Surveyor, 21, pp. 1, 42-49.
- Room, R. (1988). The dialectic of drinking in Australian life: From the Rum Corps to the wine column, Australian Drug and Alcohol Review 7:413-437.
- Rorabaugh, W.J. (1979). The Alcoholic Republic: An American Tradition, New York & Oxford: Oxford University Press.
- Ross, H.L. (1984). Deterring the Drinking Driver: Legal Policy and Social Control, Lexington, MA and Toronto: Lexington Books, 2nd ed.
- Schechter, E.J. (1986). Alcohol rationing and control systems in Greenland, Contemporary Drug Problems, 13, 587-620.
- Seeley, J.R. (1960). Death by liver cirrhosis and the price of beverage alcohol, Canadian Medical Association Journal, 83, 1361-1366.
- Smith, D.I. (1987). Should maximum alcohol content of beer sold in Western Australia be restricted?, Australian Drug and Alcohol Review, 6, 93-104.
- Smith, D.I. (1988). Effectiveness of restrictions on availability as a means of preventing alcohol-related problems, Contemporary Drug Problems 15:627-684.
- Skog, O.-J. (1986). An analysis of divergent trends in alcohol consumption and economic development, Journal of Studies on Alcohol, 47, 19-25.
- Terris, M. (1967). Epidemiology of cirrhosis of the liver: National mortality data, American Journal of Public Health, 57, 2076-2088.
- Wagenaar, A. (1983). Alcohol, Young Drivers, and Traffic Accidents. Lexington, MA: Lexington Books.
- Wald, I. and Moskalewicz, J. (1984). Alcohol policy in a crisis situation, British Journal of Addiction, 79, 331-335.
- Wallack, L. and Barrows, D.C. (1982/3). Evaluating primary prevention: The California 'Winners' alcohol program, International Quarterly of Community Health Education, 3, 307-336.
- Warburton, C. (1932). The Economic Results of Prohibition, New York: Columbia University Press.