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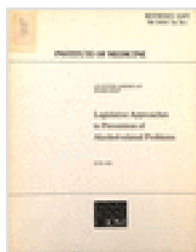

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Legislative Approaches to Prevention of Alcohol-Related Problems: An Inter-American Workshop
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# LEGISLATIVE APPROACHES TO PREVENTION OF ALCOHOL-RELATED PROBLEMS: AN INTER-AMERICAN WORKSHOP

Proceedings

INSTITUTE OF MEDICINE

June 1982

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C. 1

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The Pan American Health Organization provided vital assistance in the planning and execution of the workshop through Rene Gonzalez, a member of the workshop advisory committee, and Marilynn Katatsky, who served as liaison between PAHO and the Institute of Medicine. As host for the workshop, PAHO also provided superb facilities and unfailingly responsive staff support in the persons of Luis Larrea Alba, Jr., chief of conference and general services, and Luiz Gonzalez, conference officer.

The stimulating content of the workshop stemmed from both the very high caliber of the written contributions of all the presenters and discussants, and the advice of a most enthusiastic and knowledgeable group: John Bryant, former Deputy Assistant Secretary for International Health and his staff in OIH--Linda Vogel, Rose Belmont and Marlyn Kefauver; the members of the workshop advisory committee; and Leland Towle and Berkley Hathorne of the National Institute on Alcohol Abuse and Alcoholism, and Alcohol, Drug Abuse and Mental Health Administration, respectively.

Workshop participants were most appreciative of the illuminating insights provided by Peter D. Bell, President of the Inter-American Foundation, who spoke informally following dinner at the National Academy of Sciences the first night of the workshop. Bell offered comments on the local impact of alcohol consumption from the perspective of the extensive experience in community development activities in a number of countries in the Americas.

An important contribution to the organization of the effort was made by Martita Marx and Maria Gil-del-Real of The Robert Wood Johnson Foundation who used their bilingual skills to facilitate communication with Spanish-speaking participants.

Finally, my great appreciation goes to those at the Institute of Medicine who provided vital input and helped bring the workshop to fruition: my colleagues Wil Lybrand, Karen Bell and Barbara Filner; Betty Craig, for her tireless assistance and wise counsel in both the pre-workshop phase and in the editing of these proceedings; Mireille Mesias and Azora Irby, who provided able administrative assistance prior to the workshop; and Lynette Bates, whose expertise on the word processor helped make timely production of these proceedings possible.

Alan K. Kaplan



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# PREFACE

It has long been recognized that national economic progress often carries with it some unforeseen ripple effects. One such effect is seen in the problems that are associated with the increased ingestion of alcohol-containing beverages. In recent years, widespread problems in the world economy have turned the spotlight on the need for greater material progress in many parts of the world. The sudden, sharp rise in oil prices, acute shortages of food in certain nations, the falloff in productivity in the OECD (Organization for Economic Cooperation and Development) countries, and the problems produced by rising populations in developing countries have raised serious questions about the ability of governments to improve their domestic economic situation. The response to these developments in the Americas has been for governments to concentrate single-mindedly on economic growth to avert an immediate decline in their standard of living, or to accelerate their longer-range economic well-being.

This workshop was thus unusual. It attempted to look at one phenomenon which often accompanies economic progress -- increased alcohol consumption. The report is a unique contribution to Latin American/United States understanding of this aspect of economic growth. It examines the impact that accelerated efforts to improve a country's material circumstances can have on one facet of the better life -- the potential rise in alcoholism and alcohol-related health problems, including accidents and violence. It explores the lessons, both positive and negative, that may be learned from the experience of a variety of nations and that might have a bearing on those trying to encourage improved economic performance, while at the same time attempting to avoid the serious pitfalls associated with the likelihood of increased alcohol consumption. The papers included in this volume were presented at a workshop sponsored by the Institute of Medicine of the National Academy of Sciences, and held at the Pan American Health Organization in Washington, D.C. from March 8 to March 10, 1982.



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The idea for this workshop grew out of a recognition that an exclusive focus by governments on economic growth has sometimes had a destabilizing effect on the health and well-being of their populations. In some, a sharp rise in drinking, alcohol abuse, and alcoholism has gone hand-in-hand with "progress." These problems have come to be associated with Engel's law: i.e., when family incomes rise, the proportions spent on food and other necessities decline. Monies spent on discretionary items such as imported or domestic alcoholic beverages generally increase. In addition, growth policies can also indirectly affect the prevalence of important alcohol-related problems including violence, motor vehicle accidents, mental health problems, alcoholism, cirrhosis of the liver, and other diseases of alcohol.

Many policies, designed to increase economic productivity, often encourage large-scale internal migrations from the rural countryside to towns, and changes in employment from farming toward industry and services in urban locations. This often results in more families dissolving, more people living in crowded forms of housing, and more stress arising from employment in different types of settings, requiring different skills and aptitudes. All of these provide a climate for the increased use and abuse of alcoholic beverages. Thus, a number of countries with increasing economic growth have found themselves with a thriving domestic alcohol industry, providing desirable jobs and tax revenue, alongside a rapidly rising series of serious health problems related to alcohol.

This workshop was organized to examine whether these phenomena could be dissociated. It sought to review the data available, and the experiences of many countries, and to bring this information more effectively to bear on the important policy questions relating to economic growth, alcoholism, and alcohol- related health problems. The aim was to provide those with policy-making responsibilities throughout the Americas with improved knowledge to apply to the inescapable task of making decisions about this intensely controversial issue. The focus of the conference was on the alcohol "drinking" problem as it is seen by elected or appointed public officials, as distinct from the views of those health professionals who specialize in the field of alcohol treatment or research.

Over the past half-century, peoples of the Americas have increasingly turned to their governments for the resolution of many controversial questions. These problems have been wide-ranging in their economic cultural, religious, social, and geographic implications. They have often required a difficult balancing of judgements about both costs and benefits. As these governmental responsibilities have grown, public priority choices have become an immensely more difficult task.



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Because of this reality, the questions asked by individuals in public life about health problems such as alcoholism and alcohol abuse are quite fundamental and basic. The first is generally whether an issue can be ignored because it is not that serious a problem or because its resolution would be highly controversial. So with alcohol. Given other priority concerns, is this an issue that will go away without much attention, or are the economic and health consequences of alcoholism and alcohol abuse likely to be so significant -- involving huge increases in death rates, accidents, and other problems -- that governments will have to address the problem?

The second question is often asked by countries that feel they have to respond to this growing health problem. Given their particular culture, history, political institutions, and experience with the temperance movement, are there governmental policies that could be adopted to moderate the alcohol problem in their nation?

The third question is equally pragmatic. If there are policies which can be adopted, what are their potential political and economic consequences and what are the likely health gains to be derived from their adoption?

The organizers of this conference recognize that these are not easy questions, nor do they have a simplistic or a uniform answer. For herein lies a tautology. In order to address these questions for each country in the Americas, one needs the results of long-term research studies and the experience of policies tried within the limits of each nation's political institutions.

On the other hand, as Odin Anderson of the Univerity of Chicago has written, in areas such as this one, history shows that research follows a public consensus that there is a problem, not the other way around. Thus, major research cannot be undertaken until the public agrees that a serious problem exists.

One way out of this dilemma would be to use one country's experience as a natural laboratory for answering another country's questions about itself. Recognizing the limits in the applicability of findings across geographic borders, it provides an approach for gaining a consensus on a need for action in one nation based on the research and practical experience of another.

The need for this type of exchange takes on an increasing importance in today's world. We are living in an era where the majority of governments, regardless of their political form, are generally short-lived. In recent years, the average government, whether elected or appointed, has been able to stay in office such a brief time that it is usually unable to implement its own domestic or foreign policies. This trend has resulted in a change in the



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# WORKSHOP BACKGROUND AND OVERVIEW

Alan K. Kaplan

The Institute of Medicine's inter-American workshop on alcohol-related problems was a product of the convergence of growing international interest in the relationship between health and economic development, and increasing concern among public health leaders about the medical, social, and economic consequences of alcohol consumption. "It is a matter of concern," Charles Chassoul told the participants in his keynote address, "that, in recent decades, the consumption of alcohol and the problems associated with it have increased throughout the world, both in the rich and in the poor countries.... We must appeal to the sense of responsibility of national leaders to induce them to adopt the appropriate controls."

## Genesis of the Workshop

In pursuit of the World Health Organization's goal of "Health for All by the year 2000," the WHO European Regional Office convened a meeting in May 1980 in Copenhagen to explore the need for greater understanding of the relationships between health and economic development. Meeting participants agreed on the desirability of exchanging ideas on common health problems across national boundaries and between developing and developed nations.

The Office of International Health in the U.S. Department of Health and Human Services (DHHS) then suggested that the Institute of Medicine (IOM) consider conducting one or two workshops that would facilitate such an exchange. Further discussions involving WHO, the Pan American Health Organization, and cognizant Public Health Service agencies, led to decisions a) to focus on the issue of prevention of alcohol-related problems in the region of the Americas, and b) to examine legislative approaches toward such prevention, an aspect of the problem that had received little attention outside of the industrialized countries but was emerging as of immediate interest in the region. Accordingly, an advisory group was assembled in October 1981 under the direction of Robert J. Blendon to advise the Institute on the workshop agenda and participants. The workshop took place March 8-10, 1982 at the Pan American Health Organization in Washington, D.C..



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This background and the concerns giving rise to the workshop are recounted in detail in the opening remarks of Frederick Robbins, Hector Acuna, and John Bryant. Subsequent chapters include the full texts of the papers delivered in the respective sessions. Four presentations were followed by discussants' prepared remarks (two each, except for one presentation when a scheduled discussant was unable to attend). In addition to the formal presentations, the workshop schedule included discussion regarding both the specific papers and more general alcohol policy issues.

## Workshop Overview

The function of this overview is to serve as a brief guide to the proceedings. At the outset, however, three key concepts guiding workshop planners warrant further comment.

The emphasis on legislative approaches toward reducing alcohol problems reflects growing interest of the PAHO region in exploring the results of making alcohol consumption either less convenient (through fewer hours of sale and/or number of sales outlets) or more expensive (by raising the price through taxation). Thus, controls on supply, which generally are considered the core of legislative measures affecting alcohol consumption, are discussed at length. Participants also focused on ways to affect consumer demand, including public education and advertising regulations, as well as environmental interventions.

The second key concept, prevention, signals an increasing interest in the use of non-personalized, society-oriented measures to reduce the burden of alcohol-related problems, as distinguished from programs and policies aimed at helping persons who experience problems directly caused by drinking. Participants in this workshop thus focused on prevention and not treatment, but in so doing did not intend to minimize important policy and research questions regarding (leaving definition aside) those who experience the disease of alcoholism.

The last concept is embodied in the choice of the phrase "alcohol-related problems." An alternative would have been "alcoholism," but the overall goal of the workshop was an examination of alcohol's broad economic and social effects on industrialized and developing nations in the Americas, rather than on specific drinkers. The choice was not meant to exclude consideration of effects on individual health, but was an effort to expand the focus of this particular meeting to encompass the relationship between alcohol and such problems as productivity in the workplace, traffic accidents, violence and crime, and family disruption.



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## The First Day

The opening session, in keeping with the original impetus for the effort, concentrated on the impact of alcohol problems on economic development. Starting with the question of whether alcohol consumption can be said to have adversely affected such development and the growth of per capita Gross National Product in the industrialized nations, Levine argued that "on the basis of the historical experience of the United States, Britain and other European countries, consumption does not appear to have inhibited (such) development."

Mosher then examined the obverse question: the extent to which development might itself engender alcohol-related problems. His specific focus was tourism and the assumed economic benefits of its expansion in the developing world. "There is the possibility," he states, "that expansion (along with supportive fiscal and tax policies) fuels increases in alcohol availability and consumption, which in turn leads to increases in the incidence of alcohol problems in less developed host countries. If so, then the structure of the tourism industry itself becomes a public health concern."

Against this backdrop the workshop successively examined research findings about the extent of alcohol-related problems in the Americas, studies of community drinking pratices, and Latin-American historical and cultural factors contributing to current consumption patterns.

What one finds, Caetano told the participants, is evidence in many countries of significant health damage suffered by individuals as a result of alcohol consumption (liver disease and psychiatric hospitalization), as well as studies indicating a link between consumption and such problems as accidents and violence. However, he argued, the legacy of emphasizing the disease of alcoholism in alcohol research has been a delay in ascertaining and thereby confronting the full range of alcohol-related problems: "Those diagnosed as alcoholics are a different population from those with alcohol problems who have not reached the clinic door." Despite the disease model's important contribution to fostering treatment of alcoholics, he concluded, the time has come for more broadly focused research and prevention efforts.

Anthropologist Heath, after reviewing in detail the sociocultural history of alcohol consumption in Latin America, suggested that the target of the broader effort might be elusive: "An important generalization from Latin-American experence is that alcohol-related problems are, like alcoholics and alcoholism, truly very rare -- at least in comparision with populations in the rest of this hemisphere, and much of the rest of the world... Latin-



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Americans, by and large, seem to feel that they suffer few problems that can be related to alcohol use, either their own or on the part of significant others. It is even more significant when one considers that these studies often refer to populations among whom heavy drinking occurs regularly and where drunkenness is both frequent and acceptable."

The Caetano and Heath presentations raised serious questions about the nature and extent of alcohol-related problems and brought into focus the divergent perspectives of two disciplines: epidemiology and anthropology. "Although it is possible to agree with Dr. Heath that alcohol causes less social disruption or deviant behavior in Latin America than in, for example, Anglo America," Negrete asserted, "data on mortality from alcohol-related causes indicate that alcohol abuse constitutes an equally major public health problem in both regions."

Endorsing the development of interdisciplinary studies (epidemiological and anthropological), Medina urged that greater attention be given to the impact of current socioeconomic trends upon the patterns of alcohol consumption stemming from historical events: "Moderate consumption obtains only if the sociocultural environment offers a coherent context. The secularization of modern life tends to weaken the common rules in this regard and, therefore, to facilitate anomalous behaviors. Furthermore, the low socioeconomic level, the marginality, and the anomie of many urban population groups will generate greater intemperance."

## The Second Day

The focus shifted to an examination of alternative public policies for the prevention of alcohol-related problems, with specific emphasis on legislative control measures. Setting the framework for the discussion were presentations concerning the recently completed International Study of Alcohol Control Experiences (Makela 1981) and the National Academy of Sciences' report on alcohol policy (Moore and Gerstein 1981). Formal presentations also included an examination of research findings on the impact of specific control measures and a survey of alcohol-related legislation in Central America and Panama.

"There are three kinds of preventive policies," Gerstein said: "regulating the terms and conditions of availability of alcohol and places in which to drink it (regulating supply); trying to influence people's drinking practices directly through pedagogical efforts and legal stipulations (shaping drinking practices directly); and making the external environment less hostile or risky so that potentially damaging consequences of intoxication are reduced (reducing environmental risk). These three types are related to each other



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quite directly. Supply policies try to control two of the elements that are necessary to every alcohol-related problem: alcohol itself and places in which to drink it. Policy on drinking practices presumes that alcohol and consumption places (public and private) are available, and tries to influence how people take advantage of them, in terms of how much, how often, or what activities drinkers pair with consumption. Finally a policy designed to reduce environmental risk presumes that people will be drinking, getting drunk, and putting themselves in danger in various ways. The object of these policies is to limit the severity of the consequences by making the environment less hostile."

Smart's review of the impact of various control measures covered studies of alcohol availability and consumption, changes in laws governing outlets and hours of sale, price and taxation, laws relating to age of purchase and consumption, and advertising controls. "While allow(ing) only some tentative conclusions," Smart observed, "the empirical evidence in total suggests that prevention of alcohol-related problems depends upon holding availability and prices constant or even reducing availability, keeping access for young people limited, and hoping that the present trend towards a plateau in alcohol consumption continues where it has begun. In certain countries it may be possible to make large changes in price or availability, but in order to have a substantial effect they must be very large, probably larger than most governments will consider."

Endorsing Smart's overall conclusions about prevention policy, Beaubrun emphasized several studies indicating an inverse relationship between the real price of alcohol and liver cirrhosis mortality, hospital admissions for alcoholism, and road traffic accidents. He then addressed the drunk driving problem in greater detail. "International experience shows us," he said, "that in the short run Scandinavian-type (strict blood alcohol concentration) laws, especially if coupled with some responsible implementation and high visibility, result in significant reduction in accidents and mortality but that in the long run this deterrent effect tends to be lost even in a few years, as public perception of the threat of being caught recedes. Certainty of detection is the important variable and not severity of punishment. Celerity of punishment has yet to be properly evaluated."

Legislation pertaining to alcohol in various countries of Central America was reviewed by Arroyo. Summarizing a survey done in 1981 for the Central American Ministers of Health, he reported that "All the countries of the area have comprehensive alcohol legislation. Laws enacted at the beginning of independence are still in force and reflect the legal system that ruled our relations with Spain during the colonial era. (But) legislation has been primarily centered on economic and fiscal matters.... Priority has rarely been assigned to the health aspects of the problem, and we



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professionals and other persons interested in these tasks have been unable to provide scientific and technical data to support passage of adequate legislation. The magnitude of the problem to be faced is evident if, in addition, we bear in mind that in some countries morbidity and mortality rates suggest other priorities; that the economic structure of these countries encourages the cultivation of grains and the production, marketing and consumption of alcohol, and, especially, that the population at large and even health workers accept and tolerate these habits."

From Katatsky, Medina-Mora, and Rootman came words of caution about the applicability of a heavily control-oriented policy. Greater impact in the short run, Katatsky argued, is likely to come from educational programs that can be mounted by the health authorities on their own without the necessity of battling for legislative changes affecting alcohol availability. "Short term," she said, "I don't think we are going to see any significant deliberate attempts at changing supply. I think we can expect to continue to see emphasis on the demand side, with an increasing number of educational programs."

Medina-Mora pointed to "trade-off" considerations: "In many regions it might be economical to drink alcoholic beverages because they have calories and are cheaper, less harmful, and more available than other beverages such as water or milk. In such situations it would be necessary to raise the standard of living simultaneously with increasing control of alcohol availability, or else side effects might become more dangerous than permitting the sale of alcohol."

"Furthermore," she continued, "the alcohol industry does represent a considerable amount of economic activity. Countries that wish to promote their economic development will have to deal with the dichotomy that although they want to reduce the production of alcohol, they also have an interest in increasing tax revenues."

For Rootman there was concern about the locus of activity as well as its content. Rather than emphasize legislative controls imposed from a central authority, he observed, a community level response to alcohol-related problems (as exemplified in WHO's Community Response Project initiated in 1976 with the participation of Mexico, Scotland and Zambia) was also crucial to a comprehensive prevention policy.

The importance of the community response study as carried out in Mexico, Campillo-Serrano had observed the day before, "is that in various ways we overcame the limitations outlined by Dr. Caetano in connec- tion with previous studies undertaken in Latin America. We responded ... first by abandoning the rigid medical model of alcohol as a disease, and then by looking at social and legal problems .... I believe that this study created a model that is worthy of being copied in other countries of the region."



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## The Third Day

Norman Sartorius opened the morning session with a wide-ranging analysis of WHO's efforts to move toward its goal of "Health for All by the Year 2000." Relating the goal to mental health programs in general and alcohol problems specifically, Sartorius reviewed a number of organizational and scientific dilemmas confronting alcohol policy makers. Nevertheless, he concluded, "the size of the problem and its urgency force us to act in spite of ambiguity. We have things in front of us that we can do at the level of the individual and the community. We don't have to wait."

The last part of the workshop consisted of small group discussions of a draft statement of consensus views that sought to reflect the exchanges of the first two days. That draft, developed by William Lybrand (who had served as workshop rapporteur), along with comments of the small group chairmen (Caetano, Gerstein, and Room), formed the basis of a revised consensus statement that was sent to the Advisory Committee and participants for review. The resulting document appears in the appendix.[1]

## Conclusion

The inter-American workshop was a meeting of experts from a variety of backgrounds, cultures and nations. It was by all accounts a successful venture in transnational communication and deliberation. But it was also a spirited meeting, encompassing debate as well as consensus, and probably leaving as many areas for future inquiry as those on which it shed new light. Accordingly, the reader is encouraged to delve first into these proceedings in order to collect context and nuance for the statements in the appendix. The workshop objective was not so much consensus, although a significant amount emerged, as it was exploration and analysis. The objective of these proceedings, then, is to contribute to greater understanding of the complexities of a compelling public policy issue -- complexities apparent in the following quoted comments made by various participants during the workshop sessions:.

> ...If I understand the anthropological method correctly, it is to look at the ordinary everyday events and to ignore, if possible, the unusual. So the anthropologist might well identify as a rare event what the epidemiologist begins to consider an epidemic because the latter goes out and focuses on deviant behavior, and, if he finds a 3, 4, or 5 percent occurrence rate, he considers this a highly prevalent problem. Thus, these two ways of looking at a given situation might give us different pictures of reality. Yet in the totality of our task they both inform us, because what the anthropologist views as behavior integral to a culture is



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therefore behavior unlikely to be easily susceptible to modification by legislation. On the other hand epidemiologists may tell us that such behavior is bound to create a certain level of problems that requires behavior changes in order to prevent serious public health problems. It is in this interplay that we may yet find the information we need to make a public policy approach workable at all.

...I don't think the analogy to early industrialization applies as much today. We are seeing more and more workers engaged in activities that, relatively speaking, are sedentary, so that the advantages of alcohol's caloric content are somewhat minimized. In addition, with the shift in activity from brawn to brain, workers are engaged in activities that place a high premium on motor control, judgment, perception, and rapidity of response in operating very demanding technical machinery. All this creates a different kind of challenge to some of the traditional patterns of alcohol use.

...With respect to the history of alcohol research in Latin America, we must keep in mind that it is very costly; a society might decide its priorities for expenditure of very scarce resources point in other directions.

...If we wish to have laws on alcohol problems passed, we must convince communities, not just politicians, that there truly are problems. Until we do this, laws may be passed, but they may not be enforced.

...The data on the dangers of alcohol consumption from this hemisphere are extremely high. Forty-seven percent of all male admissions to our largest general hospital were alcohol-related in one survey by a doctoral student in 1979, forty-seven percent of all male admissions and twenty-six percent of the total admissions, male and female.

...We have an initial study showing that the expenditures for alcohol-related problems represent 630 million dollars per year in our currency. That represents an enormous cost, but we can seldom note this because it is a hidden cost. It is hidden in things such as loss of worker productivity, accidents in construction or other types of industry, absenteeism, and a lowered standard of living. Since all of this is not readily apparent, it is difficult for society to comprehend the full magnitude of the problem.

...The notion that alcoholism as a disease somehow contradicts or stands in contrast to alcohol problems is false. As a disease, alcoholism is a very important alcohol-related



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problem. In fact we are really beginning to recognize that prevention strategies and the broader concepts of alcohol problems can be viewed as being in tandem or parallel with the alcoholism concept.

...One needs to think of prevention in terms of an integrated approach, not limited to changing drinking behavior alone, but dealing with a number of societal issues. We went into one community with a great idea of trying to interest people in alcoholism treatment in order to increase their awareness of alcoholism as a serious problem, and what we met were people saying, 'Look, that is not a problem. I mean, yes, it is a problem, but what about the fact that I don't have a house to live in? What about the fact that there is no sewage system? What about the fact that the oil company that moved in here just closed down one of the two plants for six months, and I have to go somewhere else?' And I think one of the lessons from that experience was that in terms of trying to work prevention of alcohol-related problems into those settings, we have to confront the overall problems of those communities, and in fact, alcohol does touch on all of those community issues.

## Notes and References

### Note

1. On April 14, 1982 the statement of consensus views, as reviewed by the advisory committee and DHHS and PAHO liaison, was delivered to the Office of International Health (DHHS), for its use in preparation for the WHO World Health Assembly technical discussions on alcohol problems. It was emphasized that the statement comprised a perceived consensus of the majority of the participants, not necessarily the views of each and every one, inasmuch as time had not permitted a complete distribution for review. The consensus statement appearing in Appendix A does reflect review by all the participants and, while incorporating several participant responses, is in all essential respects the same compilation that was transmitted to OIH. The statement embodies the opinions of all those identified as workshop participants in Appendix B except two, whose alternative opinions appear in their entirety following the consensus views.



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# CHAPTER ONE

## WELCOME AND INTRODUCTORY REMARKS

Frederick C. Robbins

Hector R. Acuna

John H. Bryant

## KEYNOTE ADDRESS

Charles Chassoul Monge

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# WELCOME AND INTRODUCTORY REMARKS

Frederick C. Robbins

It is my pleasure to welcome you on behalf of the Institute of Medicine and the National Academy of Sciences, of which it is a part. We are most appreciative of the sponsors of this conference, particularly Dr. John Bryant of the U.S. Department of Health and Human Services, for stimulating and encouraging the development of this workshop. The Pan American Health Organization (PAHO) has been, of course, very helpful and these facilities are an excellent place to have this kind of a conference. My esteemed colleague, Dr. Hector Acuna, is a marvelous host, and I always enjoy my association with him. Dr. Robert Blendon has done an exceptional job as chairman of the Advisory Committee responsible for the organization of this meeting, along with the other members listed in your program.

We also are delighted that so many of you agreed to participate. The subject of this workshop is obviously one of importance around the world and one of great difficulty of solution. All of our countries have had experiences with it. The United States has had some very notable experiences, particularly between 1920 and 1933 when we had national Prohibition. The persistance of the problem reflects its very importance and size.

The National Academy of Sciences and the Institute of Medicine have been very interested in this topic over some time and have issued several relevant reports. From our point of view, this is an important area, and we hope to learn from you; perhaps there is something we can contribute as well, and I look forward to participating as much as I can.



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## Hector R. Acuna

It is, indeed, a great pleasure to welcome you to the Pan American Health Organization today, and I want to express my sincere appreciation to the Institute of Medicine for affording us the opportunity to host this Inter-American Workshop on Legislative Approaches Towards the Prevention of Alcohol-Related Problems.

When the Institute of Medicine approached us two years ago, requesting our assistance in selecting a topic for this workshop, the World Health Organization was deeply involved in a number of significant activities in the alcohol field. The passage of Resolution 32.40 by the World Health Assembly in 1979 marked a major shift in our thinking and policy. That resolution recognized the importance of alcohol-related problems and urged member states to take appropriate measures to reduce the consumption of alcohol. While the possible relationship between alcohol-related problems and the overall consumption level of alcohol has been previously discussed in other public forums, it was the first time that the World Health Assembly had given it such attention. It is a controversial idea, and one that some contend steps far beyond the traditional domain of public health practice. However, much of what we will be doing over the next 18 years to accomplish the goal of "Health for All by the Year 2000" could also be considered as "radical." What we are talking about is a dramatic shift in thinking, the import of which is just beginning to be appreciated. For this reason, this workshop is particularly important to us at this time.

While we have been aware of the need to cooperate with other sectors, nowhere is this need greater than in the case of alcohol problems. If prevention is envisaged in its broadest terms, then we will have to turn our attention to issues of social welfare, education, and economics which heretofore we did not analyze thoroughly.

The simple fact is that while governments as a whole can significantly affect drinking practices and, concomitantly reduce alcohol-related problems, the health sector per se cannot. What we can do, however, is put together a convincing case for action and try to delineate how that action might be carried out. Although a considerable amount of research has been directed at the application of demand-reducing strategies, we have relatively little data on the impact of supply reduction measures, particularly in developing countries.



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Let me say a few words about the developing countries of our region and the work we have been doing in the alcohol field, first, because I think it is germane to your discussions, and secondly, because we are proud of some of our accomplishments of the past decade or so. In general, the trends in alcohol problems which we are beginning to see in the region are alarming. A multinational survey conducted by the Pan American Health Organization in the mid-1970's showed that heavy drinking, particularly by young adult males, was much more widespread than we had previously thought. The numbers of people affected or potentially affected by alcohol problems is staggering. With more than one-third of adult males reporting high levels of heavy drinking in three of the five cities surveyed, the impact on health, social welfare, and economic development is clearly of such proportion as to warrant swift and direct government intervention.

While few of the governments of the region have established alcohol programs, there are considerably more today than there were a decade ago, and the list keeps growing. The increased world-wide attention given to alcohol-related problems has had a lot to do with this development. However, more importantly, governments are beginning to recognize that prevention can be effectively achieved at a social and economic cost which is well within their reach.

I would just like to remind you that the World Health Assembly has scheduled Technical Discussions on Alcohol in May [1982]. For this reason we will be looking forward to the results of this workshop with keen interest.

I am very much impressed with the very demanding agenda for the next three days, and wish you every success in your deliberations.

## John H. Bryant

It is a pleasure to be here and to see so many distinguished people in this field here to deal with this important subject.

I think you will be interested in the genesis of the set of ideas leading to this conference. In May 1980, immediately prior to that year's World Health Assembly in Geneva, a few of us convened a small conference with the World Health Organization, and particularly its European office, along with the Pan American Health



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Organization, as interested participants. Shortly before, the World Health Organization had put forward the idea of "Health for All by the Year 2000," at that time a somewhat ill-defined but very important concept.

A number of us felt it was very important that "health for all" should be seen as a goal, not for poor countries alone, but rather that it should be seen appropriately as applying to all countries. As a consequence, for the Geneva meeting we brought together representatives from about 20 nations to examine the implications for the more developed countries. Four -- the Soviet Union, Norway, Canada, and the United States -- offered themselves as case studies. We had invited a number of developing countries to participate so as to provide perspective in looking at the problems of the more developed countries. The input of the less developed countries brought an unpredicted outcome, one which led to our being here today. But let me come to that in a moment.

The problem that faced the more developed countries was how to define "health for all." It was most succinctly stated by the delegate from the Netherlands, who said that if "health for all" means universal access to basic health services, his country has had that for 20 years, but it does not have "health for all." He noted problems of alcoholism and drug abuse, and industrial toxicity, and statistics showing that on any given day 20 percent of the labor force was absent from work, ostensibly for health reasons.

These observations led into a long list of problems that exist in the most developed countries and that relate to health. In the course of developing that list, the less developed countries pointed out that even though their current priorities might be in areas of communicable diseases and provision of health services, there was not a single problem on the list of the more developed countries that those from less developed nations could not claim as one of their own: patterns of disease; problems of planning, implementing and managing health systems; health manpower development; research issues; etc.

This revelation, if you will, that all countries did indeed share the same set of problems, even though different countries would have different priorities, led us to ask another set of questions. If we all have the same set of problems, but at different stages, what is the sequence through which specific problems will emerge as priorities? That is, which current problems may demand priority attention in the future? And, can countries learn from one another? Should we think in terms of prospective priorities so that countries which do not yet face a major problem will recognize that it may be on their doorstep a decade or two from now? That brought us to the further question of whether countries can learn from one another's experiences in order to steer around



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certain problems. If they can predict which problems are on the way, to what extent can they avoid them and/or at least prepare for them in a more effective way?

There was a substantial amount of interest in this set of questions, and we decided to pursue it further. In the fall of 1980 -- encouraged by Dr. Acuna at PAHO and by Dr. L.A. Caprio, the director of the European office of WHO -- Dr. Blendon, Mrs. Karen Bell from the Institute of Medicine, and I went to Copenhagen for a meeting to further discuss the matter and to try to decide on some concrete steps that could be taken at that time. In the course of those discussions, Dr. Blendon, in particular, helped us focus on subject areas that we could define clearly and concretely enough to develop a series of realistic policy options. One encompassed problems of the elderly; others were the problems of alcoholism, vehicular accidents, occupational health hazards, and the financing of health services. We felt this list could be used as an agenda for more developed and less developed countries to come together to look at policy options to consider for the future.

We first addressed problems of the elderly, and I will note that we had some quite successful consultations that will relate very directly to the upcoming World Assembly on the Elderly.

Then the Institute of Medicine, with Dr. Blendon's assistance, generously agreed to take on the project of organizing a workshop on alcohol-related problems. I would say that our intent was to provide a forum to define the problem and to identify the policy options, in this instance in the area of legislation. Thus, as nations face these particular problems in their future they can be guided, at least to some extent, by the experience of other countries.

Against that background we are very pleased to see this conference underway, and we look forward to learning from all of you.



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Legislative Approaches to Prevention of Alcohol-Related Problems: An Inter-American Workshop
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# KEYNOTE ADDRESS

Charles Chassoul Monge

It is as a Latin American that I am attending this meeting. In Latin America, many basic areas are very inadequate or conspicuous by their absence -- health, food, education, labor and employment, consumption, trade and savings, transportation and communications, housing, clothing, recreation or leisure, social security, and human freedom. Contrasts are a distinguishing feature of this continent: here, a city of more than 10 million inhabitants with the highest degree of sophistication, there, only a few hundred kilometers away, a poverty-stricken community whose inhabitants do not even speak Spanish, but only the dialects they have inherited from their ancestral cultures.

But we Latin Americans are imbued with a spirit of optimistic persistence, to achieve new social and economic goals that will affect our models of development and, consequently, our health activities and thus enable us to find some way of preventing the problems relating to alcohol and alcoholism.

When I learned about this meeting, I imagined that it was going to attempt to emulate the 1889 Brussels meeting at which a group of European powers agreed to abide by certain moral principles regarding African territories, including the principle of limiting the importation of hard liquor into Africa. I imagined that we were going to discuss a similar proposition for Latin America and the developed countries, and I was not distressed. I further imagined that we were going to have a frank, open, sincere and, consequently, animated meeting with the representatives of the producers of alcoholic beverages in the United States, Canada, and Mexico, and that we might find ourselves involved in wide-ranging and serious verbal disagreements. And this did not upset me in the least.

But when I received the preliminary draft of the agenda of this meeting, to which I had been invited to make this speech, and when I saw who would be present there, I must confess feeling some anxiety. I am called upon to give you my opinion on a problem that at present can only be handled by specialists in that field. I am not such a specialist and my presence here is justified solely by the fact that I have been working with an alcoholism program in my own country and have some knowledge of similar programs in other Latin American countries.



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We start from certain general assumptions: we take for granted that we are acquainted with world trends in the production and consumption of alcoholic beverages; the manufacture and marketing of these products, as well as the many commercial agreements that support them; and that, in addition, we know the effects and the damage caused by the consumption of alcohol on our peoples at their differing levels of economic and social development. We assume, in accordance with what the experts tell us, that if we are to deal with these general aspects of alcohol, we cannot adopt isolated measures in our countries; rather, when we participate in any activity in this field, we must take into account all the psycho-social, political, and economic factors that may determine it.

We are told that, if we are to prevent the damage alcohol causes in our communities, we should design effective regulatory measures and integrate them into a political posture that will lead to clearly defined and consistent government action. In addition, we should simultaneously conduct other multi-sectoral support activities so as to ensure that our preventive program is both complete and coordinated and, before beginning any program, we should inform the public honestly and accurately so that it will recognize the problem and participate in our activities. It is a matter of concern that, in recent decades, the consumption of alcohol and the problems associated with it have increased throughout the world, both in the rich and in the poor countries; that in the traditionally wine-drinking countries the consumption of beer and hard liquor is increasing; that in the beer-drinking countries the consumption of wine and hard liquor is increasing; and that in the countries where hard liquor is regularly consumed, the consumption of wine and beer is increasing. Any administrator or scientist who plans to design a preventive program should note what has happened when a population that has a specified rate of consumption of traditional beverages is urged to lower its total alcohol intake by switching to other drinks. The outcome is that that population continues to consume the traditional beverage, as well as the beverage that has been urged upon it as a moderating element.

As already noted, in approaching alcoholism, most efforts should be directed towards prevention, with education a fundamental element. However, the evaluation of alcoholism education programs is undeniably complicated by a great many economic and social factors; and if we decide to direct alcoholism education exclusively at children in schools, we know that it will have little chance of success. Educational programs, which frequently lack resources and are timid in their approach, are offset by all the organized and unorganized stimuli that induce consumption.

In addition to the inducements portrayed in the mass media, there are all the things children learn in the street, at home, or



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in other contexts about how and when and why alcohol is consumed. And if a hypothetical program were to become successful, and reduce the rate of consumption, the politicians in the government are likely to contradict it by changing policies because government revenue is falling; or a citizen may invoke his constitutional rights, claiming that no one should interfere with his personal life, that he may drink wherever, whenever, for whatever reason, and with whomever he wants. That same citizen can easily say that he drinks because he has the problems of being an educated person, or that he wants to drink more because he has the problems of being an illiterate. Or he may say he drinks because he has the burdens of power, or that he drinks because he is powerless. Or else he says that physicians recommend the consumption of a certain amount of alcohol to prevent coronary disease, or that to force the population to drink less by whatever means may mean a subsequent increase in heart disease.

What I have said brings to mind Groussac's complaint about Emerson, that he usually became obscure by being too profound or that he feared he sometimes appeared profound by being too obscure. The difficulty inherent in dealing with a subject such as we are discussing is clearly apparent to the average person.

The legal aspects of control and the prevention of alcoholism are the central theme of this conference; Popham and Schmidt fill us with enthusiasm when they say that the possible preventive value of legal measures has again become important in the prevention of alcoholism and that the available information on their effectiveness is worth analyzing. We therefore believe that this conference is both necessary and timely for the countries of Latin America, many of which are trying new approaches in this field.

From Popham and Schmidt we also take a paragraph of Edwards which further explains this matter: Edwards says that if we are not capable of managing personalities and producing a human group without neuroses, the only alternative to control the prevalence of alcohol addiction is control of the environmental conditions of drinking. Gerstein also gives us guidance when he outlines in his paper for this conference the need for practical and organized thought in considering the legislative approach as an incentive for prevention in matters of alcohol and alcoholism. The statement in Smart's paper that governments have an important role that goes beyond the treatment of alcoholics to considering laws and policies on various aspects of the prevention of alcoholism, is also an excellent message. When Heath, in his wide-ranging observations on this matter tells us, in all modesty, that he is only supplying a fragmented glimpse of a complex reality, he still provides cause for optimism.

All Latin Americans know the order of priorities established by the Ministries of Health in this field. We must add that it is



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neither a privilege nor an attractive position to defend in the field of alcoholism an activity or program that in some way fails to deal comprehensively with this health hazard. Worthy of mention are the activities carried out in Latin America by the Pan American Health Organization (PAHO) to correct this situation. The many activities this organization has undertaken in the field have made many people aware of the problem in many countries. An example of PAHO's initiatives -- if you will allow me to mention it -- is the enactment in Costa Rica of a law establishing an alcohol control agency with national jurisdiction that is responsible for research, planning, community work, education in the public primary schools, advertising, and even specialized units for the hospitalization of alcoholic patients. Today we should like to pay tribute to the Pan American Health Organization for its efforts in this regard.

I would have liked to give you an overall view of the historical development of alcohol-related problems and alcohol control programs in Latin America. However, the limited information I have available and lack of time would have caused me to make many errors and omissions if I had undertaken to deal with this topic. Accordingly, and with the permission of the audience, I am going to deal with something with which I am more familiar, namely, the situation in my country, which in essence is not very different from that in the rest of Latin America, and may be taken as more or less representative of the other countries.

Nevertheless, I must emphasize that what I have just said refers to the legislative situation, since the conduct of programs and services, and prevention rates, vary greatly from one country to another.

An alcohol monopoly was established in 1848 under Decree No. 13 issued by the President General of Costa Rica, with the rationale that: "The two most productive branches of the Public Treasury, namely the revenues from tobacco and alcohol, are steadily decreasing because the laws and regulations that underpin them have been relaxed." It was not until 1937 that a General Liquor Law was enacted. In our country today there are many ways of outwitting the law and regulations governing alcoholic beverages. Such regulations include control of the frequency of sales of alcoholic drinks, regulations governing the type of sale, hours at which beverages are sold, age limits for consuming alcoholic beverages, price controls (often with quite arbitrary differences), and differential taxes (again seemingly without rhyme or reason). Although these cover virtually all aspects of alcohol control, their enforcement is limited. In short, that is our situation, and the same could be said of many countries in Latin America. This phenomenon may possibly be even more important in other countries in Latin America. Dr. Jaime Arroyo, our distinguished visitor from Panama, has studied this aspect in Central America, and reiterates there are some laws, actually quite a few, but their real and practical enforcement is unsatisfactory.



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I cannot resist the temptation of giving another example, from my own country, where a rather unusual situation prevails at this time. Changes in the value of the currency have substantially increased the price of alcoholic beverages, and this has led a large segment of the public to stop drinking imported beverages and to consume the much cheaper beverages produced in the country. It should be noted that since the end of 1979 the per capita consumption of licit alcohol in Costa Rica has been decreasing, for the first time in 75 years. This will surely be accompanied by a large increase in consumption of the illicit beverages that are widely home-brewed by our rural population. In 1974 a law and regulations for controlling advertising for alcoholic beverages was enacted. By 1982 that advertising has become more attractive, more subtle, and in general, much better designed. We had some controversies, which is natural in this field, but which we would have avoided if the information we now have had been available at that time. But one fundamental concern is to question why the outlays on advertising for alcoholic beverages in our countries should be as great as the budget of the Department of State, of the Ministry of Youth, Culture and Sports or of the National Alcoholism Institute. We need to find why large amounts are being invested in control efforts without any effect on reducing the consumption of alcoholic beverages in general.

I do not wish to list the many Costa Rican laws on the prevention of alcoholism problems. You will be able to appreciate the legal history if we present only part of the statement of reasons of the National Alcohol and Alcoholism Code,* which at this time is being discussed by our Legislative Assembly. This statement of reasons is a very modest contribution to the purpose and objective of the meeting, to which the Institute of Medicine of the United States National Academy of Sciences has been kind enough to invite us to discuss these matters.

The opinion states that since October 7, 1936, no comprehensive law on alcohol and alcoholism has been enacted in Costa Rica. The present National Alcohol and Alcoholism Code:

- defines alcoholic beverages and the types of beverages available on the national and international market, both fermented and distilled;
- places the prospects of a National Distillery in a broader dimension, requiring the Distillery to establish its own marketing and distribution systems;
- very clearly indicates where national and imported alcoholic beverages are to be analyzed, as well as defining

*Legislative Assembly: AFFIRMATIVE MAJORITY OPINION, draft law "National Alcohol and Alcoholism Code", published in Supplement 108 of La Gaceta No.151 of 11 August 1977.



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illicit, falsified, and adulterated and prohibited alcohols, and how each of them is to be treated;

- o deals with the manufacture and bottling of distilled beverages, as well as industrial products that use alcohol. In this regard it mentions the characteristics of alcoholic beverages for import and export and sets out the rules to be followed for the export, import, and transit of alcoholic beverages in the country;

- o regulates the general aspects of importing houses, specifies the ports of loading and unloading of these beverages, and prescribes careful handling of them in the national territory;

- o stipulates who can obtain licences for selling alcoholic beverages, defines the type of shops that can sell these beverages, and regulates their sale, which will be exclusively between 11 a.m. and 2 p.m;

- o regulates the procedure for obtaining ordinary licenses, as well as the qualifications of the license holders and establishes the rule that not more than one license will be issued for every 200 citizens;

- o stipulates where shops selling alcoholic beverages are to be located and prohibits the presence in the shops of minors and the sale of such beverages to them;

- o prohibits the sale of alcoholic beverages in work places, municipal or private markets, or multi-family housing projects sponsored by government institutions.

The Code deals specifically with the treatment to be given to alcoholics by the authorities and also with the approach to alcoholics to be taken by government institutions, in particular the National Alcoholism Institute. It defines alcoholism as a disease and spells out the functions of the National Alcoholism Institute. The Code:

- o simply and clearly prohibits persons from driving passenger transportation while drunk,and sets out the authority of the police to administer expert examinations for determining the presence of alcohol in the human body;

- o clearly defines the responsibilities of the alcoholic patient with respect to his family, and establishes the procedures for ensuring that these responsibilities are fulfilled;



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- requires primary, secondary, vocational and technical schools, both public and private, to give preventive education on alcohol and alcoholism;

- regulates advertising for alcoholic drinks and establishes a registry of licenses for the sale of alcoholic beverages, located in the National Alcoholism Institute.

Finally, it names certain officials of the INSA as health inspectors and confers on them the same powers and duties as the General Health Law assigns to the health authorities. It stipulates that it is a public order law, and the most important of the transitional provisions is that which freezes the present number of licenses for the sale of alcoholic beverages, as well as their location, until the present surplus is reduced to the number prescribed.

The legal measures for the control of alcohol-related problems have so far been local or national measures. It should be pointed out that the availability of alcoholic beverages and the methods for promoting their consumption reach beyond national frontiers. In a short-sighted endeavor to promote development, regional and sub-regional economic cooperation pacts have come to favor international interests in the production and distribution of alcoholic beverages. The transnational cartels will certainly be inclined to promote an increase in the production and importation of such beverages in many countries.

We do not believe there is any supranational agency that can impose legal measures to control these situations. We must appeal to the sense of responsibility of national leaders to induce them to adopt the appropriate controls. In the first place they must be made to understand that alcohol problems are not only a heavy burden on health systems and an important factor in mortality and morbidity, but also an obstacle to development. National or international financial institutions and social and economic agencies should have been aware of these facts a long time ago.

The history of humanity is full of notable events that are the work of man. It is sometimes difficult to point out the small details that gave rise to those outstanding events. Because of the nature of the agencies and persons that promoted and organized this meeting, we are highly optimistic and full of hope that we are attending the genesis of a very important endeavor for the inhabitants of our countries.



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# Chapter Two

## INDUSTRIALIZATION, ECONOMIC DEVELOPMENT, AND WORKER DRINKING: HISTORICAL AND SOCIOLOGICAL OBSERVATIONS

Harry Gene Levine

## THE IMPACT OF ECONOMIC DEVELOPMENT ON DRINKING PATTERNS AND PROBLEMS: THE CASE OF TOURISM

James F. Mosher
and
Lenore D. Ralston

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# INDUSTRIALIZATION, ECONOMIC DEVELOPMENT, AND WORKER DRINKING: HISTORICAL AND SOCIOLOGICAL OBSERVATIONS

Harry Gene Levine

When first approached about writing a paper on the relationship of alcohol to economic development, and whether some general lessons might be drawn from the historical experiences of the U.S. and other developed countries, I suggested focusing on the subject of alcohol and work. Industrial and economic development usually involves the creation of a large class of wage laborers, and continuous struggles between employers and workers are among the most prominent features of developed and developing societies. During the various periods of British and American industrial development, the conflicts often included the question of alcoholic drink.

Accordingly, in the first two parts of the paper I briefly discuss two distinct but closely related efforts which involved employer-sponsored attacks on worker drinking. The first was the attempt of early manufacturing and industrial employers to change their employees work habits and general style of life. This effort was not primarily aimed at changing drinking patterns, but included drink as part of a broader effort. The second employer-sponsored effort I discuss was the early temperance or anti-drink reform in the United States. Here the effort was aimed primarily at changing workers drinking patterns directly in order to secure a more orderly and disciplined work force. In the third section I discuss some general conclusions to be drawn from the broad European and North American experience -- in particular, that worker drinking taken by itself does not appear to be an impediment or obstacle to economic development and growth. In the fourth section I introduce some contemporary quantitative data to test and expand upon the historical evidence.

## Industrial Employers and Pre-Industrial Workers

"It is nowadays increasingly coming to be accepted that one of the most critical, and one of the most difficult, transformations required in an industrializing society is the adjustment of labour



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to the regularity and discipline of factory work." So begins Sidney Pollard in an article on "Factory Discipline in the Industrial Revolution" (The Economic History Review, 1963). This article is part of a growing body of scholarship exploring the eighteenth and nineteenth century confrontation of manufacturers and industrialists with the people who became the working class in Europe and America (See: Thompson (1963); Gutman (1976); Dawley and Faler (1976); Dawley (1976); Laurie (1980); Rock (1979); Reid (1976); Harrison (1971); Johnson (1978); Thompson (1967). The topic of alcoholic drink runs through all of this writing -- it is part of the struggle between employer and worker.

The central question for much of the writing and analysis on early industrial and capitalist development is the resistance of rural, peasant, or pre-industrial people to the routines, schedules, and patterns of industrial work. The old, pre-industrial patterns of work, sociability, and time conflicted with the needs of the factory system and the desires of industrial capitalists. Entrepreneurs and industrialists found themselves in a permanent and ongoing struggle to transform the lives of their workers.

As Pollard (1963) points out, the early industrialists were engaged in a major cultural conflict:

> The worker who left the background of his domestic workshop or peasant holding for the factory, entered a new culture as well as a new sense of direction. It was not only that "the new economic order needed ... part-humans: soulless, depersonalized, disembodied, who could become members, or little wheels rather, of a complex mechanism." It was also that men who were non-accumulative, non-acquisitive, accustomed to work for subsistence, not for maximization of income, had to be made obedient to the cash stimulus, and obedient in such a way as to react precisely to the stimuli provided.

Recruiting workers was often a difficult problem, as observers in eighteen century Britain noted. "Labourers from agriculture or domestic industry do not at first take kindly to the monotony of factory life," noted one observer, who pointed out that "the pioneering employer not infrequently finds his most serious obstacle in the problem of building up a stable supply of efficient and willing labour" (Pollard 1963:254). In Scotland it was concluded that "on the first introduction of the business, the people were found very ill-disposed to submit to the long confinement and regular industry that is required from them...." It was said that the highlander "never sits at ease at a loom, it is like putting a deer in the plough." Workers would often leave without notice and then send for their back wages. A labor turnover of 100 percent a year was not unusual for early industrial firms.



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Even when workers stayed, employers reported major problems in overcoming their employees' attachment to traditional social customs that conflicted with the new industrial ethic. Festivals, feasts, and wakes were extremely important social and community events for most preindustrial people, and this did not change when they went to work in factories. In 1772 Josiah Wedgwood complained that: "Our men will go to the Wakes, if they were sure to go to the D---l the next. I have not spared them in threats and I would have thrash'd them right heartily if I could." In 1776 there was the same problem: "Our men have been at play 4 days this week, it being Burslem Wakes. I have rough'd & smoothed them over, & promised them a long Xmas, but I know it is all in vain, for Wakes must be observed though the World was to end with them (Pollard 1963:256).

The question of the time and routine of work life was central to the struggles between working people and their employers. Industrialists wanted workers to come to work six days a week, and work at a set number of hours each day -- often 12 or 14. Traditional, preindustrial work patterns, however, were quite different, emphasizing periods of very intense work for about four days, and then three days of much more leisurely work and of play (Thompson 1967). Monday was called "Saint Monday" in Britain and America, and was an official holiday among workers (Reid 1976). One early nineteenth century observer reported that weavers would "play frequently all day on Monday, and the greater part of Tuesday, and work very late on Thursday night, and frequently all night on Friday (Pollard 1963:256). Reid (1976:81) reports that in England in the 1840s Monday was "generally kept as a holiday by a great portion of the working classes." As late as 1864 it was as popular as ever; in Birmingham, for example, employers complained that "an enormous amount of time is lost, not only by want of punctuality in coming to work in the morning and beginning again after meals, but still more by the general observance of 'Saint Monday'" (Reid 1976:81).

The preindustrial pattern of work developed in a context in which people had control over their own time and working environment. Artisans and independent craftsmen, working at their homes or workshops, set their own pace. (Rock 1978:296) describes the general pattern for New York City in the early nineteenth century.

> A journeyman shoemaker, for example, might spend Monday and Tuesday in drinking and sport only to toil at a rapid pace the rest of the week (through Saturday) to make enough to support his family.... Work was task-oriented rather than time-oriented (many artisans, in fact, did not even own a watch). Labor patterns were irregular, varying enormously from shop to shop, from trade to trade, from week to week. The most notable symbol of premodern work patterns was the venerable Saint Monday. This was the common practice of craftsmen taking each Monday



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> (and sometimes Tuesday) off for relaxation in a neighborhood tavern, excursions to the country, or other leisurely activities.

It was precisely this pattern of independent work which the industrialists would not tolerate; and it was this pattern which workers tried to maintain in the face of strong oppostion and harsh penalities. Gutman (1976) points out that in the United States, because of the waves of immigration through the nineteenth century and into the twentieth, there was a continuous encounter between preindustrial people (from Ireland, Northern Europe, Southern and Eastern Europe, Asia, Latin America, Africa, and the American South) and the industrial system. Generation after generation were forced to give up some of the older and valued patterns and adapt to the harsh regime of factory life.

The industrialists' methods of overcoming their labor problems can be "grouped under three headings: the proverbial stick, the proverbial carrot, and thirdly, the attempt to create a new ethos of work, order and obedience." It was the third approach which was distinctive of early industrialization. "Little new in the way of the 'stick,' or deterrent, was discovered by the early factory masters. Unsatisfactory work was punished by corporal punishment, by fines, or by dismissal." In addition, employers fired workers who associated with workers' organizations and unions, and sometimes had workers arrested for engaging in the illegal activity of organizing employees. Further, "Employers were as conservative in the use of the carrot as they were in the use of the stick. For a generation driving its children to labour in the mills for twelve to fourteen hours a day, positive incentives must indeed have been hard to devise." The chief incentive was additional money, though a few employers experimented with status awards for exceptional workers (Pollard 1965:266-7).

Early industrialists believed that the major problem facing them was workers who were insufficiently "endowed with the essential qualities of industry, ambition, sobriety and thrift" that the factory system required. In their efforts to discipline their workers, employers concluded they were dealing with behavior that went on outside the factory as well as inside. The capitalists sought, therefore, to reform "the whole man ... by indoctrinating him with the bourgeois values he lacked" (Pollard 1963: 267).

> The qualities of character which employers admired have, since Weber's day, been to some extent associated with the Protestant ethic. To import these qualities, with the one addition of obedience, to the working classes, could not but appear a formidable task. (The result) was the preoccupation



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> with the character and morals of the working classes which are so marked a feature of the early stages of industrialization....
>
> Factory villages ... had special provisions and, in some cases, full-time staff to check the morals of their workers. Contemporaries tended to praise these actions most highly, and it was believed that firms laying stress on morals, and employing foremen who "supress anything bad" would get the pick of labour. Almost everywhere churches, chapels and Sunday schools were supported by employers, both to encourage moral education in its more usual sense, and to inculcate obedience. Drink and drunkenness became a major target of reform, with the short-term aim of increasing the usefulness of scarce skilled workers such as Soho's engineer erectors, who were often incapacitated by drink, and the long-term aim of spreading bourgeois virtues.
>
> In this process much of the existing village culture came under attack. Traditional social habits and customs seldom fitted into the new pattern of industrial life, and they had therefore to be discredited as hindrances to progress" (Pollard: 267-8).

The industrialists' challenge to traditional patterns, customs and values reached deep into the lives of working people. It was an effort to reorient their lives to mesh with the needs of factory discipline. However, it was not a total assault on traditional patterns, and the ethical code employers sought to promulgate was limited in particular ways. "Warnings against greed, selfishness, materialism or pride seldom played a large part" in their attacks. Further, and significantly, "sexual morals rarely became an important issue to the factory disciplinarians (as distinct from outside moralists) and, by and large they did not mind which God was worshipped, as long as the worshipper was under the influence of some respectable clergyman." In short, it was rather particular aspects of traditional culture -- hours and days of work, patterns of sociability, integration of work with play, importance of other events which made claims on the individual (festivals, wakes, etc.) -- that received the brunt of reform efforts. As Pollard suggests: "The conclusion cannot be avoided that, with some honorable exceptions, the drive to raise the level of respectability and morality among the working classes was not undertaken for their own sakes but primarily, or even exclusively, as an aspect of building up a new factory discipline" (P.270).



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To sum up, industrialization in Britain (and the United States) involved the emergence of a new class of capitalist entrepreneurs and industrialists who wanted their workers to work in historically new ways (regarding hours per day, days per week, manner when working, number of breaks, degree of sociability, etc.), and in historically extraordinary ways (in factories and shops, with machinery, etc.). In order to get workers who would work in the ways they wanted, industrialists engaged in efforts to transform the lives, habits and cultures of their employees, and to some extent of the lower classes in general.

However, working people, from the beginning, resisted the efforts of employers to transform their lives. Workers clung tenaciously to patterns where the individual or the peer group exercised control over the speed, timing, and organization of work; where play was integrated with work; and where festivals, feasts, and wakes were important, even sacred events.

The period before industrialization or significant capitalist development, in Britain and North America, was a time in which alcoholic beverages were highly regarded and widely consumed. Regular drinking and frequent drunkenness were part of ordinary life for most people, upper class as well as lower. Regular drinking was common; drunkenness was regarded as an ordinary and non-problematic consequence of drinking (Dorchester 1888; Shadwell 1903; Dulles 1940; Rorabaugh 1979).

Because in the traditional, pre-industrial culture drinking was so widespread and integrated into so many parts of life, the attack on that culture sponsored by entrepreneurial capitalists encompassed drinking practices. On Saint Monday workers went to taverns and they drank; when they went to wakes, weddings, festivals, and feasts they drank; when they took breaks from work they had a drink; when doing hard physical labor they drank. The new disciplinary order being pushed by businessmen, industrialists, and middle class reformers condemned many of the traditional social forms and offered new ones that promoted self-discipline, sobriety, piety, thriftiness, orderliness. Drink was one part of the rowdy, boisterous, and disruptive traditional culture that businessmen felt needed to be suppressed in the interests of the developing industrial order.

### Drink, Temperance, and Capitalist Development in the United States

In seventeenth and eighteenth century America, liquor was called the "Good Creature of God," even by Puritans. Doctors prescribed alcohol for virtually all ills; it was widely used as a pain reliever, stimulant and sedative. The predominant drinking



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pattern in the seventeenth century was the regular, daily use of alcohol in moderate quantities with some incidence of drunkenness. By the early eighteenth century drinking and drunkenness had increased and continued to do so throughout the century. Rum manufacture began around 1700, and mixed with juices rum became the favorite drink. The general pattern in the eighteenth century was for men and women to drink alcohol every day, at all times during the day, and in large quantities at most every special occasion. The respectable elements of society, especially the upper class, set a prodigious drinking standard (Rorabaugh 1979:27; Krout 1925).

The lower classes probably equalled the standards set by the upper class. Heavy drinking was part of occasions like corn huskings, barn raisings, court and meeting days, and militia training days. Workers in all occupations drank on the job and at scheduled breaks attended the tavern, often at the employer's expense. In New England the shops and offices were closed while workers enjoyed their "eleven o'clock bitters"; the same thing happened at four o'clock. In Portland, Maine, in honor of the breaks the town hall bell was rung at eleven and four o'clock (Kobler 1973:29; Furnas 1965:22). Sometimes employers provided the alcohol to be drunk outside working hours as well. For example, George Washington's agreement with his gardner included "four dollars at Christmas with which he may be drunk for four days and nights; two dollars at Easter to effect the same purpose; two dollars at Whitsuntide to be drunk for two days." The agreement also included "a dram in the morning and a drink of grog at noon" (Kobler 1973:31).

The beginnings of the anti-alcohol campaign can be marked by the publication of a pamphlet in 1786 by the prominent American physician Benjamin Rush. The pamphlet, "An Inquiry into the Effects of Ardent Spirits," was a founding document in the American, and then world-wide, temperance and prohibition campaigns. In his piece, Rush argued that distilled liquor was destructive of health, morality and order, and he encouraged everyone to abstain from it. Beer, wine, and hard cider, he said, could be drunk in moderate quantities. In 50 years, by the mid-1830s, the temperance cause had grown into a popular mass movement of the middle class. Much of contemporary medical, scientific and popular thought about the problematic consequences of alcohol -- including as we shall see, the idea that economic development required restricting or eliminating worker drinking -- was first developed and popularized by the temperance movement in the nineteenth century (Levine 1978, 1980).

In the late eighteenth century and early nineteenth century, temperance was still only an elite concern: the effort of upper-class and upper middle-class men concerned with the drinking comportment of the laboring class. Criticism of the colonial idea of alcohol as the Good Creature was begun, in part, as an effort to



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control the behavior of workers. In his pamphlet, Rush had encouraged farmers who hired workers to stop giving the customary daily portion of drink (rum or whiskey), and to offer other beverages instead. As an influential citizen, Rush also tried to spread the idea; "at harvest time each year Rush republished and circulated this essay in the hope that farmers might be persuaded to abandon the practice of furnishing liquor as part of the day's wage." Newspapers and almanacs also reprinted his suggestions (Krout 1925:73).

The first formal temperance association in America was formed by employers concerned with the drinking of their workers. A newspaper at the time (1789) reported that "Upward of two hundred of the most respectable farmers in Litchfield County, Conn., have formed an association to encourage the disuse of spirituous liquors, and have determined not to use any kind of distilled spirits in doing their farming work the ensuing season" (Dorchester 1888:165). This decision, by a group of wealthy commercial farmers, to band together to break with traditional patterns of work and drink represents a significant change in attitudes among an important segment of American employers. The United States at this time was overwhelmingly an agricultural nation, and on the eastern coast large commercial farms were run as businesses producing for the market. It was on these farms that many of the first encounters between modern, efficiency- and productivity-oriented employers, and tradition-oriented workers took place. However, this initial effort in Connecticut to eliminate the spirits ration was not picked up by other employers, or in other regions. Labor was scarce, and in high demand and, in this case, workers could get what they wanted. The New Haven Gazette explained that the laborer would not work without "his half pint or pint every day, and at night half his wage in rum" (Rorabough 1979:46). Like the early industrial entrepreneurs in Britain, American employers encountered resistance to their new labor discipline schemes.

In 1813 the effort to limit worker drinking picked up significant support when the first important temperance society was founded, the Massachusettes Society for the Suppression of Intemperance. Composed of men from the economic, political, and religious elite, the MSSI sought to control the behavior and habits -- especially the drinking habits -- of the mass of working people. The historian Ian Tyrell has pointed out their interests and aims:

> MSSI temperance reformers focused on the drinking habits of the mass of common people, whose manners and morals the temperance advocates no longer seemed to control.... Habits of intemperance threatened, in the view of Henry Warren, a Roxbury lawyer, to unleash terrible passions on society by "nourishing



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> among us that idle and mischievous species of population called in Europe the mob." Although temperance reformers hoped that "the laboring class would be the strength of the nation," they believed that its strength was "rapidly ... becoming weakness" under the baleful influence of intemperance.
>
> One goal of the first temperance reformers was to avert such potential threats to the existing social structure by influencing the common people. For this purpose, the Massachusetts society devoted much of its energy to the prevention of excessive drinking among laborers in both urban and rural areas. Members were alarmed at the common practice of giving laborers a rationing of spirits as part payment for their work.... The MSSI therefore set as one of its foremost tactics of reform a "friendly concern of merchants, sea-captains, and wharfingers, of respectable farmers, mechanics, and manufacturers; in a word, of all hirers of labour, not to furnish ardent spirit to the labourers" (Tyrell 1979:41).

By the early 1820s the MSSI had lost momentum, and by the mid-20s a new group, the American Temperance Society, assumed leadership and committed the movement to abstinence from distilled liquor. The men who pushed the temperance and especially the abstinence cause were not, as is sometimes thought, backward looking men who sought to restore the traditional order. Rather, as Tyrell points out: "The temperance reform attracted from its beginnings ambitious and upwardly mobile men." They were not "from rural backwaters seeking to reassert traditional values on a changing society."

> On the contrary, temperance reformers sanctioned the acquisitive and individualistic economic order developing in America. Viewed from the perspective of hindsight, temperance reformers appear as apologists for economic change; they were men who were working to create a society of competitive individuals instilled with the virtues of sobriety and industry (Tyrell 1979:125).

As Jesse Goodrich, a businessman from Worcester, Massachusetts, explained, he and other temperance advocates sought the triumph of: "Cold Water,--Capital,--Enterprise,--Industry,--Morals,--and Religion." (Tyrell 1979:130).

The transformation of temperance from a fundamentally moderationist effort to an abstinence campaign in the mid-1820s marks the



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beginning of temperance as a mass movement. The Rev. Justin Edwards, one of the most important leaders of the temperance reform in the 1820s and 30s, launched the abstinence campaign with a widely circulated pamphlet called "The Well-Conducted Farm." One pro-temperance historian later gave Edwards credit for "the chief impetus in starting the temperance reform upon a new epoch" (Fehlandt 1904:48).

"The Well Conducted Farm" was a well-written pamphlet that repeated and elaborated arguments that Rush had first made, and that had also been at the heart of the early moderationist campaign. Now, however, the premise was that complete abstinence from spirits would bring remarkable results for the employers of labor. The pamphlet reported the experience of "Mr. B., a respectable farmer in Massachusetts" whose workers, like virtually all other working men at the time, drank "a portion of ardent spirit" when they worked. "It was the common opinion in the place, that, for laboring men, who had to work hard, some ardent spirit was necessary." Mr. B., however, decided that his workers should try abstinence, and if they wouldn't give up spirits they couldn't work for him. The result of the experiment was reported as follows:

> His men went to work. And his business prospered exceedingly. His men were remarkably uniform in temper and deportment; still and peaceable. He found them everyday alike, and he could always safely trust them. What he expected to have done, he found was done in good season, and in the best manner. His men never made so few mistakes, and had so few disputes among themselves; they never injured and destroyed so few tools, found so little fault with their manner of living, or were, on the whole, so pleasant to one another, and to their employer. The men appeared, more than ever before, like brethren of the same family, satisfied with their business, contented, and happy.

"The Well Conducted Farm" described the process that we earlier discussed of the disciplining of a traditional or pre-modern labor force. This farmer was concerned with breaking traditional work habits and patterns, and with creating a new ethic of industry and thrift. This was a businessman concerned with the maintenance of his capital, and with developing the greatest productivity and efficiency from his workers.

As in the case of the early British industrialists, early temperance reform was also an attack on the social forms, patterns and customs of the traditional culture. The aim of temperance advocates was change; they sought to transform the work and social habits, attitudes and life style of the laboring class. In



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particular, they sought to change the life style of workers to make them more efficient, productive, and orderly. The effort here was also to reform "the total man" for the good of the employer. The key difference is that in this case the transformation was to be effected by directly confronting the traditional drinking habits of workers. "Sobriety" in the narrowest sense of the term was seen as the key to reforming the whole outlook and lifestyle of the worker.

The argument that employers had a profound self-interest in changing the drinking habits of their workers, or in reducing or eliminating their drinking, remained at the heart of the temperance and prohibition campaigns in the nineteenth and twentieth centuries. And it is now also important in the alcoholism movement and in public health appeals regarding alcohol problems. Businesses and industries of all kinds, it has been said repeatedly since the early nineteenth century, will benefit greatly by controlling or eliminating the drinking of their workers. Efficiency, productivity, and greater profits will be the result.

## Industrialization and Drink: Observations and Conclusions

Thus far I have discussed two distinct employer-sponsored drink-related efforts to transform traditional cultural practices aimed at securing a more stable and orderly work force. The first was concerned with drinking only as part of the broader matter of traditional work patterns and social life. The second saw drink reform as the primary lever for changing other habits and patterns. These two different approaches are really two sides of the same effort, and they have been closely related for over two hundred years. On the one hand, employer campaigns aimed at making workers more disciplined and orderly have often sought to change some aspects of worker drinking. And, on the other hand, most attempts focused primarily on changing worker drinking patterns, whether by temperance and prohibition movements, or alcoholism and public health professionals, have either been motivated by, or justified in part in terms of their beneficial effects for employers.

I have emphasized the larger cultural and economic struggles between early entreprenurial and industrial capitalists and their tradition-oriented workers because I am suggesting that it was those conflicts which were central to the conflicts about alcohol. Alcoholic drink was seen by employers as a symbol and an element of the traditional culture, and as a way of marking out the differences between the life-style they desired of their workers and the ones



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which the workers' had traditionally valued. Alcoholic drink was a site of class conflict between employers and workers about broad issues of culture and life-style.[1]

However, an important question remains: was worker drinking by itself an obstacle or hindrance to industrial development? Or, more generally: independent of the cultural issues attached to it, does worker drinking -- including high levels of it -- retard or block industrial and economic development?

Based on the broad historical record, the answer appears to be "no." In Britain per capita alcohol consumption increased over the course of the nineteenth century dipping and rising somewhat with the economy (Shadwell, 1903). Similarly, in the United States, despite the claims of temperance advocates in the nineteenth century or prohibitionists in the twentieth century, worker drinking on or off the job was not incompatable with rapid industrial development. Per capita drinking did decrease in the nineteenth century, but much of that was among the broad middle class of small businessmen, farmers, professionals, and their wives, mothers, sisters and daughters. Despite its best efforts, the nineteenth century temperance campaign (a genuine mass movement throughout the nineteenth century) was unable to get most workers to give up drink, or even to get drink out of the factory and workshops.

Just as workers resisted with varying degrees of success employer efforts to reform their characters, restructure their social life, and reorganize their work life, they also resisted efforts at getting them to change their drinking habits. Alcohol had long been part of the ceremonies, rituals, and events which celebrated and affirmed community and fellowship, and workers fought to preserve those drink-related events. They did not always succeed, however, and the ongoing story of work and drink has been the story of a cycle of old patterns being defended, some of which were lost, and new patterns being created, some of which were opposed, some of which were also lost, some of which were defended, and so on.

Further, as the experience of other European countries shows, industrial development and the attempt by employers to transform traditional work patterns does not necessarily involve any challenge to drinking at all. France, Italy and Germany, for example, changed from agricultural to industrial societies without experiencing substantial temperance, prohibition, or anti-alcoholism movements. Although industrial employers in all these countries targeted some aspects of pre-industrial work and social life, they did not in general see drink as a primary, or even secondary, issue. Wine and beer drinking were so firmly rooted in the national cultures that drink was virtually invulnerable to attack. It is worth noting that France, Germany, and Italy have per capita consumption levels,



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substantially above those of Britain or the United States. High alcohol consumption did not prevent those nations from developing skilled, productive work forces or high levels of industrial development (Cherrington 1924-30).

Further, when we look beyond the early nineteenth centry, it is clear that the assertion of temperance supporters that worker drinking was an obstacle to economic development was not correct. By 1900 the United States had become the richest and most developed industrial nation in the world, and it did so despite the fact that the working class drank more than industrial capitalists and middle class reformers might have wished. The United States continued to grow and prosper from 1900 to 1920, another period in which worker drinking continued, and in which the number of urban saloons increased significantly. During the period of national prohibition in America, from 1919 to 1934, working class drinking reduced significantly because liquor was expensive and harder to get. The early part of that period was a time of continuing prosperity; the latter encompassed the most devastating depression in American history. Between 1935 and 1970 the American economy and industrial output expanded, and World War II saw the United States become the most powerful nation in the world. During the whole period U.S. per capita consumption gradually increased.

One reasonable conclusion to be drawn from the broad European and North American experience is that high levels of worker drinking -- including routine bouts of intoxication and chronic heavy drinking -- have not been incompatable with a skilled, efficient, and productive work force, or with rapid economic development. Employers in some western countries have tried to change their workers' drinking patterns (either directly, or through temperance reformers, prohibitionists, alcoholism advocates, or public health professionals). Workers in the United States and other countries have resisted with varying degrees of success employer efforts to restrict or eliminate their drinking. However, worker resistance, even when extremely successful, does not appear to have seriously hindered the processes of industrial and economic development of these nations.

Employer attempts to reform worker drinking patterns are neither inevitably a part of industrial development, nor do they appear to be necessary or even beneficial for economic growth and development. While employer attempts to limit worker drinking have sometimes been justified on moral grounds and as public health concerns, by and large they have been directed at securing a more disciplined and orderly work force.[2]



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## Economic Development and Drink: Observations and Conclusions

On the basis of the historical experience of the United States, Britain, and other European countries, alcohol consumption does not appear to have inhibited industrial development. Obviously, more contemporary and quantitative data, especially using a cross-national sample, would be useful in testing this hypothesis. Although data has never been collected on this topic directly, I have found some relatively reliable and comparable data that can be analyzed in terms of this question.

The World Bank-sponsored study Twenty-Five Years of Economic Development: 1950-1975, by David Morawetz, compiled statistics on economic growth for most countries in the world. The study examined the problems involvd in measuring economic development and concluded that growth rates, as measured by increases in GNP per capita, are relatively reliable indicators of the changes within a country.

Probably the best cross-national data on alcohol consumption has been compiled by Mark Keller and Carol Guroili, and published by the Rutgers Center of Alcohol Studies. Keller was for many years the editor of the Journal of Studies on Alcohol, and their publication, Statistics on Consumption of Alcohol and Alcoholism, lists per capita drinking age consumption statistics according to beverage type for 27 countries, and the percentage increase or decrease for 21 countries from the late 1950s (average year 1958) to the early 1970s (average year 1973).

Table 1 lists the 21 countries with the per capita drinking age consumption in litres of pure alcohol in the early 1970s. Table 1 also identifies the beverage which is responsible for more than 50 percent of the alcohol consumed; if no one beverage accounts for more than half of the alcohol, the second beverage is indicated in brackets. Finally, the table lists the World Bank's growth rate figures for the years 1960-1975.

Table 2 categorizes the sample countries by high, medium, and low consumption levels, and high, medium, and low growth rates. The highest consumption countries averaged 14.9 litres a year, the medium 10.0, and the lowest 6.1. Only 19 countries were included in the calculations because growth rate figures were not available for Poland or the Soviet Union. Based on the recent news about Poland's economic difficulties, it seems reasonable to assume that its growth rate has been quite low. Poland is listed on the chart in brackets, but was not calculated into the correlation statistics. The table shows no relationship between consumption and growth rate. Some countries have high consumption and high growth, others have low consumption and low growth, and there are many in between.



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TABLE 1

Per Capita Consumption of Alcohol, as Well as Predominant Beverage, Growth Rate, and Percentage Change in Alcohol Consumption for 21 Countries

| Countries | Per Capita Age 15+ Consumption in Litres of Pure Alcohol in Early 1970s | Growth Rate 1960-1975 | Percentage Change in Alcohol Consumption From Late 1950s to early 1970s |
|---|---|---|---|
| 1. France | 22.44 W | 3.9 | -12.7 |
| 2. West Germany | 14.82 B | 3.1 | 79.6 |
| 3. Belgium | 14.36 B | 4.0 | 72.4 |
| 4. Switzerland | 13.92 W(B) | 2.2 | 23.2 |
| 5. Italy | 13.56 W | 3.7 | 28.3 |
| 6. Australia | 13.27 B | 2.9 | 43.8 |
| 7. New Zealand | 12.61 B | 1.8 | 30.8 |
| 8. Denmark | 10.94 B | 3.2 | 111.6 |
| 9. Canada | 10.78 B | 3.5 | 51.0 |
| 10. Netherlands | 10.60 B(S) | 3.4 | 52.7 |
| 11. USA | 10.48 B(S) | 2.7 | 33.7 |
| 12. United Kingdom | 10.16 B | 2.2 | 70.8 |
| 13. Soviet Union | 8.85 S | NA | 82.5 |
| 14. Ireland | 8.31 B | 2.9 | 100.2 |
| 15. Poland | 8.07 S | NA | 22.3 |
| 16. Finland | 7.64 S | 4.1 | 157.7 |
| 17. Peru | 7.27 S | 2.1 | 21.0 |
| 18. Sweden | 6.97 S(B) | 3.2 | 43.4 |
| 19. Norway | 5.58 B(S) | 3.6 | 67.6 |
| 20. Iceland | 4.96 S | 2.7 | 84.4 |
| 21. Israel | 3.25 S | 4.4 | -11.7 |

W, B and S indicate that Wine, Beer or Spirits constitute more than 50% of the alcohol consumed. If no one beverage accounts for more than half the alcohol, then the second beverage is listed in parentheses.

Average years for computing alcohol consumption increase are 1958-1973. Average year for per capita figures is 1973.

SOURCES: Mark Keller and Carol Gurioli (1976) Statistics on Consumption of Alcohol and on Alcoholism, Journal of Studies on Alcohol, New Brunswick, New Jersey; David Morawetz (1977) Twenty-Five Years of Economic Development: 1950-1975 Baltimore: John Hopkins University Press.



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TABLE 2

Countries Categorized by Growth Rate and Per Capita Consumption in Litres of Pure Alcohol

| Per Capita Consumption | Growth Rate 1960-75 High Growth Mean 3.94 | Medium Growth Mean 3.17 | Low Growth Mean 2.28 |
|---|---|---|---|
| High Consumption Mean 14.9 | France W<br>Italy W<br>Belgium B | Australia B<br>West Germany B | Switzerland W(B)<br>New Zealand B |
| Medium Consumption Mean 10.0 | | Canada B<br>Denmark B<br>Netherlands B(S)<br>Ireland B | USA B(S)<br>United Kingdom B |
| Low Consumption Mean 6.1 | Israel S<br>Norway B(S)<br>Finland S | Sweden S | Iceland S<br>Peru S<br>[Poland S] |

W, B and S indicate that Wine, Beer or Spirits constitute more than 50% of the alcohol consumed. If no one beverage accounts for more than half the alcohol, then the second beverage is listed in parentheses.

SOURCE: See TABLE 1.

Table 3 shows the mean growth rate of the high, medium and low consumption countries. Growth rate does not correlate directly with consumption. The medium consumption countries have the lowest growth rate, the highest consumption have the medium growth rate, and the low consumption have the highest growth rate. The differences are all very slight, and show no statistical significance.

Table 4 reverses the analysis of Table 3. It shows the consumption levels of the high, medium, and low growth rate countries. In this case there is a slight positive relationship: the high growth countries averaged 11.1 litres of pure alcohol per capita, the medium 10.8, and the low 9.9. The higher the growth rate the higher the per capita consumption levels, though the differences are not persuasive.



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TABLE 3

Mean Growth Rate by Per Capita Consumption in Litres of Pure Alcohol

| Per Capita Consumption | Growth Rate |
|---|---|
| High | 3.09 |
| Medium | 2.98 |
| Low | 3.35 |

SOURCE: See TABLE 1.

TABLE 4

Mean Per Capita Consumption in Litres of Pure Alcohol By Growth Rate

| Per Capita Consumption | Growth Rate |
|---|---|
| High | 11.1 |
| Medium | 10.8 |
| Low | 9.9 |

SOURCE: See TABLE 1

Table 5 categorizes the countries by high, medium, and low increase in alcohol consumption from the late 1960s to the early 1970s (average period 1958-1973), and the high, medium, and low growth rate from 1960-1975. The average high increase in consumption was 98 percent, the medium increase 52 percent, and the low 14 percent. If a dramatic increase in consumption affected economic growth it should be reflected in this table. The table shows that consumption increases do not adversely affect the growth rate.



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TABLE 5

Countries Categorized by Percent Increase in Alcohol Consumption and Growth Rate

| Increase in Alcohol Consumption | Growth Rate | | |
|---|---|---|---|
| | High Growth Mean 3.95 | Medium Growth Mean 3.17 | Low Growth Mean 2.28 |
| High Mean 98% | Finland S<br>Belgium B | Denmark B<br>Ireland B<br>West Germany B | Iceland S |
| Medium Mean 52% | Norway S | Australia B<br>Canada B<br>Netherlands B(S)<br>Sweden S (B) | United Kingdom B<br>USA B(S) |
| Low Mean 14% | Israel S<br>France W<br>Italy W | | New Zealand B<br>Peru S<br>Switzerland W(B)<br>(Poland S) |

W, B and S indicate that Wine, Beer or Spirits constitute more than 50 percent of the alcohol consumed. If no one beverage accounts for more than half the alcohol, then the second beverage is listed in parentheses.

SOURCE: See TABLE 1.

Table 6 shows the mean growth rate of the countries with high, medium, and low increases in consumption. This table shows clearly that growth rate does not negatively correlate with increasing consumption. Indeed, the reverse is true: growth rate positively correlates with increasing consumption to a slight degree.



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TABLE 6

Mean Growth Rate by Increase in Per Capita Alcohol Consumption

| Increase in Consumption | Growth Rate |
|---|---|
| High | 3.33 |
| Medium | 3.07 |
| Low | 3.02 |

SOURCE: See TABLE 1.

Table 7 reverses the analysis of Table 6. It shows the mean increase in consumption of the high, medium and low growth rate countries. There is no correlation of increased consumption with growth rate. The countries with the medium growth rate had the highest increases in consumption, those with the highest growth had the medium increases, and those with the lowest growth rate had the lowest increases. The differences are all negligible and show no statistical significance.[3]

TABLE 7

Mean Increase in Per Capita Alcohol Consumption by Growth Rate

| Growth Rate | Increase in Consumption |
|---|---|
| High | 50% |
| Medium | 69% |
| Low | 44% |

SOURCE: See TABLE 1.



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Other than the finding that growth rate does not correlate with either per capita consumption or increases in consumption, perhaps the only other significant relationship comes directly from he tables of Keller and Gurioli: the high consumption countries are predominantly wine and beer drinking, and the lowest consumption countries drink spirits. However, all three categories contain examples of very high and low economic growth. Spirit-drinking Israel and Norway have very low consumption levels (3.25 and 5.58) and very high growth rates (4.4 and 3.6). Wine-drinking France and Italy have very high consumption levels (22.44 and 13.56) and they also have high growth rates (3.9 and 3.7). The French intake is the equivalent of 44 litres of 100 proof liquor, or half a litre of wine, every day of the year for every man, woman and child over 14 years of age. By the standards of many nations, that would constitute chronic heavy drinking. Yet, in addition to their high growth rate, the French also have a sophisticated technological and industrial apparatus.

Spirit-drinking Finland, whose people are famous for their attachment to episodic intoxication, has a medium consumption level, an almost astronomical increase in alcohol consumption (157.7 percent), and the second highest growth rate in the sample (4.1 percent). Beer-drinking Denmark has a medium consumption level, an extremely high increase in consumption (111.6 percent) and a medium growth rate. The United Kingdom is beer-drinking, and the United States drinks beer and spirits. Both had a medium increase in alcohol consumption, they have almost identical consumption levels, and both have low growth rates (2.7 and 2.2). Poland and Finland have very similar per capita consumption levels; Finland's consumption increased dramatically, while Poland's increased relatively little. But Finland has a high growth rate, and Poland has been in serious economic trouble.

These figures thus strongly suggest there is no relationship between alcohol consumption and the economic difficulties of the United States, Poland, New Zealand, Peru, or the United Kingdom, or the economic successes of France, Italy, Finland, Israel, or Norway. The determining factors in the economic life of a nation, or for that matter a corporation, are major fiscal and productive matters such as interest rates, capital investment, wage and price levels, and so on. Today, in the United States and Great Britain, 10% or more of the labor force is out of work. If all the unemployed heavy drinkers instantly became sober, it would not affect the unemployment rates in those countries. And if all the unproductive working chronic drinkers -- at most 1 percent of the work force -- became abstinent, it would not increase economic development or the growth rate.

This is by no means to argue that alcohol consumption is not a legitimate and important public health concern. Clearly some people drink too much and, as a result, ruin their livers, stomachs and



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brains, or injure or kill themselves or others in automobile wrecks. There are humanitarian and ethical reasons to be concerned with alcohol consumption. However, the broad historical and sociological evidence strongly suggests that, compared to major economic and political factors, alcohol consumption is not important in determining economic growth and development.

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## THE IMPACT OF ECONOMIC DEVELOPMENT ON DRINKING PATTERNS AND PROBLEMS: THE CASE OF TOURISM

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and
Lenore D. Ralston

Recent international studies and reviews concerning alcohol consumption and alcohol problems in modern societies have stressed the need for more careful examination of the impact of increased consumption in less developed countries (LDCs) (e.g. WHO 1980; Moser 1980; Edwards 1979). Publications by the World Health Organization (WHO) have documented rapid increases in alcohol problem indicators in LDCs and argue that these increases create a serious obstacle to socioeconomic development and a severe financial burden on available health services (e.g. Moser 1980, Globe 1979).

WHO, in an effort to document and better understand this phenomenon, has begun a study of the public health aspects of international production, marketing, and distribution of alcoholic beverages. An important aspect of such a study concerns the relationship of the international trade in alcohol to the rapid development of the international tourism industry. Tourism not only provides an important international alcohol market but also creates new availability structures, which in turn may affect drinking patterns and the rates of alcohol-related problems within LDC societies. The Alcohol Research Group (ARG), in cooperation with



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the WHO study, has therefore embarked on a research program to test and document the impact of the international tourism industry on alcohol consumption, availability, and problems in LDC host countries.

The tourism project is important to this workshop in at least three ways: a) mass tourism, with its heavy reliance on alcohol consumption, represents a major and rapidly expanding industry in the lesser developed world today, and thus provides a case study for exploring some important alcohol/economic development issues; b) tourism is rapidly expanding in many regions of Latin America, particularly in the Caribbean, which ARG has chosen as a study region; and c) our research has uncovered crucial legal components to the alcohol-tourism link that may provide important avenues for developing legal approaches for future prevention strategies.

Because of the brevity of my talk today, I cannot fully present the current status of the tourism/alcohol project. Instead I will discuss the link between mass tourism and alcohol availability, particularly in Latin America, and provide a brief description of our research design. I will conclude with a brief report on one aspect of the study -- current U.S. trade and tax provisions related to alcohol and tourism in Puerto Rico and the U.S. Virgin Islands and their impact on alcohol availability and problems in the Caribbean region.

## The Link Between Tourism and Alcohol Availability

Prior to the 1970's, little attention was given to the socioeconomic impact of international tourism on either host or guest countries (Nash 1981; Graburn 1980; Mings 1978). Most planners and economists simply assumed that the revenues brought by tourists provided economic benefits to host countries that far outstripped any social or cultural problems that might result (cf. Zinder 1969; Clement 1961). During the late 1960s and 1970s, tourism expanded rapidly, particularly in the less developed world, where the assumed economic benefits were eagerly sought. This rapid growth countinues today and is fueled by technical and financial assistance from developed countries, international aid agencies, and industry lobbying groups (World Tourism Organization 1976). LDCs, in addition to accepting this aid, have provided major economic concessions to tourism multinationals and have made massive capital expenditures to increase their respective shares of the market (deKadt 1979; Cleverdon 1979). The investments include such tourism-oriented projects as large airports, deepsea ports, and new roads and sewage systems for coastal developments.

Latin America and the Caribbean have been at the forefront of these developments. Tourism has become an essential part of national economies in the Caribbean, Mexico, and many parts of



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Central and South America. Many national governments are involved in large tourism developments (such as Mexico's development of Ixtapa and the island of Cancun) and sponsor expensive tourist advertising campaigns in the U.S., Canada, and parts of Europe. International tourist arrivals in Latin America and the Caribbean have increased at a tremendous rate in the last 15 years: from 3.1 million arrivals in 1966 to 6.5 million in 1971 and 13.4 million in 1979 (World Tourism Organization 1976, 1980). Statistics on excursion and cruise ship passenger arrivals were not available until recently. When included in the 1979 figures, the total number of international arrivals in Latin America and the Caribbean jumps to 82.8 million, indicating that this component has become extremely important, if not dominant, in the area (World Tourism Organization 1980).

The revenue generated by tourism has grown at a similar rate. Latin America gross tourist receipts totaled $1.5 billion in 1964 and $7.1 billion in 1979, approximately 10 percent of total world tourism receipts (IUOTO 1965; World Tourism Organization 1980). Mexico, the Bahamas, and Puerto Rico have by far the largest shares of both tourist arrivals and tourist receipts in Latin America. According to Cleverdon (1979), tourism receipts represent a large percentage of both total exports of goods and gross national product in several Caribbean and Central American countries. South American countries generally have more diversified industrial sectors, but tourism receipts remain increasingly important in national economies there, also.

With the expansion, however, have come some serious questions concerning the assumed economic benefits. Numerous case studies from many parts of the world document social and cultural disruptions which accompany the development of mass tourism (e.g. deKadt 1979; Boissevain 1979; Esh and Roseblume 1975; Finney and Watson 1975). Even the supposed economic benefits have been challenged. Bryden, in his landmark study Tourism and Development (1973), argues that current forms of mass tourism are actually economically detrimental to host countries, even without reference to intangible factors of social and cultural disruption. His examination of international tourism and its impact on local industries, employment opportunity, and capital investment choices provides a strong basis for urging major reforms in the future development of tourism.

An additional set of problems concerns the control of tourism by international firms located outside the LDCs. International hotel chains, transportation industries, and tour-operating companies, which are increasingly dominating the industry and which are usually located in the tourist-generating countries, monopolize the promotion of tours -- their destinations, activities, and facilities. According to the World Tourism Organization (1976:82):



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> The trend towards the concentration of power in the distribution of tourism services to the consumers in the major tourist generating countries is felt by developing countries, on the one hand, to give the large operators the chance of influencing demand and, on the other, to weaken the negotiating power of the receiving (developing) countries.

The tourism literature, then, has begun to examine critically the industry's character and impact, mostly from an anthropological, political, or economic framework. What is still lacking, however, is any systematic study of the public health implications of tourism development. Several authors at least mention such traditional public health concerns as water pollution, sewage treatment, and disease control (e.g., Smaoui 1979; Evans 1979; Hiller 1976; Bryden 1973), but even these variables are usually ignored in the calculus of tourism's costs and benefits.

Even more infrequent in the tourism literature is the mention of the impact of tourism on alcohol availability, consumption, and problems in host countries. Some studies have made cursory references to alcohol, but the descriptions are usually set in a more general framework of "lifestyle changes" or what Bryden (1973) and others term the "demonstration effect" (e.g. Wilson 1979; Reyoso y Valle and deRegt 1979; Cleverdon 1979; MacCannel 1976; Manning 1973). Tourists from the developed world bring their own lifestyle with them, including many consumption items which, at least from a LDC perspective, are luxury commodities. The demonstration effect hypothesizes that the importation of these amenities creates a demand for them among those in the host societies. Tourism also encourages the developoment of a cash economy (by offering wage labor in unskilled service jobs), therefore making the purchases of foreign amenities a realistic possibility. Several tourism studies have provided limited data to support this demonstration effect hypothesis (cf. Bryden 1973), but alcohol importation, production and consumption variables continue to be ignored (cf. Kemper 1979; Smith 1977).

Writers in the alcohol field provide some insight into the relationship of tourism and alcohol problems not found in the tourism literature, but, because of a limited focus, have not critically examined the crucial economic and health variables involved. Nordic scholars have been in the forefront in this area, examining the changes in Nordic drinking patterns which have accompanied increased Nordic tourism to southern, Mediterranean, wine-drinking countries. They have suggested that tourists have "brought home" the foreign drinking patterns and added them to existing home patterns (Makela 1979). The Nordic literature also includes studies of the duty-free alcohol trade that accompanies international ferries in northern European waters (e.g. Granqvist



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1981). Travel by boat between various European countries typically involves extensive drinking and purchases of alcoholic beverages for home consumption. These alcohol studies have focused almost exclusively on the impact on "guest" drinking habits. Leisure, travel, and recreational activities, as expanding aspects of everyday life in developed countries, are becoming increasingly associated with alcohol consumption, which may lead to increases in alcohol-related problems for those who participate (cf. Makela et al. 1982).

The leisure-oriented research is augmented by some fragmentary studies which suggest that alcohol availability increases in tourist areas and is accompanied by increases in consumption (Watts and Rabow 1980; Mosher 1979; Koskikallio 1979; Cahannes 1979; Sulkunen 1978). Makela et al. (1981: IV-20) report that the expansion of the mass tourism industry has had an important impact on government policies regarding alcohol availability in developed countries during the period 1950 to 1975:

> Mass tourism requires active marketing, highly developed organization, extensive planning and a wide array of services. The state has in many countries taken a strong responsibility in carrying out these functions. A less restrictive licensing policy has often been justified on the basis of benefits to the tourist trade. . . . In some cases the state has promoted the restaurant and hotel industries not only by liberal licensing but also with other supportive measures and in this way actively contributed to the increase in the availability of alcoholic beverages.

Only limited data is available to determine whose consumption -- local residents, tourists, or both -- increases in these situations, although at least one study suggests that local residents are more affected than tourists (Koskikallio 1979).

There is even less research concerning the impact of tourism on alcohol availability and alcohol problems in LDC host populations, although at least two researchers have commented on the subject. Beaubrun (1975) noted that certain countries with highly developed tourism industry and a poorly delineated national identity (such as the U.S. Virgin Islands and the Bahamas) also have a high prevalence of alcoholism. He hypothesizes about a possible "demonstration effect" (p. 490): "the tourist (may) provide a role model to emulate -- someone who is constantly playing and drinking and never seems to work." More recently, Moser (1980), in a WHO-sponsored international review of policies designed to prevent alcohol-related problems, states (p. 14): "The economic importance of tourism, and the recognized part played by easy availability of alcohol in attracting tourists, has had a considerable effect on



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formerly restrictive policies (in host countries)." Although Moser's assertion does not appear to be based on any detailed research findings, a recent report from Mexico provides some support for her tentative conclusion. Medina-Mora and Campillo-Serrano (forthcoming) report that a statute restricting the number of alcohol outlets in Mexico specifically exempts those outlets serving tourists. This exception has been broadly interpreted to substantially undermine the law's intent.

Moser and Beaubrun thus suggest that the observations found in Makela et al. concerning the impact of tourism within developed countries may also apply to LDC societies. Their observations provide an important starting point for more detailed research. Beaubrun raises the possibility of potential health consequences to host societies, and Moser discusses the potential economic and legal consequences -- alcohol becomes increasingly available and legal restrictions are loosened, thus increasing the risk to native populations. Taken together, they suggest the possibility that tourism development fuels increases in alcohol availability and consumption, which in turn leads to increases in the incidence of alcohol problems in LDC host countries. If so, then the structure of the tourism industry itself becomes a public health concern and changes in the relationship of alcohol to that industry may require serious consideration. These issues provide the setting for the ARG project described below.

## Tourism and Alcohol in the Caribbean: The Impact of U.S. Tax Policy

An analysis of the alcohol-tourism link based on survey, anthropological, and policy data is now in the planning stage. Two study sites -- the U.S. Virgin Islands and St. Kitts-Nevis -- have been chosen, and more extensive geographical coverage may be possible in the future. Instead of outlining the preliminary data concerning our study sites, which are still in the preparatory state, I will instead focus on a more developed legal component of the study.

U.S. tax policies concerning the U.S. Virgin Islands -- a U.S. territory which is an important Caribbean tourist center -- illustrates the role of governmental intervention in creating and maintaining the alcohol/tourism link. Several related fiscal provisions assure the dominance of the alcohol trade in the territory. First, the U.S. government refunds to the territorial treasury all excise taxes collected on island-produced rum exported to the mainland (I.R.S. 26 U.S.CA. Section 7562 (Supp. 1981)). This tax expenditure has a profound impact on the local rum industry's influence in local affairs. In the U.S. Virgin Islands there is only one operational rum distillery, and this is a wholly-owned subsidiary of Schenley, a large U.S.-based alcoholic beverage



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producer. This distillery must import all of its raw materials and is of relatively minor economic importance on the islands in terms of employment and capital investment (U.S. Federal Maritime Commission 1979). Yet through its exports to the mainland it provided $24.5 million to the Virgin Islands' treasury in 1978 and $36.2 million in 1980, or 17 percent of net government revenues (U.S. Federal Maritime Commission 1979; Caribbean Business 1981e; U.S. Virgin Islands Annual Economic Review 1980).

The Virgin Islands government, therefore, has an obvious stake in promoting the local rum industry. It imposes no export or excise taxes on locally produced rum and has given the rum industry favorable tax concessions regarding corporate income, property, and sales taxes (cf. Oldman and Taylor 1970; Danielson 1974). In order to attract more alcohol-related industries to take advantage of the excise tax rebate, the government also offers extremely attractive tax exemptions to prospective industries, and, as a result, at least one U.S. distiller has decided in the last three years to locate a blending factory on the Islands (Hedman 1979b). The government even operates a rum promotion office, which is designed to encourage rum consumption both locally and nationally in the U.S., and the Virgin Island Commissioner of Commerce has listed rum promotion as one of his major priorities (U.S. Virgin Islands Governor's Report 1978; Hedman 1979a).

The U.S. and Virgin Island fiscal policies go beyond encouraging the local industry. Neither government imposes any excise tax on U.S.-produced alcohol products purchased in the Virgin Islands. The Virgin Islands has a 6 percent duty on foreign brands, which is an extremely low rate, but the tax has still been attacked by the tourist sector as detrimental to both the government and industry (Hedman 1981a). These taxing policies result in some of the cheapest alcoholic beverage prices in the world. U.S.-produced rum, for example, can be purchased for as little as $1.50 per fifth as compared to $5.00 or more on the mainland (Hedman 1981b). The U.S. government further encourages tourist purchases on the Virgin Islands by permitting visitors to return to the mainland with one gallon of tax-free rum, a quota four times the permissible amount allowed when returning from foreign countries (Caribbean Business 1981a, 1981b).

Most of these fiscal policies also apply to Puerto Rico, another U.S. Caribbean territory heavily dependent on rum production and tourism. Because Puerto Rico has a much larger rum industry, the effects of the tax policies are correspondingly more impressive. The industry produced $200 million in excise tax returns from the U.S. Treasury to the Commonwealth government in fiscal year 1979-80, and the total is expected to have increased substantially for the next year (Blasor 1981). To insure the health of the industry, the Puerto Rican government has given rum producers an exemption for most of its local tax liabilities, including most



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sales, income, and property taxes. The examption will run until 1990 and reduced Bacardi's tax bill by $10.5 million in 1979 and $13.2 in 1980 (Bacardi 1980; O'Neill 1981; Wynne 1974).

Puerto Rico, in official recognition of the importance of rum to the economy, has made the pina colada cocktail the official island drink, part of its overall campaign to encourage tourism (Caribbean Business 1981c). A spokesperson for Coco Lopez, the pina colada producer, noted that its product is now very popular among local residents, who had until recently not been interested in this tourist drink. The spokesperson, in a statement offering some support for the "demonstration effect", attributed the new local popularity to the company's heavy local advertising promotion (Caribbean Business 1981c).

The U.S. government provides an additional boost to the alcohol market on both the Virgin Islands and Puerto Rico with its tax treatment of business convention expenses. Prior to 1976, corporate and individual expenses incurred for sponsoring and/or attending conventions were deductible regardless of the convention's location. Congress, as part of the Tax Reform Act of 1976, prohibited such deductions for conventions held overseas (U.S. Federal Maritime Commission 1979). Puerto Rico and the Virgin Islands, however, were specifically exempted from this restriction. As a result, the annual convention-tourism business on the Virgin Islands more than tripled between 1976 and 1979, to 30,000 annual convention visitors (U.S. Federal Maritime Commission 1979).

Conventions are noted for providing extensive drinking occasions. Thus, in addition to attracting more alcohol consumers, increases in the number of conventions also translates into increases in the number of drinking settings on the islands (Mosher 1981). Although accurate data are not available, several indicators suggest that alcohol is a major expense at many if not most business conventions. The business market itself is extremely large in the U.S., accounting for 12 percent of all alcohol sales, or $8 billion 1979 (Mosher forthcoming). Business conventions constitute a substantial share of that market.

Recent trade concessions by the U.S. illustrate the importance of these alcohol-related fiscal provisions to the development of tourist economies and the need for a region-wide, public-health-oriented alcohol availability policy. In 1979 the Carter Administration instituted significant reductions in U.S. excise taxes on imported alcoholic beverages (being phased in over several years), in part to encourage the rum industries in the Caribbean region (Caribbean Business 1979; DISCUS 1981). (Western European countries have also provided special trade concessions regarding the rum industries of their former Caribbean island colonies. As a result, the status of the rum trade has been the subject of considerable debate in European Economic Community negotiations (Wine and Spirits



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Magazine 1981).) Most recently, the Reagan Administration, in an attempt to revive the Jamaican tourist economy, has given Jamaica the same status as the Virgin Islands and Puerto Rico regarding tax-deductible business convention expenses (Caribbean Business 1981d). The Administration has also proposed accelerating the tariff reductions imposed by the Carter government. These alcohol-related concessions for other parts of the Caribbean have been heatedly opposed by the Virgin Island and Puerto Rican governments, which consider their special treatment regarding alcohol a major advantage in developing their respective tourist industries (Caribbean Business 1981d, 1981f).

Policies designed to promote the alcohol trade are not a necessary part of tourism development. Other economic aspects of the tourism industry could as easily be promoted through special tax treatment. Alcohol could remain as a relatively high-priced luxury good and a source of tax revenue, just as it is treated in the majority of guest countries. Current tourism policies, in additon to pushing down alcohol prices, tend to greatly inflate the cost of food, housing, and real estate (cf. Bryden 1973). Reforms in fiscal policies of guest countries could significantly alter this picture.

Perhaps most significant is the impact of the U.S.-sponsored trade concessions on the region as a whole. With tourism as one of the most important focuses of development, the U.S. Virgin Islands, as well as other free-port islands, have made alcohol a major, highly successful, tourist attraction. As other islands seek to compete for the tourist dollar, then, similar concessions are likely to appear necessary. In Venezuela, for example, the government recently created a free port on the island of Margarity, off its coast, in part to compete with the nearby free port of Aruba. Moser (1980: II-2) reports: "thousands of Venezuelans go there daily to purchase alcoholic beverages. Each time the visitors are permitted to take away 5 or 6 liters of the most widely consumed types, 89 liters total. Much of this is resold on the mainland."

Nations which choose not to compete for the tourist industry through the use in inexpensive alcohol products may find their alternative policies seriously eroded. Not only do they risk losing tourists to other countries, they also may lose alcohol-related revenues. High import duties may encourage an extensive bootlegging trade, which will in turn cause a major loss of tax revenues and a threat to locally-produced beverages. This phenomenon may well be occurring throughout the region today, although the extent of the bootlegging trade has not been adequately researched.

## Conclusion

Policies regarding international trade and tourism appear to have a profound influence on the structure, location, and size of



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alcohol production and availability in the Caribbean. Extensive and detailed research is necessary to understand this impact, as well as the relationship of tourism-influenced alcohol availability to drinking patterns and alcohol problems. Existing data, however, suggest that a public-health-oriented alcohol policy in the Caribbean must take a very broad perspective on the economic and political factors which influence the region, particularly those regarding tourism development.

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## Chapter Notes and References

### Industrialization, Economic Development, and Worker Drinking: Historical and Sociological Observations

#### Notes

1. It was Joseph Gusfield in Symbolic Crusade: Status Politics and the American Temperance Movement (University of Illinois Press: 1963) who first argued that conflicts over alcohol should be seen as symbolic struggles about culture and life-style. Although my analysis differs from his on a number of points, I am indebted to Gusfield for first pointing the way.

2. I do not mean to imply that there is anything wrong with voluntary programs to help workers with drinking problems. However, such programs are by no means adequate to deal with the full range of worker health needs. A strong public health perspective concerned with workers would push for quality medical care, including mental health coverage, and would be concerned that work environments are free from toxic and noxious materials and that workers' wages are sufficient to feed, house, and care for their families.

3. Because the cross-tabular analysis loses information by collapsing observations into categories, I performed a regression



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analysis to assess the validity of inferences drawn from the tables. The regression of either alcohol consumption indicator on growth showed little if any relationship, as did the regressions of growth upon each alcohol measure. In two instances the unstandardized coefficient (B) were exactly zero, and in the other two instances they were slightly positive (B=.07), directly contravening the notion that growth and consumption are inversely related.

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Chapter Three

# MANIFESTATIONS AND PERCEPTIONS OF ALCOHOL-RELATED PROBLEMS IN THE AMERICAS

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# MANIFESTATIONS AND PERCEPTIONS OF ALCOHOL-RELATED PROBLEMS IN LATIN AMERICA

Raul Caetano

Concern for the pathological effects of alcohol ingestion in human health have been present in the scientific literature of Latin American countries since the late part of the 19th century. But, as in other parts of the world, it took more than 50 years for alcohol research to become an organized effort in these countries. It was only during the 1950s that the public health approach to the study of alcohol problems, expressed as a concern for epidemiological studies of alcohol problems and for organizing their treatment and prevention, emerged in Latin America.

One purpose of this paper is to review the epidemiological literature on alcohol in these countries. Such a task can only be performed in a selective manner, that is, by examining papers judged to be representative of the development of research. Even then, the final product will have an essentially panoramic nature, and it should not be seen as more than a bird's-eye view of the field. In addition, there is the fact that this paper attempts to cover research which has been published in more than 50 scientific publications and which is so scattered as to be almost impossible to reassemble. Consequently, topics which one or another reader may deem as important might be left untouched.

The plan for this review is as follows: In the first section some demographic, social, and general health indicators for countries in Latin America will be reviewed in an attempt to characterize the health and socioeconomic status of nations in the region. These indicators will be contrasted with those for the U.S. and Canada. A second section reviews data on alcohol problems as indicated by alcohol-related mortality, psychiatric problems, traffic accidents, suicides, and crime. In the third section surveys of drinking patterns and alcoholism in several countries are summarized. The final section discusses the Latin American conceptual approach to alcohol problems and its impact on efforts to alleviate such problems in the region.



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## Latin America: Selected Demographic, Social, and Health Related Indicators

Latin America is composed of some 26 countries and other political units. As such, it is a mosaic of cultures with similarities as well as differences. Many of the nations in the region share the common history of having been former colonies of Spain; Brazil, of course, is a former colony of Portugal, while some of the island and littoral nations of the Caribbean are former colonies of England, France, and Holland. Another commonality among Latin American countries is their inclusion among the developing nations. However, this should not be taken as implying uniformity of economic development. There is a wide gulf between Mexico and Venezuela on one side, both petroleum exporting countries, and Bolivia and Haiti on the other, often cited as the poorest nations in the area. Also, while economic, health, and social indicators presented here translate experiences at the national level, within most of these nations different regions present quite different levels of economic and social development. Thus, life in the big cities of the industrialized southeast of Brazil -- cities such as Rio de Janeiro or Sao Paulo -- may be in many aspects more similar to life in New York, Buenos Aires, or Caracas than to life in the rain forest of the Brazilian Amazon or in the dry quasi-desert region of the Brazilian northeast. These same differences may be observed between the south and north of Argentina, or between the coastal and Andean regions of Chile and Peru.

Apart from these sub-regional differences, and of crucial importance to the study of alcohol consumption and alcohol-related problems, is the fact that within many Latin American countries there still is an important native or Indian culture which has in many instances remained quite distinct from the European one. These Indian cultures and the importance and characteristics of their alcohol consumption have been described by anthropologists. Without the intent of providing a review of this literature, which has already been aptly examined by Heath (1974, 1975), these papers will be cited here as a means of shedding light on, and as gauges for making comparison with, epidemiological findings. Negrete (1976a) has underscored the importance of these cultures and the extent to which traditional fermented beverages (pulque, chicha) are used by native peoples in countries with numerous indigenous populations such as Bolivia, Mexico, Guatemala, and Peru.

Table 1 presents some indicators with a bearing on health status in the Americas. All of the indicators in the table show significant variations among the different countries of Latin America. The age-standardized death rate shows dramatic variations, ranging from 1,900 deaths per 100,000 in Bolivia to 431.6 per 100,000 in Cuba. The U.S. and Canada show rates between 440 and 420 per 100,000, at least one-third smaller than for the majority of Latin American nations. Infant mortality rates vary from a high of



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86.0 per 1,000 live births in Guatemala to a low of 20.8 per 1,000 live births in Puerto Rico. For the whole of South America the rate is 49.4 per 1,000 live births, while for North America (U.S. and Canada) it is one-third as much, 15.8 per 1,000 live births. The gross national product shows more dramatic variations than other indicators. The differences between North America (U.S. and Canada) and Latin America are very marked. Both the U.S. and Canada have GNPs, which are 6, or 10, or in the case of some of the poorest countries (Haiti, Honduras, Guyana, Bolivia), 20 times greater than Latin American nations.

## Alcohol-Related Indicators*

### Mortality

From 1962 to 1964 the Pan American Health Organization (PAHO) (Puffer and Griffith 1967) conducted a study of patterns of urban mortality in 10 cities of Latin America plus Bristol in England and San Francisco in the U.S. In each of the cities 2,000 deaths were selected through a systematic sampling procedure from all the deaths of persons aged 15 to 74 years of age. The families and physicians of the deceased were interviewed by local collaborating researchers and the data were sent to a central office where the cause of death was diagnosed with the use of standardized procedures.

The investigation showed that alcohol-related deaths (cirrhosis, alcoholic psychosis, and alcoholism) comprised 4.9 percent of all deaths in the study. Table 2 shows a wide difference between males and females with regard to alcohol-related mortality and also very significant differences among the various cities in the study. The death rate for alcoholic psychosis and alcoholism is, for instance, six times higher in Guatemala city and two times higher in Santiago, Chile, than in San Francisco.[1] Bristol, England, has the lowest rates both for females and for males. Among men Santiago and Mexico City have higher rates than San Francisco, the rate in Santiago being twice as high. Among females, San Francisco has the highest rates, followed closely by Santiago. Mexico City and La Plata, Argentina, also have high rates, both in the neighborhood of 30 deaths per 100,000 population.

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*All of the data have to be examined with care since they usually reflect not only differences in alcohol use and alcohol-related problems in a particular set of countries, but also the differences in the extent and organization of medical services or in the way in which different legal systems deal with such problems.



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TABLE 1

Health Related Indicators in Selected Countries of the Americas*

| | Crude Birth Rate Per 1,000 Population | Age Standardized Death Rate Per 100,000 Population | Infant Mortality Rate Per 1,000 Population | Physicians Per 10,000 Population | Hospital Beds Per 1,000 Population | G.N.P. (1977) |
|---|---|---|---|---|---|---|
| Argentina | 22.7 | 692.1 (70) | 58.8 (70) | 21.7 (73) | 5.4 (73) | 1,870 |
| Bahamas | 19.8 | 560.9 (73) | 35.3 (72) | 6.8 (76) | 4.1 (76) | --- |
| Barbados | 19.1 | 577.0 (76) | 28.3 (76) | 6.7 (76) | 8.7 (76) | 1,774 |
| Bolivia | 19.6 | 1900.0 (70) | -- -- | 4.7 (72) | 1.8 (75) | 476 |
| Brazil | 38.0 | 900.0 (70)+ | -- -- | 6.1 (72) | 3.8 (71) | 1,411 |
| Chile | 25.0 | 647.2 (75) | 55.4 (75) | 4.5 (76) | 3.6 (76) | 1,247 |
| Colombia | 33.1 | 753.0 (73) | -- -- | 4.8 (77) | 1.9 (75) | 762 |
| Costa Rica | 30.1 | 496.5 (75) | 37.0 (75) | 6.6 (76) | 3.8 (75) | 1,393 |
| Cuba | 20.7 | 431.6 (75) | 27.4 (75) | 8.9 (77) | 4.0 (76) | --- |
| Dominican Republic | 23.8 | 544.5 (75) | 43.5 (75) | 5.4 (76) | 2.8 (73) | 841 |
| Ecuador | 31.3 | 941.0 (74) | 70.1 (74) | 4.7 (77) | 2.1 (73) | 819 |
| El Salvador | 40.1 | 750.3 (74) | 53.4 (74) | 2.7 (76) | 1.8 (75) | 589 |
| Grenada | 27.4 | 651.7 (75)+ | -- -- | 2.6 (74) | 6.9 (71) | --- |
| Guatemala | 39.9 | 1253.0 (75) | 86.0 (75) | 2.2 (71) | 2.0 (73) | 830 |
| Guyana | 33.5 | 680.0 (70)+ | -- -- | 1.7 (72) | 4.3 (76) | 520 |
| Haiti | 43.0 | 1780.0 (70)+ | -- -- | .9 (76) | .8 (76) | 230 |
| Honduras | 47.1 | 678.9 (75) | 33.6 (75) | 3.4 (76) | 1.7 (76) | 424 |
| Jamaica | 30.1 | 671.3 (71) | -- -- | 2.8 (74) | 3.8 (74) | 1,060 |
| Mexico | 37.5 | 718.3 (74) | 46.6 (74) | 8.0 (74) | 1.2 (74) | 1,164 |
| Nicaragua | 42.7 | 592.3 (73) | 36.9 (73) | 6.3 (72) | 2.2 (76) | 865 |
| Panama | 30.6 | 545.8 (74) | 32.9 (73) | 7.9 (76) | 3.7 (76) | 1,195 |
| Paraguay | 38.2 | 890.1 (75) | 84.8 (75) | 4.6 (76) | 1.5(765) | 747 |
| Peru | 34.4 | 681.5 (72) | 72.3 (72) | 5.6 (77) | 2.0 (73) | 721 |
| Puerto Rico | 22.3 | 426.5 (75) | 20.8 (75) | 11.5 (74) | 4.1 (73) | 2,450 |
| Surinam | 23.8 | 664.9 (71) | 39.1 (71) | 4.6 (75) | 5.4 (75) | 1,874 |
| Trinidad & Tobago | 23.8 | 617.7 (74) | 25.6 (74) | 5.1 (75) | 4.5 (75) | 2,623 |
| Uruguay | 21.3 | 604.5 (76) | 40.8 (76) | 11.1 (71) | 5.7 (71) | 1,449 |
| Venezuela | 37.2 | 649.5 (75) | 43.7 (75) | 11.5 (75) | 2.9 (76) | 2,625 |
| United States | 14.8 | 440.0 (75) | 16.0 (75) | 16.3 (76) | ---- | 8,750 |
| Canada | 15.7 | 420.0 (75) | 13.6 (75) | 17.3 (75) | ---- | 8,347 |

*The crude birth rate, the age standardized death rate, the infant mortality rate, the number of physicians per 10,000 population and the number of hospital beds per 1,000 population were all abstracted from PAHO (1978). The G.N.P. was taken from the World Bank (1980).

+The rates were taken from World Bank (1980).



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TABLE 2

Annual Age-Adjusted Death Rates for Alcoholic Psychosis and Alcoholic Cirrhosis per 100,000 Population age 15-74 years in 10 Latin American Cities, San Francisco (U.S.A.) and Bristol (England), 1962-1964*

| City | Alcoholic Psychosis and Alcoholism | | Alcoholic Cirrhosis | | Total | |
|---|---|---|---|---|---|---|
| | Male | Female | Male | Female | Male | Female |
| Bogota | 1.8 | 0.7 | 11.2 | 2.2 | 13.0 | 2.9 |
| Cali | 4.1 | 0.6 | 1.2 | 0.3 | 13.0 | 0.9 |
| Caracas | 3.0 | 0.5 | 13.1 | 0.7 | 16.1 | 1.2 |
| Guatemala City | 52.9 | 2.9 | 26.9 | 4.6 | 79.8 | 7.5 |
| La Plata | 7.4 | 1.1 | 20.6 | 3.0 | 28.0 | 4.1 |
| Lima | 6.1 | 0.5 | 8.0 | 0.7 | 14.1 | 1.2 |
| Mexico City | 14.4 | 1.6 | 102.5 | 31.1 | 116.8 | 32.7 |
| Ribeirao Preto | 7.7 | 3.8 | 13.1 | 1.8 | 20.8 | 5.7 |
| Santiago | 21.6 | 1.6 | 143.0 | 38.4 | 164.5 | 40.0 |
| Sao Paulo | 12.2 | 1.7 | 17.6 | 2.0 | 29.8 | 3.7 |
| San Francisco, U.S. | 8.4 | 5.1 | 71.3 | 43.4 | 79.7 | 48.5 |
| Bristol, England | 0.2 | 0.0 | 1.2 | 0.3 | 1.4 | 0.3 |

*SOURCE: Puffer and Griffith (1967).



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The sex differences for these rates reflect, of course, the well known difference in patterns of alcohol ingestion between men and women. They occur not only in these Latin American cities but practically all over the world. Once the influence of different methods of data collection and autopsy procedures is set aside, as is largely true in this study, the difference in rates among cities can only be explained by social and cultural factors linked to patterns of alcohol ingestion. Marconi and Adis Castro (1967) suggest, however, that Santiago's high rates might be explained either by an increased genetic disposition to hepatic pathology or by better diagnosis of these alcohol-related conditions.

When broken down by age, mortality data for both alcoholism and alcoholic psychosis followed the same pattern in all cities studied: there was an increase up through age 54 and a decline thereafter. The death rate for alcoholic cirrhosis also increased with age, reaching a peak in the age group 55-64 for both males and females. Thus, among males, combined data for all the cities in the study show that the rate in the age group 55-65 years is more than a hundred times greater than that in the age group 15-25 years (approximately 100/100,000 versus 0.6/100,000), and approximately 10 times greater than for ages 25-35 years (approximately 100/100,000 versus 10/100,000). These differences result both from the chronicity of liver cirrhosis and from its development in the middle-age years.

Another interesting finding of this investigation was the extent to which the number of cirrhosis deaths was affected by changes in assignment of cause of death. Of the original 1,231 deaths diagnosed as cirrhosis without alcoholism, 57 percent (708) were changed to cirrhosis with alcoholism. With these additions and others from other groups, the number of deaths due to cirrhosis with alcoholism went from 700 to 1,645, a proportional increase of 235 percent. Cirrhosis deaths without mention of alcoholism, which numbered 1,231, decreased by 300 percent to 391. As a result of these changes there were increases in the number of deaths due to cirrhosis with alcoholism in every city in the study, with the final count being twice the initial in 9 cities.

When examining cirrhosis mortality data for Latin America, Puffer and Griffith (1967), suggested that 80 percent of all cirrhosis deaths were alcohol related. Because of this significant association between heavy alcohol consumption and cirrhosis, mortality data for this pathology can be viewed as an indicator of alcohol problems and it is therefore worth examining in a more extensive way. Table 3 shows such data as published in 1978 for selected countries of Latin America, Canada, and the U.S. The rates vary considerably from country to country for both the males and females. Men's rates range from a high of 35/100,000 population in Chile or Mexico to a low of 4/100,000 in Cuba or Panama. Female rates are lower than male for all countries, with the exception of



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the Bahamas. Setting aside this latter country, the range of variation of female rates is smaller than that of males: the highest rate is 12.4/100,000 in Chile and the lowest is 1.6/100,000 for Barbados. The fact that two Caribbean countries, Bahamas and Barbados, have such different cirrhosis death rates should be noted and further investigated.

When compared to rates in Canada and the U.S., 7 of the 22 countries in Table 3 have higher rates of male cirrhosis. These countries are: Argentina, Bahamas, Chile, Dominican Republic, Guatemala, Mexico, and Puerto Rico. Venezuela and El Salvador have rates similar to the U.S. and Canada. As for female death rates, both the U.S. and Canada have rates higher than Barbados, Colombia, Costa Rica, Cuba, Jamaica, Nicaragua, Panama, or Surinam. Rates in Ecuador, Honduras, and Peru are similar to those in Canada but lower than the U.S. rate. Argentina has a female death rate for cirrhosis similar to the U.S.

## Admissions to Mental Hospitals

Another common indicator of alcohol-related problems is the proportion of persons treated for alcoholism and associated diagnoses in psychiatric facilities. As with other indices, this measure suffers from limitations since it is influenced by the particular organization of medical care in each country. Thus, in the U.S. the proportion of admissions for alcohol-related psychiatric diagnoses varies according to the type of facility being considered. In 1975, alcohol disorders accounted for 27 percent of all admissions to county and state mental hospitals, while the proportion for private mental hospitals and community mental health centers was 8 percent and 9.7 percent, respectively (President's Commission on Mental Health, 1978). Another example of changes in alcohol-related admissions, in this case due to shifts in administrative policies, is illustrated by what has happened in California in the last 30 years. In 1950, admissions with diagnosis of alcoholism to state psychiatric hospitals comprised 22 percent of all admissions. With the attempt to reduce the emphasis on inpatient care in state mental institutions and the development of outpatient community mental health centers and alcoholism treatment centers as alternative types of facilities, by 1970 the proportion of alcoholism admissions to state mental hospitals in California had dropped to 0.1 percent (Cameron 1980).



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TABLE 3

Age-Adjusted Death Rates Per 100,000 Population for Cirrhosis of Liver in Selected Countries of the Americas*

| Country | Year | RATES Male | Female | Total |
|---|---|---|---|---|
| Argentina | 69-70 | 17.5 | 5.7 | 11.4 |
| Bahamas | 72 | 28.2 | 31.0 | 29.7 |
| Barbados | 75-76 | 6.8 | 1.6 | 3.8 |
| Chile | 74-75 | 33.9 | 12.4 | 22.6 |
| Colombia | 74-75 | 4.7 | 2.4 | 3.5 |
| Costa Rica | 74-75 | 8.0 | 3.3 | 5.6 |
| Cuba | 74-75 | 4.4 | 3.3 | 3.9 |
| Dominican Republic | 74-75 | 12.4 | 6.9 | 9.7 |
| Ecuador | 73-74 | 9.2 | 4.1 | 6.6 |
| El Salvador | 73-74 | 10.5 | 3.1 | 6.7 |
| Guatemala | 75 | 13.2 | 6.8 | 10.0 |
| Honduras | 74-75 | 7.9 | 4.2 | 6.0 |
| Jamaica | 70-71 | 9.2 | 2.5 | 5.5 |
| Mexico | 73-74 | 35.0 | 10.8 | 22.7 |
| Nicaragua | 73 | 7.1 | 3.4 | 5.1 |
| Panama | 73-74 | 4.1 | 2.5 | 3.3 |
| Paraguay | 74-75 | 7.5 | 2.6 | 4.9 |
| Peru | 71-72 | 9.1 | 4.9 | 6.9 |
| Puerto Rico | 74-75 | 30.1 | 10.1 | 18.5 |
| Surinam | 71 | 8.5 | 3.1 | 5.8 |
| Uruguay | 75-76 | 8.0 | 2.0 | 4.9 |
| Venezuela | 74-75 | 10.9 | 4.3 | 7.5 |
| Canada | 74-75 | 10.3 | 4.4 | 7.3 |
| United States | 74-75 | 10.9 | 5.8 | 9.0 |

*SOURCE: PAHO (1978).



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TABLE 4

Alcohol-Related Admissions to Mental Hospitals in Selected Countries of the Americas

| Country | Admissions | Source |
|---|---|---|
| Argentina | 8.3% of admissions to psychiatric Facility in Lanus | Sluzki 1966 |
| Costa Rica | 32% of all admissions | Morales and Chassoul (Moser 1980) |
| Venezuela | 3.5 to 5.4 % of all admissions | Ordonez (Moser 1980) |
| Brazil | 4.5% of all female first admissions 28% of all male first admissions in 1974 -- 19% for both sexes | Caetano 1981 |
| Chile | 36% of all admissions to psychiatric hospitals in Santiago | Marconi 1967b |
| Peru | 4% to 13% of admissions to psychiatric services in the country | Almeida 1969 |
| Colombia | 15% of admissions to psychiatric services in general hospitals | Ministerio de Salud 1977 |
| Puerto Rico | 16.6% of admissions to a psychiatric hospital - 1971 | Aviller-Roig 1973 |
| Mexico | 20% of adult patients admitted to psychiatric hospital through the INASS | Toro Perez 1973 |
| United States | 27% of all admissions to state and county mental hospitals; 8.3% of all admissions to private hospitals; 9.7% of all admissions to community mental health centers; 8% of all admissions to all facilities | President's Commission on Mental Health 1978 |
| Canada | 18.6 % of all first admissions to inpatient psychiatric institutions; 15% of all readmissions to inpatient psychiatric institutions | A.R.F. Statistical Supplement 1977-78 |



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Data for alcohol-related admissions to psychiatric hospitals in several countries of Latin America plus Canada and the U.S. are summarized in Table 4. The burden of alcohol-related disorders on the psychiatric system of these coutries varies considerably, from a high of 36 percent of all admissions in Chile to a low of 4 percent in Venezuela. Argentina, Costa Rica, Brazil, Canada, Mexico and the U.S. all have rates higher than or close to 20 percent.

In the Caribbean region rates of admissions to psychiatric hospitals for alcohol-related problems also vary significantly. Beaubrun (1967a) reports a rate of 47.6 percent in Nassau, 53 percent in Martinique, and 3 percent in Kingston, Jamaica. This author suggests four interacting factors to explain this variation, noting high rates would be found in those places of the Caribbean region where:

> 1) tourism is highly developed and the country's own national identity is poorly delineated and disparaged; (Examples of this would be Bahamas and the U.S. Virgin Islands. It is thought that the tourist provides a role model to emulate -- someone who is constantly playing and drinking and never seems to work.) 2) where indigenous Indian populations exist, for example Aruba; 3) where East Indians (Hindus and Moslems) are a large part of the population (examples of this would be Trinidad and Guyana); and finally, 4) another variable would be where French cultural influences predominate, like Martinique and Guadelope (Beaubrun 1975:490).

The low rates in Jamaica are explained by Beaubrun as due to the use of ganja, which is endemic on the island and might serve as an alternative to drinking. Prince et al. (cited by Beaubrun 1975), agree with this contention and cite economic reasons: the poor Jamaican would prefer the cheaper ganja to alcohol. Discussing the topic, Rubin and Lomitas (1975) deny this economic influence. In their study, ganja users saw this drug as an alternative to alcohol and preferred it because of its perceived beneficial effects compared to drinking.

## Traffic Accidents, Arrests, and Suicide

Data on alcohol-related traffic accidents, arrests and suicide are more difficult to analyze than that for cirrhosis mortality or mental health admissions. For one thing, a search of the literature on the specific topic of alcohol-related traffic accidents, arrests, and suicides showed that most of the published data for Latin American countries are now more than 20 years old and refer mostly to the 1950s and 1960s.



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More significantly, different countries have varying procedures to deal with alcohol-related problems that fall within the law enforcement area, as well as different enforcement practices; every police officer has immense discretionary powers as to when and how to enforce the law. Gonzalez and Katasky (1978) comment on the apparent lack of concern for traffic safety in general and for the consequences of alcohol involvement with traffic accidents in Latin America. "Data on traffic accidents are often incomplete. The influence of drugs and alcohol in traffic accidents is not usually recorded, and even where it is, the source of the report is not always uniform and clear. In most cases the report is based on the police officer's impression at the time. Blood alcohol testing and autopsies are very uncommon. Hence, it is difficult, without conducting special studies, to estimate what proportion of traffic fatalities and injuries are due to alcohol and/or drugs" (Pp. 60).

Negrete (1976a, 1976b), and Saavedra and Mariategui (1970), after examining the literature in previous reviews, concluded that alcohol is highly associated with traffic accidents and other legal problems in Latin America. A more recent estimate (PAHO 1973) indicates that between 25 percent and 60 percent of all traffic accidents in Latin America are caused by drunk drivers. Marconi and Adis Castro (1967), commenting on data for six Latin American countries (Costa Rica, Chile, El Salvador, Honduras, Nicaragua, and Peru), indicate that arrests for public drunkenness comprise 40 percent to 58 percent of all arrests in these nations.

In Argentina, between the years of 1960 and 1965 the percentage of homicides associated with alcohol ingestion varied from 2 percent to 10 percent, with five years in this period showing figures higher than 5 percent (percentages calculated by the author with figures from Vidal 1967a). In 1961, of those persons arrested in shanty towns (villas miseria), 67 percent were "alcoholics" (Calderon Narvaez, cited by Saavedra and Mariategui 1970). In a more recent study in Buenos Aires, 20 percent of the drivers examined by an "alcoholtest" had blood alcohol levels considered "dangerous" (Mardones 1980). Negrete (1967b) indicates 28 percent of individuals involved in "crimes against persons" admitted having been under the influence of alcohol at the time of the crime.

In Chile, Marconi (1967a) quotes data from the Institute of Legal Medicine of Santiago showing that 25 percent of those who committed suicide in 1965 had positive blood alcohol levels. He also quotes figures from the Chilean police indicating that 52 percent of all crimes against persons were committed under the influence of alcohol. As for the role of alcohol in traffic accidents, Vargas (cited by Moser 1974) shows that among males involved in traffic accidents, 70 percent had positive "alcoholemia". Viel et al. (1970) report findings from a sample of 1,662 autopsies performed during the period of 1960-1964 at the Institute of Legal Medicine in Santiago. In this sample 41 percent of the



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males were heavy drinkers as compared to 5 percent of the females. In 943 deaths from traffic accidents, 46 percent had alcoholemias over 0.10 percent. Among females (N=78), the proportion was only 6 percent.

In Mexico, among the reported causes of suicide in 1967, 4 percent were associated with alcohol ingestion (de la Fuente and Campillo-Serrano 1978). A more recent study done by the Instituto Mexicano de Psiquiatria on 266 cases of suicide received by the Servicio Medico Forense during 1979 show that 1/3 of the cases had positive levels of alcohol in the blood (Ripstein 1981). Alcohol involvement in injuries by violence reaches 68 percent and 64 percent, respectively (Cabildo, cited in de La Fuente and Campillo 1978). As to traffic accidents in general, Silva Martinez (1972) reported alcohol involvement in 7 percent for the country as a whole. Looking at each of the Mexican states separately, the proportion varied from a high of 19 percent in Baja California to a low of 2.3 percent in Vera Cruz. Calderon and Cabildo (1967) also report an overall total of only 7 percent. In Mexico City, however, the proportion of alcohol-related traffic accidents was 17.5 percent in 1974 (Navarro 1975).

In Puerto Rico, Kaye (1974) has analyzed the association between alcohol and traffic accidents. This data shows that between 1968 and 1972, alcohol involvement in traffic fatalities ranged from 46 - 63 percent. In an analysis of 508 traffic deaths for the year of 1973, Kaye reports positive blood alcohol content in 44 percent of 386 examined cases. The remaining 122 cases were not examined either because the deceased was under the age of 15 or because more than 5 hours had elapsed between accident and death. Among the alcohol positive cases the proportion of drivers, pedestrians, and passengers was 40 percent, 30 percent, and 25 percent respectively.

In Venezuela, Boada (1976) reports that in the period between 1961 and 1964 alcohol was involved in no less than 50 percent of all traffic accidents. In Guatemala, only 9 percent of traffic accidents occurring between 1967 and 1971 were reported as related to alcohol ingestion (Rivera-Lima 1973). Of all arrests in the same country in the period 1962-1963, 66 percent were for drunkenness. In Costa Rica, Morales and Chassoul (cited by Moser 1980) report that the rate of road accidents connected with alcohol in the total population went from 17/100,000 in 1961 to 26/100,000 in 1965. Two-thirds of all arrests in 1965 (9,166 out of 13,370) were for drunkennes (Adis Castro and Flores 1967). In 1977 the figure was 59 percent (20,557 out of 34,945) (Instituto Nacional Sobre Alcoholismo, cited in Moser 1980).

Turning to North America, the U.S. between 1965 and 1975 saw arrests for drunkenness decline from 35 percent to 15 percent of all reported legal offenses (Roizen and Schneberk 1978). In the same



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time period the total proportion of alcohol-related offenses decreased from 53 percent to 38 percent. With regard to alcohol's association with crime, as assessed by whether the offender had been drinking before the crime, figures vary by type of crime and from study to study. Roizen and Schneberk (1978), summarizing 16 U.S. studies, found figures ranging from 15 percent to 60 percent.

Alcohol involvement with suicides and attempted suicides also varies markedly across studies. Aarens and Roizen (1978), in a review of this literature, report figures ranging from 18 percent to 40 percent. As for the proportion of alcoholics in samples of completed and attempted suicides, the range is from 0.5 percent to 48 percent. Alcohol's association with traffic accidents changes according to the seriousness of the event. When all traffic accidents are considered, roughly 10 pecent are alcohol-related (Cameron 1978). The more serious the accident the more likely that alcohol was involved. Cameron (1978), summarizing a number of studies on traffic fatalities, reports that the percentage of drivers killed in crashes who had BACs 0.1 percent or higher varies from 35 percent to 59 percent.

In Canada, between 1961 and 1974, 41 percent of all solved murders involved at least one person who had been drinking prior to the murder (Addiction Research Foundation 1978). In 1978 between 30 percent and 45 percent of reported crimes of violence were alcohol-related (Canada, Special Report on Alcohol Statistics 1981). With regard to traffic accidents, a total of 4.5 percent of all drivers involved in accidents in 1975 were listed as having been drinking or having their ability to drive impaired by alcohol. As for pedestrians, 12 percent of those killed in traffic accidents were listed as having been drinking or having their ability impaired by alcohol (Addiction Research Foundation 1978).

Selected findings from the literature reviewed above are summarized in Table 5.

## Community Studies of Drinking Patterns and Alcoholism

Before the 1950's, alcohol research in Latin America was directed mainly at the description and interpretation of alcohol-related statistics such as consumption, legal offenses, and most often, hospital admissions for alcohol-related diagnoses. Progressively, Latin American countries began to develop epidemiological studies aimed at assessing drinking patterns and alcoholism in the general population. This research was greatly supported by PAHO



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TABLE 5: Percentage of Legal Offenses Associated with Alcohol in Selected Countries of the Americas

| Country | Years | Percentage of Offenses Associated with Alcohol | Offenses |
|---|---|---|---|
| Argentina | 1960 - 1965 | 2 - 10 | all homicides |
| | 1961 | 67 | all arrests in shanty towns |
| | 1980 | 20 | a sample of drivers with positive BACs* |
| Chile | 1965 | 52 | all crimes against person |
| | 1965 | 25 | all suicides |
| | 1970 | 46 | male traffic fatalities with positive BACs |
| | 1974 | 70 | male drivers |
| Mexico | 1972 | 7 | all traffic accidents in the country |
| | 1974 | 17 | all traffic accidents in Mexico City |
| | 1981 | 30 | suicides autopsied had positive BACs |
| Puerto Rico | 1968-1972 | 46 - 63 | traffic fatalities |
| Venezuela | 1961-1964 | 50 | all traffic accidents |
| Guatemala | 1967-1972 | 9 | all traffic accidents |
| | | 66 | all arrests |
| Costa Rica | 1965 | 30 | all arrests were for public drunkenness |
| | 1977 | 59 | all arrests were for public drunkenness |
| Canada | 1961-1974 | 41 | all solved murders - one of the persons had been drinking |
| | 1975 | 45 | all drivers involved in accidents had positive BACs |
| | 1975 | 12 | all pedestrians involved in traffic accidents |
| | 1978 | 30 - 45 | all violent crimes |
| United States | 1975 | 15 | reported legal offenses were for drunkenness |
| | various | 15 - 60 | all crimes are alcohol-related |
| | various | 18 - 40 | all suicides and attempted suicides |
| | 1978 | 10 | all traffic accidents |



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activities in the area. When funds for research did not come directly from PAHO, PAHO provided consultants and organized meetings in various countries of the region which helped bring together researchers with interest in the field.

In this section we examine a variety of investigations that describe drinking patterns among population segments of a number of countries. This literature is reviewed country by country and an overview of its findings and limitations is provided in the conclusions. But before moving to the community studies review, we should note Marconi's operational definitions for different types of drinkers since they have been used not only in Chilean surveys but also in studies in other Latin American countries. These concepts have been discussed by Marconi in a series of papers (Marconi 1965, 1967b, 1967c).

Alcoholics are identified by their "inability to abstain" and/or "inability to stop" ("loss of control" in Jellinek's terminology). Besides alcoholics, Marconi recognizes abstainers, moderate, and excessive drinkers. Abstainers are those who had never drunk or who had drunk less than a 100 cc.* of absolute alcohol in a day and had done this less than five times in the year previous to the survey. Moderate drinkers are those with a regular ingestion of less than 100 cc. of absolute alcohol per day and less than 12 episodes of drunkenness per year (Marconi 1967c). The limit of 100cc. of absolute alcohol was arbitrarily set up by Marconi according to the standard that moderate drinkers should not derive more than 20 percent of their total daily caloric intake from alcohol. Assuming that the daily caloric intake is 3,000 calories, and that each gram of alcohol generates 7.1 calories, 100 cc. or 80 grams of absolute alcohol will provide 600 calories or 20 percent of 3,000. Excessive drinkers are those who drink habitually (more than 3 days in a week) more than 100 cc. of absolute alcohol in any day and/or present 12 or more episodes of drunkenness in a year.

In the U.S. researchers have used lesser quantities to characterize heavy drinking, a category which may include not only Marconi's excessive drinkers but also his alcoholics. More detailed comparisons between Marconi's and U.S. definitions are difficult because of the proliferation i.e. of drinking typologies in the latter country. Room (1977) has reviewed these measures at length. The impact of different definitions of heavy drinking on survey results is not negligible, and the relationship between heavy drinking and social class can be totally reversed according to the definition being used (Room 1971).

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*One hundred cubic centimeters allows for the ingestion of approximately 9 drinks, each of which has 9 grams of absolute alcohol and corresponds to a 1/2 pint of beer (4 percent). or a 4 oz. glass of wine (10 percent), or a 1 oz. shot of spirits (40 percent).



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Legislative Approaches to Prevention of Alcohol-Related Problems: An Inter-American Workshop
http://www.nap.edu/catalog.php?record_id=19631

## Chile

Chile is one of the countries in the southern cone of Latin America, and is a wine producing and consuming country. Jellinek (Popham 1976) described Chilean problems with alcohol as reaching "extraordinary magnitude." It is true that there is a high rate of cirrhosis mortality and legal offenses associated with alcohol, but the rates of "alcoholism" do not seem to be dramatically higher than those found in other nations of the region.

The first surveys of drinking practices developed in Chile were all aimed at the urban population of Santiago. Honorato (cited by Marconi 1967a) and Horwitz (cited by Marconi 1967a), and Marconi et al. (1955) report rates of pathological drinking, and also of moderate drinking, abstention, and frequency of intoxication. The best known of all these surveys, perhaps because it is the only one published in English, is that reported by Marconi et al. in 1955.

Marconi et al. set out to obtain information about the prevalence of alcoholism. The population studied was that of a working class suburb of Santiago which, according to the authors, was typical of the Chilean working class in urban areas.

The prevalence of alcoholism was 4.2 percent (8.3 percent for males and 0.6 percent for females). Excessive drinkers included 28 percent of the males and 0.5 percent of the females. Drunkenness was very frequent among males, with 43 percent of them getting intoxicated at least "each weekend." Also, 22 percent of the men drank before breakfast everyday. Marconi rightly concluded that since drinking first thing in the morning was so prevalent in this Chilean sample it could not be considered a sign of addiction in this population.

Honorato et al. (cited by Marconi 1967a) surveyed drinking patterns in a working population of Santiago. The results showed 19 percent abstainers, 54 percent irregular moderate drinkers, 21 percent regular moderate drinkers, 2 percent excessive drinkers. The proportion of alcoholics in the sample, 6 percent, was a little higher than that previously found by Marconi et al.. Horwitz et al. (cited by Marconi 1967a) in a study of "Gran Santiago" found a similar proportion of alcoholics: 5 percent. His definition of alcoholism utilized as operational indicators "inability to abstain" and "inability to stop drinking," according to the concepts developed by Jellinek (1960) and adopted by Marconi (1967c) to indicate physical addiction to alcohol. There also were 8 percent excessive drinkers (defined as those who had more than 12 episodes of drunkenness in the previous year), 54 percent moderate drinkers, and 34 percent abstainers. Among women only 0.8 percent were alcoholics, as compared to 11 percent of the men.



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Studying the prevalence of mental disorders in the north area of Santiago, Moya et al. (1969) found a rate of alcoholism ranging from 1.9 percent in a population of middle lower class to 3.9 percent in an "organized" working class population and increasing to 7.6 percent in a marginal population. The typology of drinkers employed was that proposed by Marconi.

Outside Santiago, drinking patterns have been studied in the island of Chiloe by Tapia et al. (1966) and by Ruiz et al. (1967), in Cantin by Medina and Marconi (1970), and in Talca by Medina et al. (1980). The Medina and Marconi study (1970) describes the drinking patterns of adult Mapuches from five reservations located in a rural area of Chile. Nearly all individuals 15 years of age and older were interviewed and their drinking habits assessed. The drinking categories utilized were those proposed by Marconi in previous work discussed above (Marconi 1967c).

With these definitions 3 percent of the men (N=70) and 15 percent of the women (N=75) were abstainers. Among the men the proportion of moderate drinkers, excessive drinkers, and alcoholics was 46 percent, 26 percent and 26 percent, respectively. The prevalence of alcoholism among the Mapuche is thus three times higher than that in the working population of Santiago. It is possible, however, that this figure is artificially inflated by the definition of alcoholism employed in the study. Medina and Marconi, in discussing this result, acknowledge that the operational indicators previously applied to urban populations in Santiago were of little utility among the Mapuche to diagnose alcoholism. It was difficult to ascertain volume of ingestion, and alcohol consumption days could not be classified as working or non-working days, due to Mapuche division of time into periods rather than days of work and of rest.

Among women 83 percent were moderate drinkers, 1 percent were excessive drinkers and another 1.3 percent were alcoholics. The norms surrounding alcohol ingestion in these Mapuche communities explain to some extent the differences in patterns of drinking between men and women: men drink among themselves; sometimes women participate in these drinking sessions, but they never drink among themselves except during parties and festivities. Wine is the preferred beverage.

These results from Medina and Marconi's work map well onto the anthropological observations made by Lomnitz (1976) among the Mapuche. According to her, Mapuche drinking is basically a "social act between males." This characteristic has been present in Mapuche drinking for more than 400 years, having survived changes in drinking habits due to Spanish colonization and migration to the cities. Changes in Mapuche alcohol ingestion over time have included a switch to wine and spirits, drinking in bars, new ritual drinking occasions of non-Mapuche origin, and changes in female drinking norms.



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Besides studying the general population, some Chilean researchers have described attitudes towards alcohol ingestion among school populations of adolescents (Garcia 1976, Norambuena 1980). These studies illuminate some aspects of attitudes and behaviors with regard to alcohol ingestion which have not been touched upon by surveys of the adult population in Chile. They put more emphasis on mapping the adolescent's knowledge of and reaction to drinking than on ascertaining pathological consumption. Such an approach seems to stem from the notions that a) there aren't many pathological drinkers in this population worth counting; and b) it is necessary to know what adolescents think about alcohol ingestion in order to implement preventive campaigns better.

## Argentina

Argentina, as Chile, is one of the wine producing and wine consuming countries in the southern part of South America. Although not possessing such a tradition of alcohol research as Chile, a group of researchers working in Buenos Aires has produced a significant survey of attitudes towards drinking in the general population (Goldenberg et al. 1968) as well as a very illuminating survey of "alcoholism and excessive drinking" (Tarnopolsky et al. 1975).

Jellinek described Argentinian drinking as follows:

> . . . both men and women drink wine with their meals . . . it is strictly understood that women are not supposed to become even slightly intoxicated. There is some drinking outside meals. In the upper social classes cocktail dances are very popular, but one does not see drunkenness on these occasions. Generally, the Argentinian does not get drunk publicly, but he may do so at home. In Argentina, as in many other South American countries, one may speak of "domestic drunkenness" (Popham 1976:173).

Some of Jellinek's observations have been confirmed by empirical data. The difference in the proportion of alcoholics and excessive drinkers between man and women (ratio of 15:1 in Tarnopolsky et al. 1975) and tne high proportion of moderate drinkers among women (76 percent of all the respondents in the same survey) suggest that women drink only socially, with no great risk of intoxication. Wine is the preferred beverage.

In the study of attitudes towards alcohol consumption, Goldenberg et al. (1968) compared two groups of respondents: a sample of individuals from the city of Buenos Aires, and a sample of



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individuals from the district of Lanus, an industrial suburb of that city. The results showed that 74 percent of the families drank wine with meals. In Lanus, 51 percent of the sample regard "under 12 years of age" to be an acceptable limit at which people can begin drinking. The proportion of respondents in the Buenos Aires sample endorsing the same limit was even higher, 71 percent. The sample from Lanus was more concerned about harmful effects of alcohol (90 percent of the respondents in Lanus against 30 percent in Buenos Aires). A majority of the respondents in both samples, 75 percent in Lanus and 57% in Buenos Aires, considered alcoholism a vice. When the samples were divided by social strata, the low stratum showed more permissiveness towards alcohol use and a greater support for "punitive" solutions to alcoholism (prohibition of sales, fines as punishment for alcoholics). The middle class supported medical and social solutions such as treatment, education, socioeconomic improvements.

The authors also report that 82 percent of this sample accepted as ideal daily intake at least 1/4 of a liter of wine (approximately 1/2 pint), and 44 percent accepted a daily intake of more than 1/2 liter of wine (approximately 1 U.S. pint). The actual daily intake of wine in the sample was as follows: 1/4 to 1/2 liter, 21 percent; more than 1/2 liter, 58 percent.

In the survey described by Tarnopolsky et al. (1975), which also used the Lanus district as a research site, the daily intake of wine among males was 500 ml., while for females it was 100 ml. However, these averages are strongly class related. In a slum area Tarnopolsky et al. found an average of 1 liter of wine per day, while in the best residential areas this went down to 300 ml. per day. Criteria for defining the various types of drinkers were those developed by Marconi (1967c). The interviewers were physicians and residents in psychiatry. The prevalence of alcoholics and excessive drinkers in the male population was 4.4 percent and 12 percent, respectively. There were no alcoholics among women, and only 1 percent of them were excessive drinkers. The rate of abstention and moderate drinking was 11 percent and 71 percent among females. When these results are compared to Chilean surveys, Lanus has one-half the number of alcoholics found by Marconi et al. (1955) and one-third of that found by Horwitz et al. (cited in Marconi 1967a). As for excessive drinkers, the 12 percent in Lanus is again less than the 17 percent reported by Horwitz and less than half the 28 percent reported by Marconi, both in Santiago.

In the report from Lanus, abstention has a U-shaped relationship with age, being higher both among those 15-24 years of age (23 percent) and those 55 years of age and over (16 percent as recalculated by this author). Alcoholics and excessive drinkers were concentrated in the 25-54 age group, with rates of alcoholism



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around 6 percent. Moderate drinking does not show much variation with age; approximately 70 percent of those in all age groups are within this category. Drinking was negatively associated with education, occupation, and degree of urbanization of residential area. The association between alcohol intake and this last characteristic is the most marked in this survey. The differences are not so much in the rates of abstention, but in the proportion of alcoholics and excessive drinkers. While the wealthier area had a rate of 0.6 percent alcoholics and 7.5 percent excessive drinkers (males only), the poorer area had a rate of 13 percent alcoholics and 20 percent excessive drinkers.

Migrants from rural areas of Argentina had significantly more "pathological drinkers" (excessive drinkers plus alcoholics) than those born in the province of Buenos Aires. When compared to foreigners, Argentinians as a group (born in the city or in rural areas) did not have significantly different rates of alcoholism or excessive drinking (Tarnopolsky et al. 1977).

Grimson et al. (1972) assessed the prevalence of alcoholics and excessive drinkers, in a random sample of 3,357 Buenos Aires residents. The definitions of excessive drinkers and alcoholics are modified versions of those proposed by Marconi in Chile and followed by Tarnopolsky in his survey of Lanus. Grimson found large proportions of both alcoholics and excessive drinkers in his sample. Thus, while Tarnopolsky et al. (1975) report 1.9 percent alcoholics and 6.4 percent excessive drinkers, Grimson's results show 16 percent excessive drinkers and 6.7 percent alcoholics. The number of abstainers, 15 percent, is similar to that found by Tarnopolsky, which was 16 percent. Moderate drinkers represented 61 percent of Grimson's sample, but 73 percent of Tarnopolsky's.

Other results from Grimson's work are similar to those from other surveys in Latin America. There is a concentration of excessive drinkers and alcoholics in the 22-39 age group, the percentage of alcoholics among males is much larger than among females (13 percent versus 2 percent), who have larger rates of abstention than males (20 percent versus 9 percent). There also is a concentration of excessive drinkers and alcoholics in the lower socioeconomic groups. Comparing the distribution of different types of drinkers among the population living in slums with that living in urbanized areas, Grimson found a rate of alcoholism four times higher in the slums (21 percent versus 6 percent). The slums also had a slightly higher frequency of abstainers (19 percent versus 15 percent), less moderate drinkers (49 percent versus 63 percent), and less excessive drinkers (12 percent versus 17 percent).



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Peru

Alcohol research in Peru has been aptly examined by Mariategui (1967a, 1974, 1979, 1981). According to Mariategui (1979), different geographical areas of the country prefer distinct types of alcoholic beverages. In the Peruvian Amazon the traditional beverage is chicha, fermented from the yuca plant (Manihot Suculenta). In the costal zone the most consumed beverages are beer and distilled spirits, with very little wine. In the Andean region the more traditional fermented beverages (chicha, guarapo) and canazo, a distilled spirit from the sugar-cane, are the preferred beverages. Almeida (1971) comments that only 20 percent of the sugarcane spirits consumed in the Andean region is rectified. The other 80 percent is consumed without rectification and the toxic components add to the risks of developing organic pathologies commonly associated with abusive alcohol consumption. Side by side with alcohol consumption, the widespride habit of coca-leaf chewing to mitigate hunger and fatigue constitutes an additional public health problem in the Andean population of Peru. Caravedo and Almeida (1971) report that this habit affects approximately 50 percent of the economically active rural population and that its prevalence in the total Andean population varies from 25 percent to 13 percent.

Epidemiological studies in Peru have been developed with the overall aim of assessing psychiatric diseases in general, with alcoholism as one of the entities being studied. Rotondo et al. (cited by Mariategui 1967a) developed one such study in a socially unstable and disorganized community of central Lima. Mariategui (1970) surveyed Lince, another urban district of Lima, while Rotondo et al. (cited by Mariategui 1979) report a survey in a rural province near Lima, and Christiansen and Malca (cited by Mariategui 1979) studied prevalence of alcoholism in the coastal city of Trujillo in northern Peru. Three of these studies found a rate of alcoholism and/or excessive drinking around 9 percent, with the exception of the urban district of Lince, where two-thirds of the population is middle class and the report prevalence of alcoholism and regular excessive drinking was much lower, 2.68 percent. Rotondo and Bazan (1976) report mixed results from a survey of drinking practices among workers of two factories on the outskirs of Lima.

Information on alcohol consumption and drinking patterns among the native inhabitants of Peru, an important segment of the country's population, comes almost exclusively from ethnographic studies. These have been developed among the peoples of the Andean region, and there is very little information about drinking customs in the Peruvian Amazon (Mariategui 1979). Manguin (1957) decribed drinking patterns and alcohol-related customs of the 1,800 residents of the Vicos community in the Peruvian Andes. According to his



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description, drinking is universal among Indians in Peru, and all of the population 16 years of age and older drinks. Among adult males drinking often leads to drunkenness, and although drinking is frequent it remains a social activity "integrated with the most basic and powerful social institutions in the community." Since most of the drinking is done in social situations, as with the Mapuche studied by Medina and Marconi (1970) and by Lomnitz (1976), there are no solitary drunkards in Vicos. The absence of alcohol-related pathology in Vicos is explained by Manguin as a function of the integration of drinking and culture.

Drinking in Lunahuana, a mestizo community south of Lima, has been described by Simmons (1959, 1968). As in Vicos, drinking in this community is widespread and very frequent. Attitudes towards drinking are permissive, and there are no definitions of drinking as a "social problem." Alcohol consumption is a social activity and has both anxiety-reducing and integrative roles in the society. Integration is done through compliance with drinking norms dictated by the group. Because aggressive behavior is disapproved, drinking becomes a means of relieving tension. Solitary drinking is seen as abnormal, and "it is generally believed that these men drink alone because they are stingy and do not want to share their liquor" (Simmons 1958:109). Drinking pathologies are rare. There is also a positive association between drinking and work. Many of the working activities connected with the production of alcohol and cultivation of grapevines are punctuated by drinking. The beverage is provided by the employer, and by the end of the day, especially during grape harvest time, many of the workers are drunk.

Brazil

Jellinek (Popham 1976) described Brazil as a spirit and wine drinking country. However, although wine is indeed consumed in the south, in the nation as a whole beer is the second most consumed beverage, after distilled spirits from sugarcane. Thus, as occurs in Peru, different regions may have different beverage preferences. In the states of the south where grapevine cultivation and wine production is a growing industry, wine drinking is fairly common. This seems to be a custom which is finding acceptance in the upper social classes of the southeast region, especially in urban areas such as Rio de Janeiro and Sao Paulo.

Cachaca, the distilled spirit from sugarcane, is a beverage whose consumption cuts across all regions of the country and social classes. It is frequently consumed alone or mixed with the juice of tropical fruits and sugar. It is, together with beer, the preferred beverage of the lower socioeconomic stratum both in urban and rural areas. It is also regularly consumed in religious ceremonies of Afro-Brazilian cults, where it has the effect of integrating the cult membership (Leacock 1979).



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Knowledge about alcohol consumption and drinking patterns is very limited. The most often cited assessment of the magnitude of alcohol problems in Brazil is the percentage of alcohol-related admissions to psychiatric hospitals; between 1960 and 1974 the percentage of alcohol-related admissions went from 3 percent to 5 percent for females and from 21 percent to 29 percent for males (Caetano 1981).

The first survey of drinking practice conducted in the general population was by Azoubel Neto (1967), who studied alcohol ingestion in a district of Ribeirao Preto, a town in the state of Sao Paulo.

Among males (N=88), there were 22 percent abstainers, 48 percent moderate drinkers, and 14 percent pathological drinkers. The definitions for these categories are not given. Among females the abstention rate was 36.5 percent, while moderate, excessive, and pathological ingestion occured in 52 percent, 10 percent, and 1 percent, respectively.

Another survey was carried out by Luz (cited in Negrete, 1967a) in a lower class suburb of Porto Alegre in the south part of the country. Respondents were a representative random sample of the district. The definitions utilized were those used by Grimson et al. (1972) in Argentina. The rate of problem drinkers was 10 percent, which is less than half of the 23 percent reported by Grimson.

More recently, Vianna Filho et al. (1978) report on drinking patterns of a sample of residents of the Island of Santa Catarina, a district of Florianopolis, a state capital in the south of Brazil. Approximately 80 percent of the respondents were females, an over-representation resulting from no preselection of interviewees and the fact that interviews were conducted during the afternoon when most of the men were at work.

The rate of abstention was 39 percent in the more urbanized part of the district and 55 percent in the other area. Ingestion of alcoholic beverages was done usually at parties and social gatherings. Only 3 percent of the respondents in the urban area and 6 percent in the rural area stated they drank every day. Drinking is usually done at home, and the beverage most frequently drunk is cachaca, followed by beer and then wine.

Two recent papers by Masur et al. (1980) and by Moreira et al. (1981) report on the drinking patterns of patients hospitalized in general hospitals in two regions of Brazil. Masur et al. (1980) selected at random 63 women and 50 men who were hospitalized for treatment of various organic pathologies. The authors used as an indicator of alcoholism the daily ingestion of at least 150 ml. of ethanol (this allows for the ingestion of approximately 13 drinks,



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each of which would have 9 grams of absolute alcohol) or the ingestion of 450 ml. of ethanol during weekends (this allows for 40 drinks, each of which would again have 9 grams of absolute alcohol, or 1 1/2 bottles of 80o proof spirits). They found that 59 percent of the men and 18 percent of the women reported enough drinking to be classified as alcoholics. Comparing these findings with the information on medical records showed that the medical histories did not have much information concerning alcohol intake. For men, the proportion recognized in doctor's notes as having the above mentioned levels of alcohol intake was 32 percent; for women the proportion was 10 percent.

This research was replicated in two hospitals in the northeast part of the country by Moreira et al. (1980). The results showed lower rates of drinking than those reported by Masur et al. This is especially so for the rural hospital where rates for men were half of those found by Masur et al., while rates for women are only one-fifth as high. A total of 90 pecent of these drinkers reported consumption of distilled spirits from sugarcane.

Colombia

Previous reviewers have already commented on the lack of epidemiological research on drinking problems in Colombia (Velasquez 1967; Mariategui 1974). This seems to be still true today. Mackenzie and Osorio (1977) report a study of drinking patterns, the first one undertaken in Colombia, in a rural community in the eastern part of the country. Interviewers for this study were school teachers recruited in the local school district. The effect of using these interviewers on respondents' reporting is not discussed by the authors; considerable under-reporting may have been caused by having these authority figures inquire about drinking patterns.

The preferred beverages were distilled spirits from sugarcane and beer. Drunkenness episodes were frequent and, according to the authors, seemed to follow a native pattern of alcohol ingestion which invariably leads to intoxication. Among males 70 percent delcared at least one episode of drunkenness per year. Among females this proportion was 20 percent. Drunkenness was especially common during Christmas, New Year, family gatherings, and other social occasions. A total of 19 percent of the men were abstainers, 46 percent were moderate drinkers, 24 percent were excessive drinkers, and 10 percent alcoholics. Women had a larger proportion of abstainers, fewer excessive drinkers and no alcoholics. In both sexes abstention was positively associated with age.



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## Uruguay

Munoz (1967) reviews data on alcohol involvement in traffic accidents, as well as laws and regulations which apply to alcohol-related offenses. The data in the paper refers to the beginning of the '50s and must be outdated by now. The same has inevitably happened to Jellinek's (Popham 1976) comments on liquor production and alcohol consumption in the country.

## Bolivia

The most significant research on alcohol to come out of Bolivia has been Heath's studies of the Camba (Heath 1958) and the Camba and Aymara (Heath 1971). The Camba drink alcohol during festivities. Their beverage is a potent distilled spirit called simply "alcohol" -- for very good reasons, since it contains 89 percent ethyl alcohol. It burns the mouth and the throat, and to the Camba it has some medical uses ("it kills the parasites"). According to Heath's analysis, drinking among the Camba usually leads to intoxication, but never to aggression or solitary drinking. By the virtue of being a non-corporate people, drinking groups among the Camba may take on an important integrative function, serving to form "primary reference groups."

Heath's (1971) description of drinking in Montero, a town populated by the Camba, and Coroico, inhabited by the Aymara, are a testimony to the relationship between drinking patterns and the social structure. In 1952, Bolivia was the stage for a political revolution that changed significantly the political and social structure of the country. In Montero the peasants left the farms to establish themselves on their own land, and as a result the previously friendly relationship with the landowner was broken. In Coroico, the landowners became merchants and now serve as middlemen between former peasants and wholesalers in La Paz. The relationship between these former landowners and the peasants, although commercial in nature, now includes social drinking as a mode to keep the commercial alliance on good terms.

## Ecuador

In this country the preferred beverage is distilled spirits from sugarcane. In 1966 cultivation of this crop alone took up 11 percent of all the cultivated land in the country (Pacuru Castillo 1972).

Endara (1967) describes the study of alcoholism by Canelos and Cevallos in an Indian community on the outskirts of Quito, the country's capital. The information was obtained from 90



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individuals, selected through systematic random procedures from among those treated in a medical office. They constituted a 10 percent sample of the population in the community. According to Endara, drinking was associted with being male, single, of young age, and of lower socioeconomic status.

Venezuela

Quijada (1961) describes a survey of prevalence of psychiatric morbidity in the population of three districts: urban, semirural, and rural. In the urban area two districts were surveyed. In one of them 221 individuals were interviewed and the authors found a prevalence of alcoholism of 1.8 percent. In the second area data were obtained for 120 individuals, and the prevalance of alcoholism was 2.5 percent. The semi-rural area (N=210) and the rural population (N=731) had prevalence rates for alcoholism of 5 percent (Castrillo and Sanjuan 1961) and 1 percent (Quijada 1961) respectively. Unfortunately none of these authors provides adequate information about the methodology employed in this study. Neither sampling precedures nor definitions of alcoholism are given.

Costa Rica

Costa Rica is one of the few Latin American nations with a constant output of alcohol studies. Most of this research has been developed by the Instituto Nacional Sobre Alcoholismo (INSA) since its inception in 1973 (INSA 1981a).

In spite of all the efforts developed by this institute in the area of treatment and prevention, alcohol consumption in the country has been growing steadily. In 1961 the annual per capita consumption in liters of absolute alcohol for the population 15 years of age and older was 2.76. In 1979 it was 4.76, an increase of approximately 70 percent (Miguez 1980). About 2 percent of the annual per capita consumption is of wine. The other 98 percent is equally divided among distilled spirits from sugarcane (rum), other distilled spirits, and beer. Changes in consumption in the two latter beverages accounted for the bulk of the increase in the annual per capita consumption between 1961 and 1969. There were different rates of change in per capita consumption between 1969 and 1979 in the different regions of the country. In the Atlantic region the annual per capita consumption rose from 4.3 to 4.7 liters of absolute alcohol, an increase of 10 percent. In the Central region the proportional increase was 55 percent (from 3.3 to 5.2 liters). In other regions the increase ranged from 28 percent to 66 percent.



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All these figures on consumption do not take into consideration the clandestine production of alcoholic beverages, which according to Chassoul (cited in Miguez 1980) is similar in volume to the production by the state monopoly. An example of this illegal production and sale of alcoholic beverages surfaced recently in a survey of drinking patterns in the district of Limon, located in the Atlantic region of Costa Rica. In a community which officially had one licensed place to sell alcoholic beverages, the researchers found 10 illegal operations located in private residences (INSA 1980a).

One of the first surveys on alcohol-related problems in Costa Rica is that of Adis Castro and Flores (1967) who were assessing the prevalence of psychiatric disorders in the community. One of the categories investigated was alcoholism. The prevalence rates in a simple random sample of a rural population was 13 percent among males, with none among the females. In an urban sample, the proportion of alcoholics was 24 percent and once again no alcoholics were found among women.

More recently INSA has been sponsoring a series of surveys of the general population throughout Costa Rica in an effort to obtain data on drinking patterns (INSA 1980a, b; 1981b, c, d, e, f). So far the published surveys have covered 69 percent of the area of the country (personal conversation, H.A. Miguez). They all present similar methodological features and utilize the same categories and definitions for the various types of drinkers. Respondents were selected through a two-stage sampling procedure and were interviewed at home by trained personnel. Data were collected through questionnaires and in some surveys those diagnosed as alcoholics were further interviewed by a physician, who confirmed or rejected the initial classification, The definitions used to identify abstainers and different categories of drinkers were as follows:

Abstainers: Never drink alcoholic beverages

Moderates: Drinks less than 120 cc.* (males) or 60 cc. (females) of absolute alcohol, in one day or per drinking occasion, with a maximum frequency of twice a month or its equivalent in a year.

Excessives: Drinks 120 cc. or more (males) or 60 cc. or more (females) in one day or in one drinking occasion, with a minimum frequency of twice a month or its equivalent in a year.

Alcoholics: Those who present any of the following: inability to abstain, inability to stop drinking, withdrawal syndrome (INSA 1980a:39).

When giving these definitions the authors of the reports do not comment on why men were allowed twice as much alcohol as women.



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The rate of abstention among males varies from a minimum of 12 percent in the city of Limon to almost twice as much in Santa Cruz.[2] Females have higher proportions of abstainers in all the areas studied. In general this proportion is three times higher than that for males, with the exception of Puntarenas and San Izidro, where it is four times higher. As with males, female abstention rates also vary considerably across areas, going from 34 percent in Limon to almost twice as much in Santa Cruz. The proportion of moderate drinkers also presents variations across areas among both males and females. In some areas (Talamanca, Desamparados, Santa Cruz) men are more often moderate drinkers than women, while in other areas the opposite occurs.

Honduras

There have been very few studies of alcohol consumption and drinking practices in Honduras. Natera et al. (1982) summarizes some of these studies while describing the investigation they carried out in that country and Mexico. Two areas of central Honduras were investigated using the "informant" method proposed by Jellinek.[3] The informants were selected from rural areas and 30 groups were formed, with a total of 178 participants. All were males, a fact which places some limitations on the findings, especially when they refer to women's sentiments towards alcohol ingestion and drinking habits.

The majority of groups indicated that men in Honduras begin to drink before 18 years of age, while women begin to do so a little later, after 19 years of age. This first drink is usually taken "with friends without parent's permission." The groups reported a striking difference in the places where men and women do their drinking; 70 percent of the groups stated that men do most of their drinking "only in public places," while 60 percent declared that women's drinking occurs "only at home." Norms associated with drinking by men and women seem to be very different. Most of the groups (57 percent) declared that both men and women disapprove of moderate drinking by women. According to the groups, however, women would have a high degree of tolerance for drunkenness among men. Thus, 50 percent declared that women see men's intoxication as something which is "undesirable but that one has to tolerate." Drinking was also associated with social and sport activities.

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*One-hundred-twenty cubic centimeters of absolute alcohol allows for the ingestion of approximately 10.5 drinks each of which contains 9 grams of absolute alcohol. This is the alcohol content of a 1/2 pint of beer (4 percent), a 1 oz. drink of spirits (40 percent), and a 4 oz. glass of table wine (10 percent).



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## Guatemala

Aguilliera (1967) describes sociocultural aspects of alcohol consumption, treatment, and preventive programs. Rivera-Lima (1973) prsents data on alcohol production, alcohol-related legal offenses, and the treatment system. Bunzel (1940) describes drinking in an Indian Community. As with other Indian communities studies, drinking is associated with fiestas and market days, alcohol is also consumed in large quantities during dancing parties, and drinking may develop into long sprees that may last for days. Such sprees are marked by distruptive behavior including quarrels between neighbors and families and loss of money; their result is, as Bunzel puts it, "an enduring aftermath of guilt and anxiety."

## Caribbean

Rum has been acknowledged to play an important part in the Caribbean culture. Ralston (1980) traced this influence back to the seventeenth century, when sugar plantations replaced tobacco farms in the islands. Beaubrun (1967a), commenting on the rates of alcoholic admissions to mental hospitals in the area at a time when no prevalence data was available, stated that these indicators suggested the existence of a problem of "some size." Yet, there have been few studies of drinking patterns and the role of alcohol in the cultures of the region.

In Jamaica, Beaubrun (1967b) reports a study of alcoholism and drinking patterns in Kingston, the capital and the largest ctiy on the island. A total of 1,377 individuals 18 years of age and older were interviewed, comprising a random sample of four socioeconomic levels of the city. The data collection instrument was a questionnaire developed by the Alcohol Impact Study Group of the Maudsley Hospital, London. The results showed a rate of abstention of 10 percent among males and of 25 percent among females. The prevalance of heavy drinking among men was 38 percent. Drinking was positively associated with age, with the highest rates of drinkers being found in the 40-44 age group. Heavy drinking was positively associated with income (using residential status as an indicator), education, being white or of East Indian origin, and lacking religious affiliation. The estimated prevalence of alcoholism in the total population of the island was 5 percent.

In Trinidad, Yawney (1979) studied alcoholism and drinking patterns among East Indian men and blacks. She emphasizes the great availability of rum, which can be purchased in "rumshops" in any amount by the local population. These shops are a combination of "corner store" and "neighborhood tavern," also serving food and selling provisions. Drinking is casual, women are hardly ever present, and there is a general attitude of permissiveness towards alcohol ingestion.



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Patterns of drinking in Barbados were studied by Dann (1980). Data come from interviews with 437 respondents selected through a stratified random procedure from among the Barbadian adult population. The overall response rate for the study was 97 percent. The results showed 26 percent abstainers among men (54 out of 206), and 57 percent (13 out of 231) among women. Drinking was positively associated with being young, unmarried, without religious affiliation, employed, having a high income, and living in a semi-urban or urban area. The average annual per capita consumption in liters of absolute alcohol for the sample was 7.24. The preferred beverages were rum and beer for both men and women, but preference changed according to place of ingestion. Rum was the most consumed beverage in rumshops, at home, at others' homes, and "in the open air." Beer was the most consumed beverage at parties, picnics, bars, and nightclubs. In the workplace, during lunch breaks, the beverage of preference was gin. The preferred locale for drinking was the home, followed by other's homes, followed by parties. The major sex difference was that a larger proportion of men than women preferred to drink in rumshops. The rumshop was in first place in relation to all other drinking locales, when the number of hours spent drinking, the quantity consumed, and expenditures on alcohol were considered.

Using definitions based on percentage of time spent drinking, annual amount of alcohol drunk, and percentage of annual net income spent on alcohol, Dann constructed a typology of drinkers as follows: occasional, regular, and heavy. The prevalence of each type of drinker among males (whole sample), as recalculated by this reviewer, were: occasional, 34 percent; regular, 27 percent; heavy, 13 percent. For women the rates were: occasional, 40 percent; regular 2 percent; heavy, 0.4 percent.

A profile of the heavy drinker, as offered by Dann, may serve to characterize this rubric when contrasted to drinking patterns of the sample as a whole. Thus, while the average number of hours spent drinking per year for all drinkers in the sample was 293.16 hours, the heavy drinkers' average was five times this number. Mean annual consumption for drinkers in the sample was 12.7 liters of absolute alcohol, while for heavy drinkers it was 83.7 liters. This allows for the consumption of 1 pint of spirits per day. Frequency of drunkenness among heavy drinkers was once every 8 days, while 75 percent of all drinkers got drunk less than once a year.

Mexico

Mexico is one of the Latin American countries where alcohol problems have received considerable attention from researchers, and a number of studies have been carried out there in both general population and special groups. Some of these have been reviewed by Cabildo (1967), and the information below is taken from his review.



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Three of the intitial studies providing information about alcohol problems in Mexico were carried out to assess the prevalence of psychiatric pathology in general. As such, they focused on the diagnosis of alcoholism only, without touching other drinking problems or drinking patterns. The Direccion de Salud Mental y Direccion de Bioestadistica (cited by Cabildo, 1967) surveyed a national sample and found the rate of alcoholism was 0.55 percent. Cabildo (1967) studied employees from the Mexican government. Out of a total population of 568,396 a 2 percent sample was taken; the rate of alcoholism was 0.7 percent. The questionnaire used in the Cabildo survey was used by Ayuso et al. (cited by Cabildo, 1967) on a sample (N=3,231) of military personnel. The prevalence of alcoholism was the same 0.7 percent.

Maccoby (1972) carried out a study of alcoholism among males 16 years and above in a mestizo agricultural community. Drinkers were classified according to Marconi's typology of moderate, excessive, and alcoholics. But Maccoby did not use Marconi's operational definitions. Alcoholism was determined by the degree of failure to met social obligations. Excessive drinking was defined by drinking beyond cultural norms, e.g., losing workdays because of drinking. Moderate drinking was that mode of ingestion which did not interfere with social responsibilities. With these definitions the rate of alcoholism among males in the village was 14.4 percent. There were 13 percent excessive drinkers, 52 percent moderate drinkers, and 16 percent abstainers. Another 4 percent of the men were classified as currrent abstainers. Heavy drinking was positively associated with age. Of the male population 40 years of age and older, 32 percent were alcoholics and 16 percent were excessive drinkers. Among those less than 40 years of age the proportion of alcoholics and excessive drinkers was 8 percent and 12 percent, respectively.

Another study in a rural community is that described by Smart et al. (1980), and Natera et al. (1981, 1982) which utilized the "informant" method to collect information on drinking patterns.[3] The community is located southwest of Mexico City and has 5,198 inha- bitants. The investigation collected information from 30 groups of 5 people each. The average daily consumption of different types of alcoholic beverages among the male population was 1.5 liters of pulque, 2 bottles of beer, and half a glass of distilled spirits. Women reportedly drink mostly at home and drink less than men, but have a great tolerance for men's heavy drinking. Reasons for drinking, in decreasing order of importance, are : "habit," "to bring friends closer," "to rest," "to calm down the nerves," "to make work easier." Reasons for not drinking, also in decreasing order of importance, are: "health reasons," "moral reasons," "economic reasons," "afraid of the consequences," "family problems," "work problems," "dislike the taste."



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More recently, the Instituto Mexicano de Psiquiatria (Mexican Psychiatric Institute) has carried out a number of surveys of drinking practices in several Mexican cities. The information summarized here are from studies of drinking among the population of La Paz (Medina-Mora et al. 1978), San Luis Potosi (De la Parra et al. 1980), and Mexico City (Medina-Mora et al. 1980). In all three surveys the sampling methodology, data collection procedures, and drinking classifications were the same. These studies found one-fourth to one-third of males, and one-half of the women, were abstainers. Another one-third of both men and women were infrequent drinkers, i.e. drank less than once a month, but at least once a year. Drinking classifications reflected a much lower level of alcohol ingestion than in other studies. For example, regular habitual drinkers were described as those who drink three or more times per day at least once or twice a month, and consume five or more drinks per occasion. Excessive drinking and alcoholism were not listed as identified categories.

The most recent, and certainly the most comprehensive, study of drinking patterns in the general population in Mexico is that carried out as part of the WHO study of community responses to alcohol-related problems. This study was carried out in two other countries besides Mexico -- Zambia and Scotland -- in the framework of international collaboration. The same instruments for data collection and the same methodology were applied in each country. Adherence to the agreed procedures was ensured by a series of meetings which brought together the research teams and where the methods were discussed and agreed upon.

Complete reports for this study are forthcoming. Data from Mexico have been described both by Calderon et al. (1981) in the report from that country and by Roizen (1981) in a cross-cultural review of findings from Mexico, Zambia, and Scotland. According to Calderon et al. the work in Mexico began in 1976 and the objectives to be achieved were: a) to study drinking patterns and alcohol-related problems and disabilities; b) to study community responses to drinking and the ways in which the community in general and its specific institutions handled alcohol-related problems. The two communities studied in Mexico, one rural and the other urban, are both in the vicinity of Mexico City and had a history of drinking problems. Subjects for the study were selected by a two-step sampling procedure from among the population 15 years of age and older. Because drinking problems are more prevalent among the male population, it was decided to oversample this population so that two-thirds of the respondents would be males.

Among males 22 percent were classified as regular drinkers (drink at least once a week). Approximately 25 percent were judged to be intermediate drinkers (drink between one and three times a month) and another 30 percent fell in the category of occasional



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drinkers (drink less than once a month but at lease once a year). The prevalence of abstainers was 19 percent. Among females the proportion of both regular and intermediate drinkers was 9 percent. Occasional drinkers and abstainers had prevalence rates of 40 percent and 42 percent, respectively.

Roizen (1981) provides a detailed analysis of the Mexican data from the WHO study. Approximately 40 percent of the alcohol consumed in Mexico is estimated to come from distilled spirits (especially tequila and rum). Beer and spirits together comprise 88 percent of the total alcohol consumption. Almost all the rest is supplied by pulque, a fermented beverage made from the sap of the maquey cactus.

The association of drinking with age is such that middle-aged men show the larger percentage of drinkers (91 percent), followed by young men (83 percent), followed by older men (76 percent). Among women there is not much change in the percentage of drinkers in relation to age. In general 50 percent of the women, independent of age, are drinkers. Drinking at least once a week is more frequent among men than among women, among rural than among urban respondents, among the old than among the young. Twenty-seven percent of women drinkers and 59 percent of male drinkers get drunk less than or about once a month. Frequency of being drunk at least once a week is 7 percent among male drinkers and 1 percent among female drinkers.

The most frequently stated reasons for drinking are as follows: "a good way to celebrate" (men, 50 percent; women, 38 percent), "like the feeling of getting high or drunk" (men, 43 percent; women, 27 percent), "it is what most of my friends do" (men, 55 percent; women, 44 percent). The high proportion of drinkers declaring as reason for drinking "getting high or drunk" seems to indicate approval of drinking to intoxication.

Norms regulating drinking by sex in the communities are very different. While 27 percent of the sample would condone drinking by a man 21 years of age, twice as many or 53 percent would not condone it for a woman the same age. A man 40 years old should drink, according to 15 percent of the subjects; 43 percent disapproved of drinking by a woman of 40.

Male drinkers report high rates of personal problems: 55 percent report guilt over drinking, 55 percent felt they should cut down or stop drinking altogether, 36 percent experienced hands shaking in the morning after drinking. Male drinkers in the rural area reported approximately twice as many problems as their urban counterparts.



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The presence of problems originating from adverse social reactions to the subject's drinking was also investigated in the WHO study. The social problems most often reported by male drinkers were: "felt effects of alcohol at work" (35 percent of urban drinkers, 49 percent of rural drinkers); "family and friends problems" (32 percent of urban drinkers, 41 percent of rural drinkers); "ashamed of what you did while drunk" (28 percent of the urban drinkers, 45 percent of the rural drinkers). Problems in the workplace, with police, and accidents were reported by 1 percent to 6 percent of the male drinkers. Female drinkers both in the urban and in the rural community reported fewer problems than male drinkers. However, the type of social problems reported most frequently were the same as those reported by men.

Although the above provides some detail, it does not sufficiently reveal the richness of the data provided by the WHO study. Many of these results acquire more significance when they are compared with similar data from the two other countries in the study, Zambia and Scotland. Roizen is in a much better position to interpret the Mexican data than this reviewer, and this is what he had to say:

> And what should we make of the Mexican circumstance, where in spite of the extraordinary infrequency of drinking, still substantial alcohol-related problems are reported, even by nearly abstemious women? In the Mexican data one has the distinct feel of the presence of an overriding cultural negativity toward alcohol: perhaps a rhetorical disposition so strongly inclined against drinking as to prompt extraordinary reports of its evil doings...This body of antidrinkng rhetoric, then, may function as a kind of well out of which those who are not permitted access to drink are obliged to dip their ladles...We have seen, in the Mexican case especially, a circumstance in which very high positive reports on indicators sometimes regarded as indicative of a dependence on alcohol nevertheless are quite compatible with a very low frequency of drinking on the whole (Roizen 1981: 51-52).

## The Perception of Alcohol-Problems in Latin America: Jellinek's Chilean Connection

From the vantage point of the '80s it appears that the 1956 visit to Chile by E.M. Jellinek was the most important factor in the development of alcohol epidemiology in Latin America. This is not to ignore the fact that by 1956 Chile already had a tradition in alcohol research. Jorge Mardones, to whom Jellinek dedicated his



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book The Disease Concept of Alcoholism, and who was a member of the WHO Expert Committee on Mental Health and on Alcohol with Jellinek and others, was the head of the Instituto de Investigaciones sobre Alcoholismo of the University of Chile. Mardones had been actively developing experimentally-oriented research on alcohol prior to Jellinek's visit. His work at the time was directed towards researching the association between alcohol intake and vitamin deficiency, and it is discussed in detail by Jellinek (1960). Also, Varela and Marconi (1952) had already published what probably is the first replication of Jellinek's 1946 study of symptoms of alcoholism (Jellinek 1946).

But after Jellinek's visit epidemiological research flourished, and Marconi published his first paper on the disease concept based on Jellinek's work (Marconi 1959).[4] Other papers followed (Marconi, 1964, 1965, 1967b, 1967c) in which Marconi was not only concerned with furthering the disease concept, but also with defining alcoholism at an operational level. These operational definitions, developed for use in epidemiological surveys in the community, found enormous acceptance among alcohol epidemiologists in Latin American nations, and became a standard concept applied in a number of prevalence studies in Chile, Argentina, Brazil, Peru, Mexico, and Costa Rica.

Athough Marconi subscribed entirely to Jellinek's disease concept, there are many points of substantial difference between their work. Thus, Jellinek's definition of alcoholism is purposely loose and vague. He understands alcoholism as:

> ...any use of alcoholic beverage that causes any damage to the individual or society or both (Jellinek, 1960:35).[5]

Marconi defines alcoholism as:

> ...a chronic disease characterized by a fundamental disturbance of the central nervous system which manifests itself in a group of bodily symptoms and signs that give an imperious character to the concomitant desire to drink alcohol. On the behavioral level, the disease manifests itself by a primary or secondary state of physical dependence on the drug. The symptoms disappear temporarily after the consumption of a certain quantity of alcohol (Marconi 1959:221).[6]

Marconi's definition is more precise from the beginning and does not mention alcohol-related "damage" or problems as a possible indicator of the disease. The absence of alcohol-related problems from the definitions of both excessive drinkers and alcoholics in



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Latin America is one of the major differences between drinking typologies developed in the U.S. and Latin America. Thus, the U.S. concept of "problem drinker" does not have a parallel in Latin American epidemiological literature. Marconi's excessive drinker is roughly comparable to the heavy drinker category in the U.S. literature, but even here the limits of ingestion may vary widely. The U.S. concept of "problem drinker" encompasses both excessive drinkers and alcoholics as defined by Marconi.

Marconi's definition characterizes alcoholism as a pathology of the central nervous system. For him this conception is an unavoidable consequence of characterizing alcoholism by the phenomenon of physical dependence. This is how he puts it:

> . . .if (physical dependence) is defined as the coexistence of a state of intense distress, usually one of anxiety, and of strong desire to ingest alcoholic beverages, we must postulate the existence of central neuronal circuits capable of unchaining spontaneously or under the stimulus of small doses of ethanol those phenomena consciously registered by the patient (Marconi 1967b:634).

Briefly, Marconi (1965, 1967b, 1971) and Marconi et al. (1965, 1970) postulate the existence of two central nervous circuits located in the hypothalamus: one would regulate the appetite for alcohol and the second the appearance of anxiety. In the "intermittent" type of alcoholic, which Marconi (1959) describes as experiencing short periods (days or weeks) of abstinence, alcohol ingestion directly stimulates these circuits, with the consequent appearance of "physical dependence" as evidenced by "inability to stop" (loss of control). In the "continuous" type of alcoholic, defined as those drinkers who experience intervals of several hours between one drinking occasion and the next, the mechanism triggering the appearance of physical dependence is different. In this case the central nervous system circuits are depressed by the continuous ingestion of alcohol, and it is the abrupt reduction or the decrease in the frequency of alcohol intake that triggers the pathological reaction causing physical dependence, which then appears as "inability to abstain."

These two mechanisms explain the appearance of one of the forms of physical dependence. This is the type of dependence which is at the foundation, as mentioned, of two of the three clinical forms of alcoholism as proposed by Marconi: the "intermittent" and the "continous" alcoholics. Using Jellinek's typology, these would be the "gamma" and the "delta" alcoholics, respectively. A third clinical form put forward by Marconi, the "remittent" alcoholic, corresponds to Jellinek's "epsilon", a form of alcoholism which



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Jellinek did not include within the boundaries of the disease concept. This type of alcoholic is characterized by Marconi (1959) as presenting long periods of either abstinence or moderate drinking between periods of addictive drinking. In this case, the physical dependence appears spontaneously without any alcohol ingestion.

This pathogenic theory of alcoholism puts forward a relationship between cause and effect which is difficult to accept. The malfunctioning of the central nervous system neuronal circuits, as proposed by Marconi, is at one time triggered by the presence of alcohol, at another time by its absence or by a reduction in alcohol intake, and at a third time occurs spontaneously. Empirical evidence in support of this theory is lacking as of today and, therefore, Marconi's ideas remain tentative.

How can wide acceptance of Marconi's concepts by Latin American researchers be explained in the light of this criticism? First, Marconi is concerned not only with furthering the disease concept, but also with defining alcoholism, moderate drinking, and excessive drinking at a operational level. It is possible then to identify two distinct (although connected) themes in Marconi's papers. One is eminently neurophysiological and is associated with his pathogenic theory of alcoholism. The other is epidemiological and can be exemplified by his concern with laying out "objective indicators" of alcoholism which would allow for the identification of this condition in epidemiological surveys. Alcohol epidemiologists may well have been utilizing Marconi's operational definitions without necessarily subscribing to his pathogenic theory of alcoholism.

Second, in the overwhelming majority of cases epidemiological studies of alcohol in Latin America have been authored by physicians, and the notion that alcoholism per se could be considered as a specific disease was therefore not so foreign.[7]

In the U.S. and in some Scandinavian countries, on the other hand, sociologists have been very active in the field of alcohol research. This interest seems to have emerged from the combination of a general concern for an important sociocultural topic (alcohol and its uses) and the empirical orientation of U.S. sociology, which provided the knowledge and the tools (survey research) necessary to develop research in the subject. Thus, one of the main points of difference between the U.S. and Latin America with regard to alcohol studies is the involvement of social sciences and the consequent development of competing alternatives to the disease model of alcoholism.

Both in the U.S. and Latin America, supporters of the disease concept have been quick to point out that the understanding of alcoholism as a disease helped to change the labelling of alcoholics



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as morally degraded, and paved the way for the public health approach to alcohol problems.

It is also pointed out that the disease concept helped to create a new field of research and therefore legitimated the aspirations of alcohol researchers for career development, funding, and professional respectability. It brought this new field under the wing of an already powerful established professional group -- medicine -- thus increasing its chances for recognition in the scientific community. With this new paradigm, alcohol specialists became more organized and developed into an effective group.[8]

Undoubtedly, these points have validity. However, the widespread acceptance of the disease concept and of Marconi's operational definitions has not been without consequences to Latin American research on alcohol problems. Clark (1975) has discussed adequately some of the implications of the disease concept for research. In Latin America, the following consequences are readily identifiable:

1) General population surveys in Latin America have been basically concerned with assessing the prevalence of alcoholism. Even those who estimate the prevalence of different types of drinkers do so only secondarily, focusing their discussion and analysis on the pathological drinkers (excessive drinkers and alcoholics). Once the general population surveys of the late '50s and '60s were developed, and the prevalence of alcoholism was established, epidemiologically-oriented research just ground to a halt in many countries. However, little can be done with such nose-count information other than using it to provide an adequate number of hospital beds for the discovered alcoholics.[9]

2) As a corollary of this concentration of efforts to assess the number of excessive drinkers and alcoholics, sociocultural factors associated with drinking have been left neglected in the Latin American alcohol literature. This is not to say that researchers have not underlined the importance of such factors for understanding alcohol abuse. A number of authors (Negrete 1973, 1974, 1976a; Adis Castro 1966; Heath 1974; Mariategui 1967b, 1967c) have emphasized the necessity of paying attention to those characteristics of the social environment that have a bearing on alcohol use. Yet, when it comes to studying the phenomenon in the community, only the more severe forms of ingestion are addressed. The only exception to this seems to be the ethnographic studies developed among native peoples, some of which have been mentioned here. Outside these populations, which are concentrated in small towns and rural areas, little is known about reasons for drinking, drinking contexts, norms, attitudes, and beliefs associated with alcohol use in Latin America.



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3) The use of indicators such as "inability to stop" or "inability to abstain" allows for the identification of a group of drinkers with severe alcohol problems in the general population and who may be in need of help. Whether they have a disease called alcoholism or not becomes secondary if the purpose is to identify and assess the prevalence of these drinkers. However, by using only these indicators, along with amount and frequency of drinking, to identify "at risk" drinkers, the broader range of alcohol-related problems remains largely unexamined. Clark (1976) has already demonstrated for the U.S., at least, that "loss of control" does not correlate highly with scales that assess problems in social functioning caused by drinking. Thus, little is known about the association between drinking and the occurrence of problems in areas such as interpersonal relationships (wife, friends, relatives, working relations, and legal problems) among the general population in Latin America.[10]

4) The majority of efforts to prevent alcohol problems have been concentrated in Chile, as reflected in readily available, published research. These programs have been developed under the framework of the disease concept and thus aimed at the prevention of alcoholism (Marconi 1966, 1969, 1976; Feuerhake et al. 1980; Minoletti and Demjean 1976) rather than the whole gamut of alcohol-related problems.

Data from the general population in the U.S. show that there are basic differences in characteristics such as age, social class, occupational status, and marital status between clinical populations and problem drinkers in the community. This suggests that those diagnosed as alcoholics are a different population from those with alcohol problems who have not reached the clinic door. Further, problems in the general population do not at all resemble problems in clinical groups. In the general population problems are "diffuse and sporadic," and the presence of a particular problem has only a modest correlation with the presence of problems in other areas or in the future (Room 1979). Thus, by identifying a population of alcoholics based on "loss of control" and "inability to abstain," or a population of excessive drinkers by the amount and frequency of drinking, epidemiological surveys in Latin America provide only a very limited picture of the target population for prevention strategies and of the kinds of problems that should be prevented. The goals of preventive efforts have remained largely restricted to location of early case and public education about the dangers of alcohol, with these educational efforts concentrated on teaching the public how to recognize early signs of alcoholism.[11]



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## Conclusions

The epidemiology of alcohol-related problems in Latin America goes back almost 30 years. During these years only a few countries were able to maintain a sustained interest in alcohol studies as evidenced by the literature in the field. Among those doing so were Chile and Costa Rica. More recently, Mexico has developed studies on the community response to alcohol-related problems within the framework of an international collaboration with the World Health Organization.

From an overall perspective it is possible to perceive that alcohol constitutes a legitimate source of concern for researchers in Latin America. This conclusion takes into consideration the extent to which alcohol use is associated with everyday life in Latin America: drinking takes place "first thing in the morning," during the day, in the evening, during weekdays or weekends, at religious ceremonies, baptisms, funerals, marriages, sport activities, in toasting one's health or to promote socializing, to celebrate revolutions or to mourn them, to bring friends close together; it takes place because tradition tells one to drink, because there is little else to do, and because drinking is what men are supposed to do -- to name just a few reasons.

What emerges are marked differences in the norms associated with alcohol use by men and women and the consequent contrasts in the drinking patterns of the two sexes. Except perhaps among the upper social classes, for which there is very little evidence, excessive drinking is a territory occupied by males. The women's domain is that of abstention or moderate drinking. Drinking to intoxication is again a male prerogative, tolerated by both men and women alike. This contrast in normal patterns of alcohol use is one of the factors explaining the large ratio of men over women who are recognized in the community as having alcohol-related problems and are receiving treatment for them in psychiatric hospitals.

Looking at the results across countries, it is possible to see major differences in the extent of excessive drinking and the composition of alcohol-related problems. There are, for example, considerable differences in the proportion of "alcoholics" and excessive drinkers. Among males, the proportion considered alcoholics ranges from 5 percent in Argentina to 10 percent in Colombia, and for excessive drinking from 12 percent in Argentina to 23 percent in Chile or 26 percent in some parts of Costa Rica. Data from Costa Rica, Mexico, and Chile also indicate significant variations among regions within these nations. All these differences, plus those in choice of alcoholic beverages, make it unwarranted to identify one single pattern of drinking as typical of Latin America as a whole.



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The studies reviewed for this paper also show differences in the perception of alcohol use and alcohol-related problems between the urban society of Latin America countries, with its European roots, and the native peoples of the region. Ethnographic studies suggest that although drinking and heavy drinking is common practice among natives, there seems to be more tolerance for the effects of these practices and a lower rate of problems.

Latin American studies have concentrated on urban and working class populations, with little attention given to marginal urban groups, rural populations, or the upper classes. The drinking of native populations has not been investigated epidemiologically, but only with ethnographic methods. As a result alcohol studies in Latin America comprise an epidemiology of alcoholism in the urban working class rather than a general epidemiology of alcohol-related problems. The window into the community opened by these studies is therefore very narrow, and allows only a very partial view of the nature and characteristics of alcohol-related problems.

Differences in the perception of alcohol problems are evident in the way in which professionals go about studying alcohol problems and what may be seen as the public perception of these problems. While researchers understand alcohol problems as events related to a condition called alcoholism, the popular view seems to see the dominant pattern of drinking as sporadic and the problems of interest as occasion- rather than condition-related; i.e., serious alcohol problems are those more dramatic events such as road accidents or violence. It is quite true that lack of money to buy provisions toward the end of the month may be a major problem to those families where money is being spent in heavy drinking by the head of the household. However, here we are making reference to the general popular view of alcohol problems and not the view of those affected by heavy drinking. These two very different profiles of alcohol problems are of importance in re-orienting preventive and treatment interventions.

Given this general panorama, the following recommendations can be made:

1) A basic requisite for the successful organization and development of any research project is an assessment of the literature in the field. As mentioned in this review, the alcohol literature of Latin American countries is widely scattered. Many journals have limited and irregular circulation, and substantial research remains unpublished as master's or doctoral dissertations. It would seem therefore that the organization of a clearinghouse for the scientific literature on alcohol is a necessary step in furthering the development of alcohol research in the region. The PAHO-sponsored Biblioteca Regional de Medicina (BIREME), located in Sao Paulo, Brazil, would be one of many potential sites for such a clearinghouse.



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2) Methodological shortcomings appear in some of the epidemiological studies carried out in Latin America. The problems encountered affect sampling procedures, data collection, and the statistical treatment of the data. It would seem therefore desirable to provide more training opportunities for researchers in the field in Latin America. This could be done either by organizing research seminars (the example of the schools of alcoholism studies may be invoked here), or, better yet, by developing research projects in the area, which would provide on-the-job training for research personnel. The WHO Study of Community Responses to Alcohol-Related Problems is one example of this type of effort.

3) Epidemiological studies in Latin America should be re-focused to include a broad range of alcohol-related problems, not only those associated with severe forms of drinking. Research on the association between alcohol and related casualties should also be stimulated. A first step in this direction should include an attempt to describe how legal systems in selected countries of the region handle alcohol-related problems.

4) Prevention efforts should also be re-oriented and broadened. These interventions should aim at minimizing not only alcoholism, but all the alcohol-related problems in the community. Accordingly, the "target" populations should be readjusted to include all those drinkers who present problems, and not only those midway to the clinic door, as happens with "early case finding" procedures. Neglected strategies of prevention should be developed and implemented, and the formal and informal responses of the community to alcohol-related problems should also be taken into account when planning preventive interventions. It may also be more feasible to prevent undesirable events than undesirable conditions, especially when the condition, such as is the case with "alcoholism," is poorly delineated. Finally, the evaluation of prevention efforts should include not only an overview of their implementation, but also a measure of their effects in the community.

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Legislative Approaches to Prevention of Alcohol-Related Problems: An Inter-American Workshop
http://www.nap.edu/catalog.php?record_id=19631

## DISCUSSANT

Carlos Campillo-Serrano

It is, for me, a true pleasure to have the privilege of commenting on the work of Dr. Raul Caetano. He is an old and dear friend and also, a colleague since our days in epidemiological psychiatry a few years ago at the Psychiatric Institute of London. I now have the great pleasure of seeing him as a professional and researcher in the field of alcoholism.

Works of the quality that we have just heard are seldom found in the literature of Latin America. Dr. Caetano presented an excellent and detailed review of the topic, giving us a panorama of the problems related to alcohol in Latin America and taking the occasion to point out methodological weaknesses that exist in the various publications. His paper also emphasizes the lack of data in specific and important areas, and explains why epidemiological research in our particular region has rather rigidly adhered to the medical model, and discusses the limitations of that approach.

Obviously, this is a work that will fill a gap in our bibliographies and one that has been needed for quite some time. We have not had this before because, among other reasons, of a lack of trained and capable people in our region and, also, because of the extent of effort needed to compile bibliographies from widely scattered sources in Latin America. For all of these reasons I would like to most heartily congratulate Dr. Caetano for the quality of the work presented to us.

His work can be divided into four parts; a) a review of health indicators in Latin America; b) a review of the effects of alcoholism: deaths due to hepatic cirrhosis, alcoholism, alcoholic psychoses, crime, suicide, confinement in mental institutions; c) a study of alcohol consumption patterns and alcoholism within communities; and d) the Latin American perspective on alcohol-related problems.

### Latin America - The Health Perspective

With the data that Dr. Caetano has given us, it is very clear that Latin America is a rather heterogeneous region with great differences between countries, but at the same time sharing a series



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of common characteristics which differentiate it from other regions of the world. As a group, the countries of Latin America retain a quite separate identity from more developed countries such as Canada, the United States, and those of western Europe. We are referring to countries that generally are either poor or at a median level of prosperity, under-developed or developing, where resources to deal with domestic problems are frequently scarce.

The mortality rates from hepatic cirrhosis, alcoholic psychosis, and alconolism, as Dr. Caetano has pointed out, are high in Latin America, predominantly affecting men between 55 to 65 years of age. Important differences are shown between cities; these could be explained by sociocultural factors, but we should not discount certain practices in medical diagnoses and facilities, and differences in autopsy procedures. The data that Dr. Caetano has presented also suggests that the topic should be researched further so as to explain more satisfactorily the differences between countries.

The data references to suicides, traffic deaths, traffic accidents, and the like are more difficult to interpret than those pertaining to cirrhosis of the liver. Existing studies are incomplete, inconclusive, and limit themselves to supplying statistics; no reference is made to the complex relationship between alcohol consumption and legal responses to these problems in the respective countries. There is a lack of adequate methodology, also, to compile data on traffic accidents so that, although accidents are a serious problem, there is little awareness of the necessity of studying this matter. It is a topic that has been rather shunted aside in Latin America, but one whose significance merits great attention. Studies of admissions to mental hospitals are even more difficult to evaluate because quite often they speak about the availability of facilities and psychiatric treatment rather than the problems related to alcohol.

## Community Studies on Alcohol Consumption Patterns

Dr. Caetano's review has covered studies undertaken in each of the countries of Latin America. His review is detailed and includes not only the results obtained, but also an evaluation of the methods used. A main point is that in Latin America community surveys of alcohol consumption patterns date only from the 1950s. Earlier statistics focused on morbidity, mortality, and accidents.

The first epidemiological studies were initiated by WHO using Marconi's operative definitions, which are more precise and objective than the classification proposed by Jellinek. The majority of studies do have methodological weaknesses. There is also an absence of data analysis. In several ways, the results of the studies are



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difficult to compare. We find with the Marconi classification, for example, that statistics for either excessive drinkers or alcoholics could correspond, although not exactly, to the category of problem drinker in the United States. We do note that the countries with the greatest tradition of research in alcohol are Chile, Costa Rica, Peru, Argentina, Brazil, and most recently Mexico.

## The Latin American View of Alcohol-Related Problems

Dr. Caetano observes that Jellinek's work has been the greatest influence in the study of alcoholism in Latin America. Dr. Jellinek's concept of alcoholism as a disease is the one that has prevailed in the region. The principal proponent of this point of view has been Marconi, whose operative definitions have been used widely. Research has been under the supervision of doctors, with a lack of attention to sociological concerns that are so typical in the United States.

The limitations of the medical approach rest in the fact that attention goes almost exclusively to those who are classified "alcoholics." However, these are a minority and have a low degree of visibility in the community. The medical response also ignores sociocultural factors fundamental for the design of preventive campaigns; i.e., the reasons, context, and beliefs, attitudes and standards associated with alcohol use.

Finally, the following is a most interesting conclusion presented by Dr. Caetano, which I strongly support: Epidemiological studies in Latin America, partially due to use of the concept of alcoholism as a disease, have examined only part of the problem and a small percentage of the population, primarily the working class. They have not dealt adequately with the rural population or the higher social classes. They do show that the consumption of alcohol in Latin America is intimately connected to the daily life of its inhabitants, and that there is a great difference in the patterns of consumption of men and women.

We find that the countries that have collected the most data are Chile, Mexico, and Guatemala. Available data show that drinking practices in each country and region are very different and as a result, rather difficult to compare. Also, researchers' perceptions of the dimensions of alcohol-related problems often differ from those held by the general population.

## Mexican Participation in the WHO Multinational Study

Now moving on from the work of previous researchers, I would like to briefly describe the project in which our institute has



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recently been involved and to which Dr. Caetano and Dr. Rene Gonzalez have referred in commenting on community response to alcohol-related problems. This is a multinational study drawn up by the World Health Organization and financed by the U.S. National Institute on Alcoholism and Alcohol Abuse. The countries studied were Scotland, Zambia, and Mexico. The objectives were to note the nature, extent, and manner in which the community deals with alcohol-related problems in three countries with different degrees of socioeconomic development.

The study is a part of an extensive WHO program relating to alcohol which is to be carried out in various stages. In the first stage we compiled information according to a guideline proposed by the sponsoring organization on production, distribution, legislation, economics, and programs of treatment and rehabilitation. The results of this particular compilation have already been published in a WHO monograph.

Next, in order to obtain more specific and more detailed information, we examined responses to alcohol-related problems through community surveys in two areas to the south of Mexico City. One was rural and one was urban. We researched patterns of consumption and norms of drinking. We also surveyed agencies and agents in the community who deal with these problems, such as the police, hospitals, churches, health authorites, etc. We then identified a group of drinkers recognized in the community as having alcohol problems and used our standard community questionnaire for them also.

During the whole project we had the advice and supervision of various experts in this particular field. Special care was given to meeting technical requirements, such as determining adequate sample size, selection of those to be surveyed, content of questionnaire, and compilation of data. In order to assure that we would be able to make comparisons betweeen countries, we held various meetings during which we were very careful to determine that the collection of data and compilation of questionnaire results would guarantee the possibility of comparison.

This project was initiated in 1976 and was concluded in 1980. The preliminary results were presented at an international meeting in Mexico City in July 1981; Mexican authorities connected with alcohol programs and guests of various countries of Latin America participated. After the meeting we worked with Mexican authorities dealing with problems of alcoholism and took steps to share our experiences with our colleagues in Latin America in order to lay the groundwork for future collaboration.

The last phase of the project, now underway, is to try to initiate concrete action in one of the communities studied in order



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to demonstrate to Mexican authorities at the national level that preventive actions are feasible. We will also work to establish formal contact with other colleagues in Latin America so as to initiate joint projects.

The importance of the project that I have just described is that in various ways we overcame the limitations outlined by Dr. Caetano in connection with previous studies undertaken in Latin America. We responded to some of his suggestions first by abandoning the rigid medical model of alcohol as a disease, and then by looking at social and legal problems. We used the advice of specialists, and during the course of the investigation developed and trained a team of researchers under the direction of the Institute of Mexican Psychiatry.

This study made it possible to consider the problems of alcohol in a wider perspective, with the goal of following through with preventive policies. One advantage was that the prestige of WHO gave us access to Mexican authorities. And I would like to repeat that we now have a group of trained researchers to continue work on this topic. I believe that this study created a model that is worthy of being copied in other countries of the region.

## Chapter Notes and References

### Manifestations and Perceptions of Alcohol-Related Problems in the Americas

#### Notes

1. In standard comparisons of cirrhosis mortality rates between U.S. cities, San Francisco shows the highest rate. However, this partly reflects the highly professional death certification procedures and the restricted boundaries of the city (Room 1972).

2. The category of current abstainers was created by the reviewer by combining ex-drinkers and ex-problem drinkers, who, according to the reports, were defined as those drinkers who had



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been in continuous abstention for at least one year prior to the survey date. When added to the lifetime abstainers, the new group narrows the difference for abstention rates between the two sexes.

3. With this method the information on alcohol use and drinking patterns is collected from several groups of people assembled according to occupation and which meet to discuss patterns of alcohol use in their professional groups. The discussion is coordinated by a trained leader who follows a pre-arranged schedule of topics for discussion. The material from the groups is collated and a picture of alcohol use in the community can then be formed. The "informant" method provides a description of how a group of selected invididuals perceive the place of alcohol in their culture, but whether this perception corresponds to the real positiom and use of alcohol in that culture is debatable.

4. It should be noted that the disease concept had already found acceptance among Chilean psychiatrists. Horwitz (1965), already interpreting the increase in alcohol-related admissions to Chilean mental hospitals after 1947, ascribed these changes to a shift in physicians' perspectives about alcoholism treatment due to the diffusion of the disease concept. Along with this shift came acceptance of the kind of clinic-based treatment programs developed at Yale in 1943.

5. Jellinek becomes more specific when he defines the various species of alcoholism (alpha, beta, gamma, delta, epsilon). Also, in Jellinek the role of alcohol-related problems in characterizing alcoholism changes according to the type being considered: the role is peripheral in gamma and delta alcoholics, since these are identified by "loss of control" and "inability to abstain," but it has a more central meaning in the alpha and beta types. The alpha alcoholic drinks to relieve tensions and the "damage" is both organically and socially-related (interpersonal relations, work, etc.). Beta alcoholics are characterized by the presence of alcohol-related organic problems (polyneuropathy, gastritis, cirrhosis).

6. In a later paper, Marconi (1967c) quotes this same definition but substitutes the word illness for disease, among other alterations in wording.

7. The reasons why it was left to physicians to publish papers on the distribution and patterns of alcohol consumption in the general population of Latin American nations are complex and involve such factors as funding patterns, the development of medicine and other health related professions, and the general



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understanding of what profession is supposed to take an interest in what subjects in Latin Americn societies. In Latin America, as in many parts of the world, many psychiatrists and psychoanalysts have not embraced the disease concept. Among the former, many see alcoholism as a symptom of an underlying psychiatric disturbance. Among the latter, alcoholism is a symptom of an unresolved conflict which has roots in early phases of personality development. However, as might be expected considering their views of the problem, neither of these groups has been actively involved in alcohol research; while their positions may have a bearing on the handling of clinical cases, it has not influenced epidemiological studies. One advantage of Marconi's formulation and of the disease concept, in general, over psychiatric or psychoanalytical views is that the former does encompass epidemiology and the collection of data on drinking practices in the general population.

8. Recently, there have been indications of a shift in the way alcohol problems are understood. Room (1981) has already commented on the WHO 1980 Expert Committee Report, which does not make reference to alcoholism as was the practice in the '50s, but is concerned instead with "the alcohol dependence syndrome" and with "problems related to alcohol consumption." In Latin America the signs of such a shift are also present. Although the recent alcohol literature does not make reference to the "alcohol dependence syndrome," an association recently created to link researchers in the field has been named Asociacion Ibero-Americana de Estudios de los Problemas del Alcohol (Ibero-American Association for the Study of Alcohol Problems). Further, the recently developed "Plan of Alcoholism" (Plan de Alcoholismo) of the Chilean Ministry of Health (Medina 1980) introduces the concept of "problem drinkers" to encompass "excessive drinkers" and "alcoholics."

9. Research with a framework different from that provided by the disease concept has been very scarce indeed. Vidal (1967b, 1971) has done work on personality characteristics of alcoholics. Sluzki (1967) initiated studies focussed on the pattern of interactions in families of alcoholics. Diaz (1980), using ethnographic methodology, has described the functioning of a club of abstainers composed of recovered alcoholics. Masur (1980) has been actively pursuing research which uses the "problem drinker" approach developed by Cahalan (1969) and his associates.

10. It should be noted, however, that while the disease concept undeniably focused the attention of researchers on selected problems indicative of physical addiction to alcohol, it did not necessarily imply ignoring social or casualty problems.



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The WHO definition of alcoholism (WHO 1952), as well as that proposed by Keller (1962), advocates using social problems as indicators of alcoholism.

11. It seems that the only call to adapt preventive action to the type of problem presented by the drinker was made by Sluzki (1962). After establishing that alcoholics in different social classes and with different levels of education came to treatment with different problems, Sluzki suggested that preventive campaigns which focused on those problems would stand a better chance of achieving success than those which aimed at early case finding. This approach has similarities with that proposed by U.S. researchers, which takes into account not only problems such as "loss of control" or "inability to abstain," but the whole spectrum of alcohol-related problems in the community. Unfortunately, Sluzki's proposal was not pursued in Latin America.

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## Chapter Four

# HISTORICAL AND CULTURAL FACTORS AFFECTING ALCOHOL AVAILABILITY AND CONSUMPTION IN LATIN AMERICA

Dwight B. Heath

## DISCUSSANTS

Eduardo Medina Cardenas

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# HISTORICAL AND CULTURAL FACTORS AFFECTING ALCOHOL AVAILABILITY AND CONSUMPTION IN LATIN AMERICA

Dwight B. Heath

It is now generally recognized that alcohol is the psychoactive drug most widely used throughout the world, and that it is probably also the oldest in customary usage. There are few areas of the world where alcoholic beverages are more common among diverse populations than in Latin America,[1] or where they have more varied meanings and functions, or where we know so much about their importance throughout history. For all of these reasons, a brief review of historical[2] and cultural[3] factors affecting alcohol availability and consumption in Latin America should be useful in helping to provide context for our discussion of approaches toward the understanding and prevention of alcohol-related problems.

This presentation begins with an introduction to the importance of historical and cultural factors together with an outline of major relevant work that has already been accomplished in this connection. A brief discussion of the pre-Columbian period deals with the broad distribution of alcoholic beverages among native populations prior to contact with Europeans, and with some of what we know of the patterns of behavior and associated meanings. In relation to the colonial period we examine new standards of behavior and different meanings that were introduced, and how the force of law sometimes intervened in various ways. A section on cultural variants in modern history provides a sampling of the rich diversity that has been found among several Latin American populations during the nineteenth and twentieth centuries. It deals with some beliefs and attitudes about drinking as such, and with some of the ways in which alcoholic beverages are integrated with economic, political, religious, and other aspects of the cultural systems. It also includes reference to ethnic, class, and other variants within nations. A few tentative conclusions are offered that may be helpful in broad descriptive and analytic terms, and in identifying some implications for action.



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This workshop has provided an appropriate and timely occasion for reviewing a large and diverse corpus of literature from a fresh outlook, and this review of the widely scattered material should be informative and useful even to colleagues who have worked in the field for many years.

We are aware that, for some time, there has been considerable ambivalence about such broad labels as "Latin America" or "Ibero-America." Let us remember that after Luis Alberto Sanchez published an essay with the provocative title "Does Latin America Exist?" there was only a brief rash of uncomfortable jokes in response: "Yes, in the table of organization of the U.S. Department of State," or "Yes, in 30 different institutes and research centers in European and North American universities." But that did not last long. When Sanchez expanded the essay to a book he answered his own question in the affirmative: "Among the countries of Latin American there are as many differences as among the states that make up the United States, but fewer than those among the nations of Europe." (1944:10).

Other Latin Americans addressed this concern in the uneasy years immediately following World War II, when individuals and groups throughout much of the world were grappling with newly important -- and newly uncertain -- issues of identity. Excerpts from several authors illustrate this soul-searching, which invariably managed to reach beyond the narrow nationalistic views that had recently seemed to become so patently obsolete. "Modern Latin American culture" must be construed as "...the constructive and creative synthesis of Europe and America, of Spaniards and Indians...a spiritual symbiosis which is still in full evolution" (Alvarado 1952). Similarly, but in a more stridently regionalistic tone: "In the tacit conspiracy against the recognition of our ethical and cultural unity are writers, capitalists, and soldiers of imperialism. Cultivated Europe has been accustomed to judge us and treat us as the dispersed remains of a shipwreck" (Vasconcelos n.d.: 17). Even those who pay attention to significant differences tend to emphasize unity. For example, "The differences come, not from differences in historical situation, but from the temperaments of the actors" (Picon 1951:335-336), or "Central America and South America belong, as do North America, South Africa, Australia and New Zealand to the 'Western World'; they form, together with Brazil, an Iberic-Criollo-Indian Zone" (Basadre 1951:356). Ariel (Rodo 1900) remains a vital intellectual force symbolizing Latin spirituality and dynamism, even while caudillos fan the embers of xenophobia to serve their private purposes.

A North American anthropologist who has long wrestled with the confusion over unity and diversity with respect to Latin America as a region offers a succinct summary of the problem: "A basic theme ... has been the rich diversity of cultures and societies throughout contemporary Latin America. The reality of difference, however, should not obscure that widespread underlying unity which derives,



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in large part, from the Iberian heritage. Latin Americans and others generally agree on the importance of personalismo, dignidad de la persona, and machismo in the life of individuals, and a variety of institutions can be fruitfully interpreted as expressing these basic ethos components, even though there is often a marked divergence between ideals and action ... [and even though] the dominant national patterns also stand in marked contrast to the views of the Indians who comprise a significant portion of the population in many of those countries" (Heath 1974b:424).

With this justification of the "Latin American" component, let's briefly examine the justification for focusing on historical and cultural factors. It is gratifying that in recent decades virtually all who work in any field related to the study of alcohol and its relation to human behavior have accepted the general proposition that social and cultural factors are relevant, in combination with physiological, psychological, and other factors. In some instances, however, such acceptance may be relatively passive and pro-forma, implying little understanding and even less commitment. For that reason, an extreme illustration may deserve attention at the outset--to show that we are talking about real and significant differences rather than simply overemphasizing minor features within a narrow range of variation. For this reason, I suggest now that we briefly consider the fact that, among many of the Indian tribes in central Brazil the very act of ingesting -- whether eating solids or drinking liquids, with no regard to their alcoholic content or social or economic value -- is subject to extreme modesty, accompanied by shyness, blushing, hiding from the view of others, and so forth -- in much the way that some of us may feel about defecation, sexual intercourse, or other activities (von den Steinen 1894). This is not an appropriate context for trying to interpret or assess implications of such an attitude. However, simple recognition of the range of cultural factors that should be considered in any attempt to influence patterns of alcohol consumption in that area should dramatically underscore the need for and value of detailed understanding of local patterns, which often range far outside the categories that have become customary even in specialized survey-instruments, or in the minds of researchers or others who are concerned with health.

Fortunately, scholars from Latin America have been extremely progressive--in comparison with colleagues in other parts of the world--in their recognition and appreciation of the importance of such cultural variation. Part of this derives from their early interest in historical studies on alcohol-related topics (e.g., Herrero 1940, Piga 1942, F. Rojas 1942, Ruiz 1939, Mendieta 1939), a topic that only later became a focus of concern for a few scholars in other parts of the world.[4] Another reason for the early and broad acceptance of sociocultural perspectives is the recognition that the diverse populations within each nation of Latin America had



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different views about alcohol, used it differently, and so were differentially subject to kinds and rates of alcohol-related problems. Such a view has become increasingly widespread in recent years, even among specialists in the biological and medical sciences (see, e.g., Kissin and Begleiter 1976, Medina 1978, Negrete 1974), but our colleagues in Latin America were virtual pioneers.

One of the best known early contributions to the systematic study of alcohol had as its focus "epidemiology" (Horwitz, Marconi, and Adis 1967a), but it is noteworthy that the major articles in that collection dealt with "sociocultural factors" in alcohol use (J. Mariategui 1967), methods and results of "epidemiological and socioanthropological investigations" (Marconi and Adis 1967), "epidemiology and socioanthropology of alcoholism and alcohol-related problems" (Marconi, Horwitz and Adis 1967), and a "final commentary" that was largely devoted to sociocultural variation (Horwitz, Marconi and Adis 1967b). The exceptional breadth and high quality of the component essays make that volume an important milestone in the study of alcohol use in Latin America.

In 1974, another special issue of the same periodical was devoted to alcohol, serving as both a complement and an update of the 1967 monograph. In it, J. Mariategui's (1974) inventory of studies on the epidemiology of alcoholism in Latin America is far broader and deeper than one might guess on the basis of the title alone, combining careful definition of terms with brief country-by-country summaries of recent findings and commentary that integrates anthropological data and perspectives in an effective manner. An outline of sociocultural perspectives on alcohol in Latin America by Heath (1974a) is a brief but comprehensive introduction to the broad range of literature that was available on the subject. A summary of cultural factors in epidemiological studies of alcoholism by Negrete (1974) succinctly integrates the public health model with psychological and sociological theories about why people drink. Suggestions for an international comparative study of alcoholism and alcohol abuse were offered by Murphy (1974), anticipating some of the methodological problems that have been encountered in the preliminary attempts that have since been made. Brief notes by Negrete on alcohol and traffic, and by Adis on mental health and alcoholism show that, although few investigators were studying alcohol in Latin America at that time, their work was relevant to the same issues that occupied colleagues elsewhere.

This is not an appropriate context in which to venture a more thorough review of the literature -- presumably the proceedings of this conference will collectively serve that purpose -- but it is important in terms of our historical perspective to note that there have been several valuable contributions made by Latin Americans with respect to the study of alcohol. It also deserves to be mentioned that such works were written by authors whose diverse



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national and professional backgrounds have significantly enriched our understanding of the subject matter, and at the same time demonstrate that the material is of broad importance and relevance far beyond mere academic investigation.

## The Pre-Columbian Period

It is of crucial importance to recognize that every culture in human history has shown clear evidence of both continuity (or, some would say, stability) in certain respects on the one hand, and change (or, in sociological terms, dynamics) on the other hand. There exists no people without their unique history, and the supposedly "unchanged" life of "primitive" populations only appears so because the rate of change is so relatively different from our own.

Without attempting to provide anything approaching a comprehensive review of the evidence for pre-Colombian uses and meanings of alcoholic beverages in the Americas, it may be useful to mention a few data that demonstrate their early distribution and importance in selected instances that serve to illustrate cultural factors of enduring relevance.

There are very few parts of the world where the natural process of fermentation was not very early recognized and elaborated by native people to produce beers, wines, meads, and other types of homebrew. It remains a paradox that most of the area that is now Anglo-America[5] lacked indigenous alcoholic beverages (La Barre 1938, Driver 1969). An ironic sidelight is that the small portion of North America where Indians did drink in pre-Columbian times happens to coincide, to a remarkable degree, with the extent of control achieved by the Spaniards during the colonial period, including what is now Mexico as well as the states of California, New Mexico, Arizona, and Texas (Waddell 1980; Bruman 1940).

As a refinement beyond simple fermentation, the technology of distillation need not be complex nor involve highly refined materials. Nevertheless, the technique seems not to have been invented by any of the populations in this hemisphere in the pre-Columbian era. There was some controversy during the early part of this century about whether distillation had been known among at least a few groups in pre-Conquest Mexico (Bourke 1893, 1894), but the tenuous evidence offered in support of that idea is unconvincing (Bruman 1944, Driver 1969).

The most famous pre-Columbian cultures in Latin America are unquestionably the so-called "high civilizations" of Aztec, Maya, and Inca, each of which combined complex social organization, extensive political and economic controls, large cities, complex networks of communication and transportation, and an extremely



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sophisticated scientific and technological system. Each of them also produced fermented beverages that played a variety of important symbolic and economic roles in the lives of both leaders (some of whom were thought to be descended from the gods) and commoners.

The Aztecs of central Mexico are best known in this respect, partly on the basis of documents that survive from pre-contact times and partly on the basis of reminiscences recorded by Spaniards during the sixteenth century. Pulque was the predominant beverage, and it remains important today. It is fermented from the sap of the maguey (Agave atrovirens, also known variously as aloes, agave, or century-plant), which is also an important source of fibers used to make rope, sandals, and textiles. A remarkably detailed analysis of the bibliography and iconography of maguey and pulque in the pre-Columbian Mexican codices has been compiled (Goncalves de Lima [1956]), but it reveals little about workaday behavior or about norms and values. In symbolic terms, it seems important that pulque was thought to have been invented by the gods (especially Mayahuel, a female figure with 400 breasts, associated with Tlaloc, the principal "rain-god"), and that access to it was restricted in some regions.

The special relevance of pulque in Aztec culture has long been recognized; it was described in some detail in the so-called "Florentine Codex,"[6] and has been briefly summarized by several authors in recent years (e.g., Calderon 1968, Paredes 1975). Periodic drinking and drunkenness were important ritual activities of the nobility, and both priests and the elderly were allowed occasionally to drink considerable amounts. But other commoners were subject to severe penalties, including death, if they became drunk, and even a nobleman could be killed for being drunk at an inappropriate time. This well-known account is probably not inaccurate, having been compiled as oral history by a priest and protoethnographer, Bernardino de Sahagun, from informants who had been nobles in Tlatelolco, near the center of Mexica control. But, for that same reason, it was probably not representative of workaday realities in most of the rest of that far-flung and loosely organized "empire." It is unfortunate that, for lack of other data, this special view has long been generalized to all of the area that has become the nation-state of Mexico.

Similarly, the attitudes of another unrepresentative sample have been generalized in an inappropriate but widely shared view of mass drunkenness on the part of Mexican Indians during the colonial period. The Relaciones Geograficas were compiled after two generations of Indians had been subjected to Spanish domination in central Mexico, and those informants descended from Aztec nobles appear to have been nostalgic about the lost prerogatives previously enjoyed by their families, the "uppityness" of commoners who would have been their subjects, and so forth. It is difficult to discern



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how much of this characterization is a confusion between "real" and "ideal" culture -- i.e., between what people did and what they should have done -- and how much may have been wishful thinking or some other kind of distortion.[7]

A more plausible view was recently offered, carefully and imaginatively reconstructed on the basis of a comprehensive review of a wide range of unpublished documents from various regions of Mexico (Taylor 1979). According to this interpretation, there was considerable variation in drinking practices and norms in various communities--as is the case today. A common pattern was that of periodic fiestas, in which most of the adults drank to the point of intoxication--also a common pattern in the area today. Both drinking and drunkenness were socially approved in the context of veneration of major deities, as an integral part of significant agricultural ceremonies, or in celebration of important events in the lives of local leaders. We will return to both of these points, local variation and episodic sanctioned general drunkenness, later.

Native fermented beers throughout much of South America are generally called chicha (Cutler and Cardenas 1947) despite a wide variety of ingredients, manners of preparation, and other kinds of variation. The word has come into English as meaning "maize beer," the beverage that was (and is) staple throughout the vast Inca "Empire," which dominated virtually all of the Andean highlands from Colombia southward into Chile.

Like pulque in Mexico, chicha is a nutritious beverage drunk by people of both sexes and all ages (Nicholson 1960). Also like pulque, it has symbolic value that is very different from its economic and food value. Excavations at major Inca forts and cities have uncovered vast breweries and storehouses of chicha, which lend support to the view that it was an especially important medium of exchange, regulated by the state. Presumably it was part of a complex system of redistribution, whereby raw materials were collected in the name of the Inca and finished products were then distributed by Inca leaders. Such patterns of exchange occur throughout the world, and anthropologists have demonstrated how effective they are in maintaining social stratification and integration. Clearly the value of a gift depends in part on who is giving it, and a gift in such a system implies a continuing obligation. Not only does such a system demonstrate the beneficence of a leader, but it also can substitute for markets and money. Unlike pulque in Mexico, which began as a small-scale cottage-industry, chicha in Peru seems to have been produced on a large scale by the <u>mamakuna</u>, the famous "chosen women" of the Inca, sometimes referred to as "Virgins of the Sun" (Morris 1979). In such a context, drinking occurred as an accompaniment to work, as a reward for service, and occasionally as part of a religious fiesta, during which drunkenness was not only acceptable but actively sought as a



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kind of transcendental experience. We will pay attention later to some aspects of this pattern that have changed markedly, and to others that have shown remarkable consistency over four centuries of transcultural contact.

Among the Mayas of Mesoamerica, we know little about the details of production and distribution, but both pulque and maize-based chicha appear to have had symbolic importance in religious and political contexts. The Mayas also had a distinctive regional beer (balche) fermented from the bark of a tree (Barrera 1941, Goncalves et al. 1977).

Brief descriptions of presumably traditional drinking patterns occur in many of the journals of explorers and conquistadors, and in reports from missionaries and administrators who extended the frontiers of European contact throughout Latin America. However, details on such drinking are nowhere else so rich as in those areas of pre-Columbian civilization.

## The Colonial Period

The arrival of Europeans had an enormous impact on both the cultural and natural ecology of the Western Hemisphere. In one sense, it was far from being a "New World," having already been occupied by homo sapiens for more than ten millennia; evidence is mounting that suggests almost double that time. In another sense, however, it was a "New World" for the Europeans, who encountered native populations that did not fit their cosmology, much less their legal and political systems. It is not that there had been no prior confrontation with cultural differences or with the kinds of phenotypic variation that we call "racial"; contacts with Africa and the Orient had been many and varied during the preceding centuries. But Native Americans were different in a sense that was fundamentally important at that time. Not having rejected Christianity, they were to be protected and helped in ways that practitioners of other recognized religions were not. Of course, the reality of social relations in a context of imperial conquest, freebooting an expanding military frontier, and attempts to gain wealth and leisure from conquest resulted in widespread exploitation, brutality, and other abuses that diverged far from the utopian ideal. Nevertheless, respect for Indian cultures was an important thread throughout the Conquest, and it is crucial to recognize that "the Conquest" was a long-term process rather than an event. Obviously, the confrontation with Europeans made this a "New World" for the natives, also, in a variety of respects. In some areas they were literally enslaved or massacred; in others they were displaced from their traditional homes, sometimes obliged to work at unaccustomed jobs or to live in unaccustomed proximity to each other and to alien people. New kinds of livestock disturbed the ecology



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to which they were adapted, just as new diseases to which they had no resistance took a heavy toll among them. As more detailed historical studies are being made with respect to limited aspects of culture and focusing on specific regions or communities, it is clear that neither of the old stereotypes about the conquest fits well. The "black legend" that characterized the Spaniards as ruthless monsters contains as much falsehood -- and as much truth -- as did the "official" image that portrayed them as selflessly undergoing extreme hardships to bring salvation and enlightenment to the savage hordes.

In order to have an appreciation of the ways in which some cultural factors have persisted since prehistoric times and others have been altered in various ways, it is important that we try to understand not only the dynamics of colonialism--with the presentation of new behaviors and attitudes as models, the imposition of new laws, some discrediting of old ways on the one hand, and some nostalgia for them or the other. It is also important that we try to understand the historical and cultural factors that had already shaped the patterns borne from the metropolitan center. We must not lose sight of the fact that the Iberia (not yet even "Spain" and "Portugal") of the era of the Conquest was culturally and ethnically diverse in the same way that the New World was, and that its own drinking patterns derived from centuries of contact among many peoples. Archaeological evidence shows that the cultivation of grapes and the production of wine on a small scale had been introduced in southern Spain by 600 B.C. The Romans forbade both until 280 A.D., when vast plantings were authorized in the region of Baetica (roughly corresponding to contemporary Jerez) and production promptly expanded to the point where millions of amphorae of wine were being exported to Italy each year.

The southern strip of Iberia, in which most of the conquistadors had been reared, shared the medieval Mediterranean pattern in which wine was both an everyday beverage in normal use and sometimes a consecrated medium of Christian communion. Drinking was certainly not confused with drunkenness, as when Alfonso X listed "fertile lands to yield good wine" among his primary criteria for choosing the site of a university. The staple drinks were what we would call alcoholic beverages; wine was drunk to relieve thirst, with meals, and as a regular refreshment, in all of the ways that coffee, tea, water, or soft drinks are now used in the United States.[8] For that matter, few people anywhere in the world during that time would have recognized the term "alcoholic beverages" as any kind of meaningful category.

Moderation was a trait much respected in the men of Iberia. Certainly comments about the austerity of Hernan Cortez with respect to drink have the ring of praise about them. This is all the more



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convincing because the same paragraph, written by an adulatory contemporary, includes reference to the Conquistador's weakness for women, his gusto in eating, and his skill in shooting dice (Lopez de Gomara 1954).

One widespread misconception about the bureaucracy of Iberian colonialism is that of uniformity of law and of its administration throughout the far-flung empire. In fact, there was little uniformity and not even much correspondence between law and reality in much of colonial Iberoamerica. In part, this resulted from the fallacious attempt, by people unfamiliar with the area, to formulate a single code that would apply to the diverse situations found throughout the disparate and often remote dependencies. In part, it resulted from the administrative and logistical problems that inhere in any attempt by a small and dispersed group to control larger groups, especially in difficult terrain with limited means of communication. In short, the effective control of the government did not extend far beyond the seats of government. Another important contributing factor was the attitude of the administrators themselves, often explicitly uncommitted to the enforcement of laws and regulations, as epitomized in the well-known phrase, "la ley se acata pero no se cumple" (the law is respected but not enforced). Nevertheless, the record of laws that remain and the abundance of closely related documents, such as transcripts of trials and petitions for relief from some regulations or for stricter enforcement of others, make them valuable guides to both "real" and "ideal" aspects of the cultures of remote times. Although the text of a law does not tell us what people actually did, it reflects what authorities thought they ought to be doing, and ancillary documents of the kinds mentioned above often shed light on the size and nature of the gap between those two kinds of norms.[9] For these reasons, legal decrees and many other kinds of documents will be cited in this discussion.*

The beginnings of grape-growing in the New World have not been systematically investigated to date, but it is clearly post-Columbian. In the early years of European exploration and military incursions throughout the Western Hemisphere, the introduction of the vine was encouraged. In 1519, the Spanish Board of Trade decreed that every ship coming to the Indies should bring grapevines, presumably so that local production could lessen the need for European wine, shorten supply routes, and free valuable shipping space. But in later years the metropolitan center tried to regain

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*This discussion of drinking in the colonial period relies heavily on sources that have not yet been published and that I have not personally analyzed. Direct quotations and decrees that are not fully referenced in the next several pages are quoted in and cited by Taylor (1979), Hernandez (1974), or Belascuain et al. (1981).



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its monopoly on the commerce of wines and liquors. In a brief historical sketch that deserves to be strengthened with more details, Belascuain and his colleagues (1981) cite 1551 as the first vintage in Peru, with Bolivia and Argentina close behind. Brazil and Chile followed, but other Latin American countries never did develop the industry in any significant degree.

Changes in attitudes appear in broad historical perspective, although we know little of how or when some policies were reversed by various important institutions. It is, of course, also likely that apparently inconsistent activities were in fact simultaneously carried out by various arms of so large and diverse an organization as, for example, the Society of Jesus, or the Crown. The Jesuits are credited with having introduced the cultivation of grapes to Argentina, and their extensive vineyards in coastal Peru were economically significant (Cushner 1980) in support of their so-called "Republics" in the continental heartland, hundreds of miles away. The "Republics" in turn gained some of their fame and fortune from the cultivation and sale of yerba mate (sometimes called "Jesuit tea"), which was promoted as (among other things) a healthful substitute for alcoholic beverages (Ruiz 1939). Whether the marketing of these products reflects changed attitudes toward drink, or simply shrewd business practice in attending to different sectors of a world market, remains to be studied.

Another unclear corpus of evidence relates to the view that the Spanish administration had with respect to the production of alcoholic beverages in the Indies. We have already noted that it was encouraged in the early years, presumably for logistical reasons. But, in keeping with a general pattern of concern for balance-of-trade and domination of markets, regulations were later issued that disallowed shipment of alcoholic beverages from one administrative jurisdiction to another within the Indies, just as others disallowed importation from ships of other flags. Some of the irregularities in the force of law as a restraint on availability of alcohol clearly related to short-term local exigencies as, for example, when a long-standing ban on the sale of coconut wine was lifted in order to provide more income for the region around Colima, Mexico, after it had been devastated by an earthquake (Bruman 1945).

One aspect of the paternalistic attitude toward Indians was a series of decrees that were ostensibly intended, in the terminology of today, as legislative approaches to the prevention of alcohol-related problems. As early as 1529, Carlos forbade the sale to Indians of "adulterated pulque," on the basis that the preservatives "stupefy and easily kill." In 1594, Felipe II decreed that wine not be sold nor even introduced to "places and pueblos of Indians." Felipe III forbade payment of wages to Indians in wine, on the penalty of a fine of 20 pesos in 1609.



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The experience of Mexico is especially valuable as an illustrative case study for a number of reasons. It is a large and diverse country; called Nueva Espana, it was neither the first nor the last to be colonized, and there is relatively rich historical documentation. In terms of our special interest in alcohol-related problems, it has also been described by several authors as a classic illustration of the anomic impact of conquest and the widespread breakdown of norms against drinking and drunkenness. Illustrative of the view that has gained widespread acceptance in this connection is the sad paragraph with which a thoughtful historian concludes his detailed study of the Aztecs under Spanish rule: "What we have studied is the deterioration of a native empire and civilization. ...If our sources may be believed, few peoples in the whole of history were more prone to drunkenness than the Indians of the Spanish Colony" (Gibson 1964:409). Even an historian who usually pays meticulous attention to details in other parts of the world accepts the extrapolations that seem to have grown out of the dissatisfactions of the dispossessed heirs of Aztec nobles: "The Indian people suffered tremendously from the alcoholism in which they were encouraged to indulge. It would really seem as if the civilisation of the Mexican plateau, losing its ancient framework and taboos, abandoned itself to a temptation which wrought havoc with it after 1600" (Braudel 1973:177).

As we have noted above, what has been ignored in this widely accepted view is the abundant evidence that has only recently been gleaned from court records, early Inquisition trials, visitors' accounts, administrators' reports, and similar documents. They show that the image of pre-contact prohibition (with exceptions only for priests, nobles, and the aged) was not accurate for many communities that lay on the periphery of Aztec domination, but that periodic fiestas with heavy drinking by commoners were routine (Taylor 1979:29-34).

It may well be that a major portion of the alarm expressed by Spaniards in relation to the inebriety they deplored in Indians relates to fundamental differences in views about how and why one should drink in the first place. It may well be that Indians were not drinking excessively "to forget their sorrows," but rather were continuing to drink, for their usual reasons and in their usual manner, and thus the traditional pattern of drinking was offensive to Europeans who valued sobriety. An intellectual historian has put the point this way: "That feature of the Spanish temperament that remains most constant over the centuries is sobriety... Two thousand years, with all the racial modifications that invasions and the mixing of peoples can bring, have done nothing to blur this characteristic..." (Menendez 1959:33).

Such a view is not simply a wishful reconstruction by a Spaniard proud of his heritage; it is in close conformity with the



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medieval Christian view that emphasized man's uniqueness among the creatures of the earth, distinguished by his rational soul. According to this view, reason stands as the link between heaven and earth in an orderly chain of relationships that pervade the universe. Reason is the divine part--that by which human beings know God (and thereby accept the Christian cosmology). It is evidenced in poised stature, grace of habits, beauty of speech, and -- crucial from the point of view of theology -- stability through virtue. From such a perspective, the drunken pagan illustrates the power of Satan from without, and the strength of irrational forces within -- evil tendencies abroad in the world and also inherent in man -- which combine to undercut one's virtue, if one does not have the Christian moral strength to resist. In short, the conquistadors, the friars, and their European contemporaries were convinced that pagans, lacking a "state of grace," were easily overwhelmed by temptations and by their baser instincts, of which drunkenness was both proof and a result. A good Christian, by contrast, would not give way to drunkenness, which interferes with God-given reason.

Illustrative of Spanish views that seem to reflect this concern for moderation are the following: "If the Indian drank pulque the way Spaniards drink wine (which is not the case, nor has it been, nor is there any hope of their ever doing so) it could be permitted... but these are Indians and it is proven that their custom is to get drunk, and it is for that reason that they drink." A low-level Spanish bureaucrat complained to the effect that "Everyone knows that for them [Indians] drinking stimulates gaiety and, in general, they do not drink with appropriate moderation. From this, undignified acts, prostitution, and crime result." Priests, whether recognizing that drunkenness was often intimately associated with traditional religious practices or fearful that "there is no manner of sin that will not be committed by drunken Indians," viewed it as a threat to their charges, whom they also considered normally weak and potential backsliders. Frequent reference to "incest" as a specific abominable outcome of drunkenness almost certainly is colored by Spanish unfamiliarity with Indian social structure.

In spite of these and similar misgivings that were expressed about Indian drunkenness, the provision of pulque was not even regulated until the middle of the seventeenth century. A crude measure of increasing sales (at a time when monetary inflation was minimal) is the rise in the value of the franchise (asiento) for collecting the pulque tax in Mexico City. It was sold at 66,000 pesos for the first year, 1668, and had risen to 92,000 just six years later.

Ironically, the association between drunkenness and disrespect for officials that is mentioned in general statements by civil and



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religious spokesman is not reflected in the records of trials or various related archival materials that have been combed in a careful search for just such evidence (Taylor 1979:44-45). Perhaps more striking is the fact that the association posited between drunkenness and violent crimes is similarly unsubstantiated, although the records are sufficiently rich in detail to allow many other associations, some of them quite unexpected, to be discerned (Taylor 1979).

Obviously, not all official transactions concerning alcoholic beverages were negative. Taxes on pulque and fees for licenses of pulquerias and taverns added significantly to the income of several jurisdictions, especially those with dense populations. Furthermore, pulque was recognized, even by the Spaniards, to have value apart from its quality as an intoxicant. Among the several medicinal uses of pulque that were mentioned favorably in colonial records of Mexican court proceedings are the cure of headache, stomach ache, and diarrhea, as diuretic, to prevent lice, to promote lactation or arrest menstruation, to heal wounds, as a purgative, "for pain," and "good for any illness."

The progressive imposition of legal controls on pulque suggests administrative concern, whether for fiscal reasons or in terms of social control. There were successive attempts (in 1579, 1585, and 1586) to limit sales to a few specific sites in and around Mexico City. In 1608, it was decreed that there should be no more than one license per hundred Indians in a neighborhood. Tax evasion may have prompted regulations (in 1635 and 1639) that specified that pulque could be brought into the city only during the day.

Native beverages were not the only ones available. For a while there appears to have been a drive to encourage Indians to buy Spanish wines and brandies. This may have been partly an attempt to unload poor quality goods on an uncritical market, and/or it may have had to do with increasing revenues through customs duties and other taxes. There is no indication that this trade represented any deliberate attempt to substitute a more "civilized" drink for a "savage" one; in fact, the alternation of permission with periodic prohibition (as, e.g., in 1594, 1637, 1640) seems to reflect indecision or inconsistency.

Despite all our caveats against overestimating or misconstruing public inebriety in sixteenth-century Mexico, it would be unrealistic to ignore or deny that there does appear to have been an increase in per-capita consumption of pulque. What had been a family enterprise became market-oriented as large numbers of Indians were relocated in new settlements or deprived of their land. The cultivation of maguey was significantly expanded to serve the burgeoning urban population. Taxes on alcoholic beverages became significant sources of revenue for public works; licenses to sell became both more numerous and more valuable.



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It is altogether possible that a portion of the increased consumption of pulque may indeed have resulted from frustration, anomie, and other kinds of stress that accompanied Spanish domination. But we must not ignore a variety of other important factors that may have contributed to it. The pool of frequent consumers increased enormously as traditional sumptuary laws broke down; pulque, like meat, cacao, and certain kinds of clothes, had been limited to the nobility for daily use, but such rules were rapidly eroded as traditional leaders were replaced by Europeans. The Catholic calendar introduced additional feast-days. Miscegenation contributed a new social category, mestizos, who often grew up with lax or confused patterns of socialization and many of whom had a stake in neither Indian nor Spanish society or norms.

A number of the early chroniclers -- and some writers today whose observations are superficial and at a considerable distance from the real rhythms of everyday Indian life -- have pointed to drunkenness as symptomatic of laziness, and rendering Indians incapable of work. Anyone who pays close and sustained attention, of course, would recognize that the least energetic Indian usually works harder than any such observer in the course of normal subsistence activities. The difference lies in the rhythm of work, which tends to be intensive during brief peaks during the agricultural cycle, with intervening periods when little can constructively be done. Leisure and drunkenness are accepted and even encouraged at specific times in most urban industrial cultures, and both are deplored "at the wrong time;" the same is true of most Indian cultures.

But when a riot that devastated much of Mexico City in 1692 was blamed on "drunken Indians," prohibition was imposed. Enforcement was lax, however, and within a few years the pulque trade was again a major enterprise--although control had shifted to a few socially elite families who have continued to dominate it wherever the population is large enough to assure a sizeable and regular profit (Kicza 1980). In squeezing the Indians out from this lucrative trade, Spanish[10] entrepreneurs were replicating an advantageous move they had made earlier with respect to maize and cacao.

A special commission comprising four members of the audiencia of Mexico City made a detailed report on pulquerias and taverns in the city during the last quarter of the 18th century. Carlos III had ordered the study in response to repeated complaints from priests about murders, thefts, assaults on spouses and children, and other "indecencies" and "sacrileges" that were supposedly being committed by drunken Indians. They found 45 pulquerias, most of them serving both sexes, where there should have been only 24 for men and 12 for women. (The fact that so many special drinking places were provided for women in the first place is a curious fact,



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given that it fit with neither traditional Spanish nor Indian patterns.) Regulations specifying that they were to be small, open, and unfurnished were generally ignored. Only women were supposed to be in the business, but few were. There were few police in the city, and enforcement of unpopular laws was not pressed, especially since most of the pulquerias were owned by wealthy and powerful individuals who rented them out or had subalterns working there. The recommendation of the commission, which was soon enacted, was not to increase controls or to restrict distribution or consumption, but to increase the tax and establish a regular category within the systems of taxation and administration.

What happened with respect to chicha in Peru during the colonial period is both different from and similar to what happened with respect to pulque in Mexico. In 1556, a judge in Cuenca restricted the use of chicha and, in his decision, revealed much about the special political and economic implications of that beverage: "Because said chiefs and leaders used to have 'taverns' and places where all who came to them were given chicha to drink, and it is the cause of drunkenness of the people, and it occupies many men and women in making the chicha, and it is a thing of bad example, and the said chiefs spend excessively on it; it is ordered that from now on they not have such 'taverns' nor public or secret places for drinking" (archival ms, cited in Rostworowski 1977:241). In this way, the conquistadors were able to undercut one of the principal bases of power that the Inca nobles had enjoyed, and to drive a wedge between them and the commoners who had benefited from the traditional redistributive system. Ironically, this resulted in wide dispersion of what had been relatively concentrated production; the new cottage industry of chicha-making was more difficult to tax and did not come under the control of the European elite, in sharp contrast with what happened to pulque in Mexico.

Although the Andean area has not been so carefully studied with respect to what colonial documents can reveal about drinking, there are some similar allusions to drunkenness as commonplace, prompting Indians to violence, crime, laziness, sacrilege, and so forth. The world-view of Spaniards colors their estimations in this area, as in Mexico. Among Indians, drunkenness is said to be "congenital," "in the blood," "worsened by the burning climate of the tropics," and so forth. Prohibition was recommended by clerics and administrators "for their own [Indians'] good" (assuming weak will and childish ignorance) and "for the greater glory of God." A Chilean archbishop spelled out detailed restrictions on the sale of "wine or chicha" to Indians, and threatened violators with excommunication, whipping, and exile. Among his specifications were the following: 10 percent as maximum profit, no credit sales, no use as wages, no more than 2 reales worth at a time, and no more if a customer has drunk elsewhere (sources cited in Lejarza 1941).



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Parenthetically, one cannot help but be struck by how very similar these restrictions are, in some respects, to legislative controls in many modern states and provinces.

Although pulque was by far the most popular alcoholic beverage in colonial Mexico, this does not imply that distilled liquors were unknown. Cortes himself installed the first sugarmill a year after his arrival in Cuernavaca, and the production of aguardiente (cane alcohol) followed soon after. An historian who has paid special attention to this (Hernandez 1974) suggests that economic protectionism, with special concern for the brandy industry in Cataluna and the rum industry in the Canary and Caribbean islands, was probably most important among the reasons for long-term prohibition on the manufacture and sale of aguardiente in Mexico. He chronicles the controversies, provides some evidence of bootlegging, and shows how legalization, with heavy taxes, provided a major new source of revenue from 1796 on.

The availability and consumption of alcoholic beverages were also a source of concern during the colonial period in the area that is now Colombia. Ambivalence is evidenced in testimony by physicians who hailed aguardiente as a invaluable part of their pharmacopaea, administrators who pointed out that chicha _increases_ the work-efficiency of Indians, and clerics who deplored the immorality that they felt was caused by drunkenness. In the face of administrative indifference, the archbishop there, too, imposed his own sanction, including excommunication for those who made, sold, or bought aguardiente, fines for those who owned the _trapiches_ (normally "cane-presses," but in context presumably "stills") as well as 20 lashes for blacks (or exile for whites) who operated them (unpublished documents in Archivo General de Indias, Sevilla, extracted in U. Rojas 1960).

Lomnitz's account of the Mapuche in Chile (1973) was a pioneering attempt to trace the changing meanings and uses of alcohol through four centuries, and Medina (1978) has provided not only a strong endorsement of my recommendation that more historical studies of drinking be done, but also a useful list of appropriate sources written by people who were eye-witnesses or good reporters in Latin America during the colonial period.

Throughout the era of exploration and colonization, European contacts with members of other races were interpreted in religious rather than racial terms, and even today, although discussions of various populations are often couched in the vocabulary of "race," the distinguishing criteria that are important tend to be social and cultural rather than phenotypic or physiological. Clothing, language, religion, and other aspects of customary behavior tend to be the characteristics that people use for identifying "race," rather than physical characteristics, and it is widely recognized



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that an individual can learn new patterns and thus move (or "pass") from one such category to another. Obviously, we are not dealing here with genetic inheritance; if the term "inheritance" is pertinent at all, it is in terms of "learned inheritance," the product of socialization by means of which children are encouraged to replicate the beliefs, attitudes, values, and other patterns that their elders find congenial.

## Cultural Variants in Modern History

We have already examined, in the introduction to this chapter, one side of the dialectic concerning cultural unity and diversity in Latin America. A number of Iberoamerican authors were cited in support of the proposition that, for certain analytic purposes, it is both useful and meaningful to discuss historical and cultural factors as having a degree of unity throughout Latin America. We have also seen that regional differences, in both pre-Colombian and colonial times, included some significant kinds of variation with respect to the availability and consumption of alcoholic beverages.

In this section, we will briefly and selectively examine related forces during the nineteenth and twentieth centuries.[11] Such an attempt should illustrate a variety of considerations that are important not only insofar as they reflect the diversity of ethnographic facts but also insofar as they provide hints about reasons for particular drinking patterns, meanings of particular alcohol-related problems, behaviors or attitudes that appear to be salutary with respect to drinking, others that are associated with various kinds and rates of social or physical pathology, and so forth. The experience of legislators, administrators, and a wide range of persons who are engaged in the enhancement of public health has demonstrated vividly, in all parts of the world, that attempts to prevent or alleviate any kind of health-related problem should take into account various aspects of the cultures of the populations that are to be affected. Failure to do so has, almost without exception, resulted in the failure of such programs, whether aimed at the level of primary, secondary, or tertiary "prevention."

With respect to the subject matter of this section, as with previous ones, a number of important factors have already been discussed in other contexts. Negrete's (1976) excellent and succinct review of sociocultural factors in alcoholism nicely combines brief summaries of important sociological and anthropological theories with notes on clinical implications, using data from throughout Latin America. The pioneering work of J. Mariategui (1967), with similar scope, has already been cited as an important contribution. Heath's (1974a) review of the literature is helpful, and Medina's (1978) has the additional value of suggesting fruitful new directions for research. Amar (1977) treated several topics in



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depth, including "typical urban life," "conflicting racial relations," "white immigration" during the last 100 years, "the relationship between town and country," and both formal and informal "social controls." A number of ethnographic studies that have already been repeatedly summarized in the alcohol literature will not be discussed here in detail; those who are not familiar with such basic works as Bunzel (1940), Mangin (1957), Madsen and Madsen (1969), Heath (1958), Simmons (1959, 1960, 1968) and others will find their principal data and interpretations cited in various of the review articles already mentioned.

Among topics that are sufficiently important, but probably not yet sufficiently familiar to many, are the ways in which different aspects of culture are intimately linked with beliefs and behaviors about alcohol, and the impressive range of such patterns that are noted throughout Latin America -- or even within a single nation -- when attention is paid to different kinds of "special populations" (Heath 1981) such as ethnic groups, religious sects, tribes, and socioeconomic classes.

Most social scientists in recent years have tended to be wary of talking about "national character" or "basic personality type," but such a gross level of generalization tends to play an important role in terms of popular interpretations about drinking patterns and their sequelae. Discussion of national character is fraught with danger, partly because of the difficulty of extrapolating from individuals to populations, and partly because of the resentment that the act of stereotyping almost inevitably engenders.

Despite the fact that people may resent stereotypes attributed to them by outsiders, they often share -- and even cherish -- stereotypes that are elucidated by members of their own group or social category. Thus, while Anglos may be derided and scorned for exaggerating and caricaturing the importance of partying and machismo among Latinos, a Mexican poet, essayist, and diplomat has been lionized for his penetrating insights about the importance of fiestas: "Fiestas are our only luxury. ...During these days the silent Mexican whistles, shouts, sings, shoots off his fireworks, discharges his pistol into the air. ...This is the night when friends who have not exchanged more than the prescribed courtesies for months get drunk together, trade confidences, weep over the same troubles, discover that they are brothers, and sometimes, to prove it, kill each other" (Paz 1961:49). Similarly, although an outsider would be viewed as being at least one-sided, and more likely bigoted, if he characterized "the Latin" as irresponsible, wily, and more concerned with words than with action, the quintessential clown-hero for two generations of Latin Americans has unquestionably been "Cantinflas" (Mario Moreno), a slightly seedy character whose combination of perennial irresponsibility, ability to confound others with glib but nonsensical verbiage, and seemingly unconscious



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but infinitely graceful dodging of all kinds of obstacles make him an object of sympathy and emphathy as well as of guffaws. No one would claim that a clown is the "culture-hero" or social cynosure of an international society, but when the values and actions he portrays strike a responsive chord so deeply and so broadly for so long, there must be an important element of truth in the characterization.

Another kind of evidence bears on this gross level of psycho-historical analysis: a literary genre of cultural introspection in which Latin Americans have long been vocal and articulate. According to a prevalent view, the Conquest was a profound "psychic trauma," a second "orginal sin for the conquerors and a crushing defeat for the vanquished, and it still weighs heavily on all the descendants." A more vivid characterization represents the crass European male raping the noble American female, and then ignoring the half-breed (i.e., mestizo) offspring. Arguedas (1909) early used that image to explain why Bolivians are "a sick people"; closely related views have been articulated by Aramoni (1961), Gonzalez Pineda (1961), Paz (1961), Rodriguez Sala (1965), Freyre (1956, 1966), and others.

One by-product of this is "the criollo outlook" described by Simmons (1955) in coastal Peru. Sociable but asocial, full of guile, excelling in verbal facility and mental agility, one should be able to live well without apparent effort and to "get away with" anything. Although such a character may not be hailed as the ideal son-in-law, he is likely to be the subject of at least grudging admiration, not only in Peru but also in Argentina (like the fabled gaucho), in Mexico (closely related to the charro), and elsewhere.

Just as there is an important dialectic between unity and diversity within the vast region we have been calling Latin America, there is a similarly important dialectic between unity and diversity within each of the component ecological areas (as when geographers speak of "the Amazon basin," "the Chaco," "the altiplano," etc.). The same holds true with respect to cultural areas, based on trait-distributions (as when ethnologists speak of "Tropical Forest," "Circum-Caribbean," "Marginal," "Meso-American," or other types of cultures). It is also true with respect to most of the individual nation-states which have become such apparently unitary entities in modern times, even though their political boundaries often do violence to cultural and historical systems that are important to people at the grassroots level.

## Ethnographic Studies

A major contribution that anthropologists have made to our understanding of alcohol and its interaction with the human animal



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has been the description of patterns among identifiable local communities. This has the advantage of showing how the parts of a culture relate to each other. It can also show how historical factors influence present choices (whether in a stabilizing, catalytic, or destructive sense). In some instances, it can reveal much about the range of individual variation with respect to a normative norm, or with respect to a descriptive norm. In other instances, it can illuminate how "real" culture fits -- or differs from -- the "ideal" culture, regardless of whether that ideal is epitomized in laws, generalized descriptions, ethical or religious precepts, the results of a questionnaire-survey, or some other source that is removed from the reality of everyday life. For all of these reasons, ethnographic studies of alcohol use have been valuable, despite the fact that few anthropologists ever set out with the specific intention of focusing on that realm of behavior.[12]

Among ethnographic studies of Latin America, there are only a few that have no mention of drinking and drunkenness; this is true of both peasant communities and relatively isolated tribes which have had only desultory contact with representatives of Western industrialized cultures. In the context of this workshop, a regional survey would be of little value, but a broad sampling will demonstrate the interplay of historical and cultural factors at various levels of contemporary society, and enable us better to appreciate the variety of attitudes and interests that are involved in the availability and consumption of alcoholic beverages.

One pattern of drinking that has been remarkably consistent through time and that is widely distributed throughout Latin America is that of drinking bouts, or group binges. Characteristics of this pattern are that the men drink to the point of stupefaction; the beverage has no religious connotation; and although drinking in a group is a social imperative, solitary drinking is unthinkable. The broad geographic range of this style is characterized in Cooper (1949), and Mandelbaum suggested it was prototypical of the area (1965). A few of the detailed local studies where it is exemplified refer to Chile (e.g., Lomnitz 1969a, b, Medina and Marconi 1970); Colombia (Sayres 1956); Ecuador (Maynard et al. 1965, Rodriguez Sandoval 1945); Guatemala (Reiche 1970); Mexico (Maccoby 1965, Wilson 1972); and Peru (Gomez 1966, Mangin 1957, Marroquin 1943, Simmons 1968). This widely distributed pattern was presumably what Jellinek had in mind when he spoke of contemporary Latin America as having "an alcoholic culture."

It is probably also the pattern that has prompted many twentieth century observers to be outspoken in their criticism of drinking and drunkenness as important obstacles to modernization and progress. A Protestant missionary's view is perhaps more starkly phrased than some others, but it reflects a widespread attitude



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among urban internationally oriented people in Latin America today: "Neither Government nor the Roman Catholic Church has done anything to control the drinking habits of the people--habits which, according to many Indianistas, are destroying more Indians than any other single cause" (Rycroft 1946: 72-73).

However, among the indigenistas, whose work continues to have a significant impact on thinking about these same Andean populations, the drinking habits are almost invariably portrayed in very different terms--favorably, as integral parts of native life, important for religious reasons as well as for sociability. This view is not restricted to ethnographers, but is shared by the cosmopolitan literati who cherish folk traditions as important parts of the worldwide human heritage. In his famous novel about quasi-serfdom in highland Ecuador, Icaza (1937) does not ignore the violence that sometimes ensues, but also shows the immense value of men's going on a binge together. Writing about a closely related population in highland Bolivia, Arguedas (1919) carefully portrayed drunkenness as symbolically important and socially useful; the few references to it in J.C. Mariategui's (1971) almost timeless characterization of Peruvian reality show alcohol-related problems as more a result of interethnic prejudice and domination than a cause. A similar view with respect to Mexican Indians is offered in a classic indigenist novel by Lopez y Fuentes (1937), and in a quasi-autobiography (e.g., Pozas 1968), as well as in innumerable ethnographic monographs and community studies.

This emphasis on the social value of sharing drink is by no means distinct to Latin America, of course. Throughout the world, one of the most widely recognized values of alcohol is that, in relatively low concentrations, it often increases sociability. Similarly widespread in geographical terms, and even better documented over a long span of history, is the symbolic value that often attaches to the act of drinking together. In fact, it is ironic that so much concern has been devoted to alcoholism as an affliction of lonely people, or on the diminishing social networks of drinkers as their problems increase. In most of the world, drinking is essentially a social act, often to the point that solitary drinking is unknown and even unimaginable. It is important to keep this in mind, because at least that, among the alcohol-related problems that loom largest in some parts of the world, is virtually absent in many Latin American communities.

Without exploring in detail the rich fund of specific details that have been amassed by ethnographers concerning the positive social functions of drinking, a few of their summary interpretive statements should help to convey some of the beneficial sense that accrues from drinking -- and even drunkenness -- in such a context. Among the Camba of Bolivia, for example, "...fiestas constitute virtually the only corporate form of social expression. Drinking



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parties predominate among rare social activities, and alcohol serves to facilitate rapport between individuals who are normally isolated and introverted" (Heath 1958:507). On the basis of his work in several communities in highland Peru, another observer concluded that: "Where the use of intoxicating beverages is expected and commonplace, their special qualities are consciously utilized as a device to structure and promote social intercourse and to facilitate the achievement of cultural ideals" (Doughty 1971: 188). Remember that both of these comments refer to populations of Spanish-speaking peasants who participate in the national economy, and not to a small isolated tribe.

It is not only in Andean countries that drinking is often cited as an act that has important value in promoting social cohesion or conviviality. The same is true in the Caribbean (e.g., Yawney 1969, Prince et al. 1972, Manning 1979, Abad and Suarez 1975, Beaubrun 1968), Central America (e.g., Arriola 1965, Chassoul et al. 1973, Prestan 1975, Reiche 1970), Mexico (e.g., Pozas 1957; Kearney 1970, Kennedy 1963, Madsen and Madsen 1969), and in lowland areas of South America (e.g., Leacock 1964, Goldenberg et al. 1965).

## Drinking As Ritual Behavior

In many of the ethnic cultures throughout Latin America, social drinking is so important that it is imbedded in sequences of verbal and other behavior that are so formally patterned as to be called rituals. The case of the Chamula of southern Mexico has been more carefully analyzed than many: "Symbolically, the drinking ritual achieves at least four objectives. It emphasizes the principle of equality, for each participant receives an equal amount. It emphasizes the principle of rank, for equal portions are served according to rank order.... It literally produces and also symbolizes the heat that is considered desirable for human interaction with deities and with each other. Finally, it symbolizes solidarity among the participants..." (Gossen 1974: 174).

The symbolism of drinking together as an important contribution to social unity becomes even more dramatic in those populations where drinking patterns themselves are explicitly recognized as important features that distinguish members of one group from those of another (e.g., Heath 1971, Viqueira and Palerm 1954, Simmons 1955). Another usage relates alcohol and drunkenness to inter-ethnic relations, a theme of pervasive concern in most Latin American societies. Villagers in southern Mexico are glad to have drunken individuals play a variety of politically and dramaturgically significant roles, enjoying a peculiar permissiveness that lets them "speak the unspeakable" (Dennis 1975).



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Secular rituals are not the only ones in which alcohol plays an important symbolic role; drinking and drunkenness are highly valued aspects of the fiestas that accompany religious observances of a significant portion of the population of Latin America. This refers not only to religions of aboriginal tribes, but also to Roman Catholicism as it is practiced by the folk of urban as well as rural communities in many countries. This pattern is so familiar as not to require detailed documentation in this context; (illustrative cases from various areas include Kearney 1970, Holmberg 1971, Owen 1965, Gossen 1974, and others). Another kind of syncretic religion, combining traditional non-Western with Christian elements, is exemplified in the so-called "Afro-American cults," where alcohol is often used both as an offering to the saints and as an adjunct to the ecstatic religious experience that involves a spirit's "possession" of a devotee (e.g., Bourgignon 1964, Leacock 1964). Other groups in which alcoholic beverages are thought to be highly esteemed by supernatural beings and, hence, constitute valuable offerings, also include some peasants who practice local variants of folk-Catholicism (e.g., Bunzel 1940, Wagner 1978, Maynard et al. 1965).

If deities appreciate alcohol as a commodity, so do individual human beings in workaday situations. The economic value of alcoholic beverages as a commodity, both in terms of sales and in terms of taxation, is not only widely recognized but has probably been the subject of more quantitative documentation than any other aspect of alcohol in sociocultural perspective. There are, of course, a number of other ways in which alcoholic beverages figure in systems of exchange that are never considered by statisticians or macro-level economists. The beverage itself is sometimes a medium of exchange for paying wages, fines, or taxes (e.g., Rodriguez Sandoval 1945, Pozas 1957, Mendieta 1939). As was the case in the Inca Empire, strategic distribution of alcoholic beverages can also be a valuable way of accruing prestige (e.g., Vasquez 1967, Lomnitz 1969a). One theorist went so far as to suggest that beer is of cardinal importance in local-level politics in the Amazon basin: "The crucial mechanism by which one Tropical Forest village could achieve or maintain a position that would impress its neighbors was to give a fiesta which lasted longer, expended more beer, and unleashed more drunken brawls than any other fiesta in memory" (Lathrap 1970:54).

One particular economic use has received special attention because of its integral association with social structure, namely, the provision of beer by the landowner in situations of reciprocal labor exchange, where teams of neighbors work jointly on each other's properties by turn; this pattern is important in widely scattered areas (e.g., Doughty 1971, Kennedy 1963, Muratorio 1980). Incidentally, the outsiders' view that alcohol interferes with work and such activities turn into drunken orgies has been tested, and,



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not only is the sociability enjoyable, but in terms of thermodynamics "the beer work party is a relatively efficient means of mobilizing agricultural labor" (Gregson 1969).

Just as outsiders often err in their negative evaluation of drinking in relation to work, they often are mistaken in their judgment about the physical impact of alcoholic beverages. Illustrative of this is the unsubstantiated view that: "Once the noble beverage of the Incas, chicha is now classed by general consent, along with coca, as the Indians' deadliest enemy. ...The corn that before had nourished so well thus turned to poison; what was a blessing before became a curse. For centuries now, unchecked, it has sapped the vitality of the Indian people" (Tunon de Lara 1956: 19-20). The reality is very different from this biased outsider's interpretation. Nutritional analysis leaves no doubt that the maize still nourishes; far from being a poison, chicha is extremely rich in B-complex and C vitamins, and calcium, all of which are generally lacking in the balance of the typical Andean diet (see, e.g., Steinkrauss 1979). Physicians and biologists from abroad are not the only ones who hasten to point out that, far from sapping the vitality of Latin American Indian populations, chicha seems to reinforce it. An eloquent Peruvian writer makes much the same point that Paz did with respect to Mexico: "In daily needs, frugality rules. But the great event of the fiesta comes, and there is drink, variety of dishes, dancing, and a community of happy beings. The fiesta is volatile; under its influence, heaviness is forgotten, and the worth of being alive experienced anew" (Valcarcel 1950: 1st of un-numbered pages).

The contrasting view seems to have gained wider recognition, however. One source commonly cited is the report of a committee sent by the International Labor Organization to investigate aspects of social relations and health that might affect productivity in the Andean region. Although none of the members had training in any of the social, behavioral, biological, or medical sciences, their patronizing and ethnocentric conclusion has for many years been generally accepted by planners: "The abuse of alcohol and the chewing of coca leaves help explain, in some measure, irregularities in the social, economic, and health realms that often affect the Indian of the Andean altiplano" (Oficina Internacional de Trabajo 1953: 164). Another highly questionable view is that the toxic substances in chicha are cumulative, so that the peasants of highland Ecuador are gradually poisoning themselves by ingesting a drink that they consider healthful (Maynard 1965).

For those of us who have paid close attention to "folk wisdom" or popular beliefs about nutrition and health, it has been fascinating -- and even gratifying -- to see that Western scientists are sometimes re-discovering important facts that our informants knew all the time. This is not to say that we expect all "folk



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wisdom" to be confirmed, nor that practitioners in the biological and medical sciences make few original contributions. But it is striking that the nutritional value of fermented beverages, long presumed and extolled by peasant and tribal peoples around the world, has recently been enthusiastically confirmed in great detail by specialists from many disciplines (Gastineau et al. 1979). The food value of chicha has already been cited (Steinkrauss 1979); pulque is second only to tortillas as a source of essential vitamins and minerals in the diet of some populations in central Mexico (R. Anderson et al. 1946).

Furthermore, there are also studies that support the widespread folk-belief that alcoholic beverages (especially chicha and other fermented homebrew) have medicinal properties in addition to their general nutritional value. It may seem remarkable that these medicinal values are, in many respects, the same ones signalled by physicians during the colonial period: as a diuretic, as an aid to nursing mothers, and for the relief of diarrhea, as well as the more general tonic quality (Gastineau et al. 1979).

It must also be admitted that not all of those who recognize historical and cultural factors as important influences affecting the availability and consumption of alcoholic beverages consider them appropriate or advantageous. Even while recognizing both the traditional and contemporary cultural significance of drinking and drunkenness among many Mexican Indian populations, a sociologist concluded "that the influence of alcoholism in the economy of the indigenes of Mexico is disastrous," citing, among other problems, that "the cost of intoxicating beverages occupies more than fifty percent of the family budget"; alcoholism provokes among them the commission of crimes against the person"; politicians buy votes with drinks; landlords pay partial salaries in drink; and so forth (Mendieta 1939: 89).

The characterization of significant differences among "subcultures" or "classes" has been an integral part of the tradition of national-level descriptions of alcohol use in Latin America, even before systematic studies were made (Horwitz, Marconi, and Adis 1967a: 61-137). When surveys are conducted, "socioeconomic class" tends to be one of the major demographic variables (e.g., Chassoul et al. 1973, Tarnapolsky et al. 1965). Some have expressed surprise that it is not necessarily those of lower class who drink more. In fact, in various regions throughout Brazil Pastore (1965) demonstrated that members of the upper-class drink more. He also suggested that they can be expected to increase their consumption of alcoholic beverages, because drinking serves not only to symbolize friendship but also because it has become a means of conspicuous consumption and of demonstrating one's "cosmopolitanism."



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Rural-urban differences are similarly noted in most national surveys. Chile provides an illustrative case where popular views about drunkenness have remained strikingly different in rural and urban areas for several years (e.g., Marconi, Varela, et al. 1955, Horwitz and Marconi 1965, Marconi 1969, Medina and Marconi 1970, Medina [in press]). The data are neither statistically overwhelming nor logically compelling (in view of methodological shortcomings), but it is noteworthy nonetheless that the recent WHO survey of drinking patterns in Mexico revealed that rural people drank more, drank more often, and spent more time drinking than those in the city (WHO 1981: 120 et seq.). This deserves mention if only because it contradicts a widely held view that the pressures of urban life, with high unemployment, crowding, alien life-ways, and so forth, make for heavier drinking in cities.

## Illicit Production

It is widely recognized that a significant portion of the alcoholic beverages used in many Latin American communities is not recorded in the statistics that would normally be used as a basis for estimating per-capita consumption. Domestic production of fermented drinks, such as pulque in Mexico (WHO 1981, Garcia 1972, Roufs and Bregenzer 1968), or chicha in the Andean countries (e.g., Vasquez 1967, Muelle 1945) is widespread and customary, so that significant quantities of them are drunk without leaving any record. The same is undoubtedly true of home-made wines in Argentina and Chile, as with other low-alcohol beverages elsewhere. Another portion of alcohol consumption that goes uncounted is that of illicitly distilled aguardiente, cachaca, or rum. Such production has not received the systematic attention of scholars in Latin American contexts as it has in Anglo America; my own work in Costa Rica remains unpublished because it would be incriminating to many friends who were helpful. In that same country, illicit rum (guaro) has long been recognized as posing a major health problem (Chassoul 1971, Escobar et al. 1974), and clandestine distillation is mentioned as an important economic activity in at least a few peasant communities elsewhere (e.g., Reichel-Dolmatoff and Reichel-Dolmatoff 1961, Bunzel 1940).

The reason that home-distillation is illegal in most areas probably has less to do with public health than with public wealth. Distilled alcoholic beverages are usually heavily taxed, so that "moonshining" represents major losses to the national treasury. The situation in Costa Rica is even more problematic, because distillation is supposedly a monopoly of the state. It should not be surprising that the potential conflict of interest between the government as beneficiary of the liquor business on the one hand, and the government as benefactor in attempting to prevent alcohol-related problems on the other, is not only recognized but



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acutely felt in many Latin American nations. In informal conversation, concerned Chileans often are ambivalent about the personal advantage of having liquors available very cheaply -- a rare instance of low taxation -- and the public disadvantages reflected in high rates of cirrhosis from long-term heavy drinking. Similarly, some Argentines who enjoy excellent wines at reasonable prices are also distressed that their impoverished compatriots can buy mediocre wines for less than they would pay for milk, coffee, or soft drinks. Another important fact with respect to the beverages, and alcohol-related problems, is the remarkable exercise in social epidemiology in which it was demonstrated, for Trinidad and Tobago, that: "The extraordinarily close relationship (r = -0.978) between road accidents and the relative price of rum suggests that the latter may be a better indicator of true consumption than the figures obtained from production and imports minus exports" (Beaubrun 1977: 49).

The linkage between accidents and drinking raises the question of diminished responsibility when an individual is intoxicated. In Uruguay, for example, drunkenness can be considered an extenuating circumstance with respect to criminal responsibility, although public inebriation is punishable (Galeano 1967: 130-131). Similar ambivalence is evidenced in widespread acceptance of "the disease model of alcoholism" on the one hand, and continuing stigmatization of problem drinkers as lacking with respect to willpower and morality (ibid: 136) on the other.

Closely related to the question of responsibility for drunken comportment is the question of appreciation of drinking in positive terms, when such appreciation does not relate to economic, religious, or other structurally important values. The real and symbolic linkage between drinking rum and other forms of "play" is a major theme in the lives of young Bermudan males (Manning 1979). Another curious finding in the recent WHO cross-national survey was identified by the sociologist who was commissioned to analyze the findings in terms of cross-cultural similarities and differences: "The degree to which Mexican respondents said no to the idea that 'having a drink is one of life's pleasures' is something of a mystery," and "In the Mexican data one has the distinct feel of the presence of an overriding cultural negativity toward alcohol" (Roizen 1981: 18, 51).[13]

This view of cultural variants in recent history is intended to be neither encyclopedic in breadth nor comprehensive in depth. The sampling of variant attitudes and practices with respect to alcoholic beverages in recent times has been deliberately diverse in terms of subjects, to reflect the pervasiveness of cultural factors that should be understood before anyone attempts to formulate plans for prevention of alcohol-related problems. It has also been diverse in terms of geographic distribution, to demonstrate that each nation and each region can contribute valuable data and raise important questions in such connection.



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## Conclusions

In the context of a workshop such as this, it seems appropriate that one not feel constrained in the sense that conclusions need be based solely on evidence presented in the body of the paper. In fact, it seems more appropriate, in addressing the broad subject of historical and cultural factors affecting the availability and consumption of alcoholic beverages, to draw on a number of impressions that are not easy to document in a bibliographic sense, as well as on the many and diverse sources that have been cited above.

For example, immersing myself again in the literature, I find a few new questions arising. Is there perhaps an international type of "Caribbean rum-culture," associated with a complex of features such as periodic unemployment or underemployment, female-dominated households, tropical climate, a diet high in carbohydrates, and some other features? If so, is it also associated with a fair amount of boasting and horse-play among drinkers, and few social, psychological, or economic problems that could be blamed on alcohol? Is there perhaps another that might be called the "highland-cargo-culture," combining participation in a hierarchical religious and/or political system in which men take turns holding short-term public office, a climate tempered by higher elevations (at least 2,000 meters), with intensive agriculture, and a more varied diet? If so, are boasting and horse-play probably absent, and drunkenness on the job expected? If there is a "frontier beer-culture," does it typify newly established towns and include a high likelihood of fighting, even to the death. Is there perhaps an "upper-class whiskey culture" even more widely dispersed in cities throughout Latin America? If so, is it the only "alcoholic subculture" in which women participate almost as often as men? If any of these is, in fact, a meaningful category, then we would do well to ask ourselves why. But it may also be that they are not even useful categories.

Some of the categories that have enjoyed some currency and that have already proven their worth for a variety of analytic purposes probably deserve much more attention. Negrete (1974) has already effectively addressed "types of alcohol use" and their implication.

The Conquest didn't necessarily drive the Mexican Indians to drink in the colonial period, any more than city life drives their descendants to drink today. Prohibition appears always to have been difficult to enforce and, except when imbedded in religious precepts, tends to be short-lived. Thoughtful planners have differed about whether sales of alcoholic beverages should be restricted to holidays--or forbidden only on holidays. Similarly, various jurisdictions in Latin America have experimented with



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requiring that drinking places be open to public view--or that they be closed from view. Some have favored development of pub-like atmosphere, congenial to women or families as well as to men, whereas others have insisted that public drinking places should be starkly bare and for men only. The debate over whether food should be available with drink has been resolved in different ways in different places--and in different ways also at different times in some specific places.

If a man has been taught that he must never admit to being weaker than anyone or anything, he is not likely to be comfortable with the guidelines of Alcoholics Anonymous, emphasizing recognition that "alcohol is stronger" and surrender to "a higher power." If, however, someone feels comfortable in the security of having a close personal relationship with a saint or a particular manifestation of the Virgin Mary, then a pledge of abstinence devoted to that religious figure may be therapeutically effective.

But there may not be so much need for this solution among Latin Americans. One of the most important generalizations that emerges from an overview of my quarter-century of watching, reading, listening, and otherwise paying attention to alcohol use in Latin America is the rarity with which "alcoholism" occurs.[14] To be sure, it is a serious problem that few of the authors define what they mean by "addiction," "alcoholism," or "alcoholics." Nevertheless it is striking that so many investigators -- most of them presumably at least familiar with the major controversies over those terms -- explicitly make the point that those phenomena are absent in the populations studied. Medina's (1978) recommendation that more careful attention be given to defining the terms as they are used in various research projects deserves not only a second but also a follow-up. It is striking that this shortcoming occurs not only among social scientists. There are at least as high a proportion of psychiatric, epidemiological, and other studies from Latin America in which the terms "alcoholic" and "alcoholism" are used without specification, including many where the subject-matter has nothing to do with loss-of-control, dependency, withdrawal, or other alcohol-related problems that usually are cited as diagnostic or defining characteristics.

I will go a step further and suggest that we may soon find ourselves in a situation where the tired old question--"prevention of what?" takes on new and immediate significance. This may occur because another important generalization from Latin American experience is that alcohol-related problems, like "alcoholics" and "alcoholism," are rare--at least in comparison with populations in the rest of this hemisphere, and even in comparison with much of the rest of the world. A few nations are exceptions to this, as evidenced in Dr. Caetano's presentation on epidemiology, but most surveys and community-studies suggest that Latin Americans, by and



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large, seem to feel that they suffer few serious problems that can be related to alcohol use, either their own or on the part of significant others. This is all the more significant when one considers that there is, in a very real sense, some bias toward finding problems when one is doing research on alcohol use.

It is even more significant when one considers that these studies often refer to populations among whom heavy drinking occurs regularly and where drunkenness is both frequent and acceptable. It is now generally recognized that certain alcohol-related problems tend to be associated with particular patterns or styles of drinking. One of the best known illustrative cases is French alcoolisation, in which the alcohol dependence syndrome, often called physiological addiction, can develop among individuals who have been constant wine-drinkers over several years, even if they have never drunk enough to show a blood-alcohol concentration of .08 percent or any related physical or mental impairment (Ledermann 1956). It should surprise no one that the episodic binge-drinking that typifies large segments of the Latin American population does not produce anything like alcoolisation, nor frequent cirrhosis, nor damage to other internal organs. But it may be surprising that neither is it linked with high rates of accidents (with a few dramatic local exceptions), nor with high rates of crimes of violence.

Another striking contrast with alcohol-related problems in other parts of the world is the rarity of individuals who suffer greatly in terms of mental health. The guilt-ridden solitary drinker who is so commonplace in Anglo-America is fortunately missing in most of Latin America, where drinking is usually done in a setting that emphasizes sociability.

A strong caveat is in order at this point. It may well be that the foregoing "conclusions" are based on inadequate evidence. By that, I do not mean that my comments diverge from or ignore the data that are available. On the contrary, it seems appropriate to stress that the data -- rich and diverse as they are -- still leave much to be desired. One of the greatest shortcomings is shared with the vast majority of studies, wherever they may have been conducted. As Medina (1978) noted, it is unfortunate that, despite increasing efforts toward transdisciplinary collaboration in recent years, there have not yet been closely integrated studies of drinking that combine epidemiological assessments of the sequelae of drinking with diagnostic and psychoevaluative measures and/or analyses of relevant social and cultural features. Various populations have been studied by various methods. It is probably no surprise that those relatively small and isolated "tribal" populations that have been analyzed in ethnographic terms have rarely been studied in terms of biological and medical sciences. Ironically, it is also true that the populations best known in



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biological and medical terms have rarely been systematically studied in ways that behavioral and social scientists would find helpful in understanding the subject of alcohol use, its meanings, and functions.

By pointing out that many people drink often and without suffering serious problems, I do not intend to try to steer us away from the important central theme that has brought us together. What I want to accomplish, on the contrary, is to confront all of us with the practical implications of this historical and cultural diversity that we have all accepted as being in some sense relevant. Let us briefly explore, in some wide-ranging and occasionally unorthodox ways, various senses in which the cultural and historical features may be informative and useful.

In simplest terms, social acceptance of drinking and of drunkenness throughout much of Latin American provides an emotional context in which both drinking and drunkenness are likely to occur, and in which they can easily be viewed as unproblematic. But life is rarely so simple, and we should begin to experiment with themes and variations, harking back to some of the miscellaneous information that was discussed earlier in this chapter. For example, in those instances where drinking is considered a religious act, and drunkenness a transcendant state, it is unlikely that interpersonal aggression would be a common alcohol-related problem. Where drinking is a normal accompaniment to plowing, planting, weeding, harvesting, house-building, and other major work-projects, it is not likely to be used as a means of psychological escape. But if a youth is indoctrinated that the measure of a man is his capacity to drink, he is not likely to be temperate, especially in his early experimentation with alcohol.

In settings where alcohol is offered to the gods, or litigants drink together to signal acceptance of a settlement arrived at in a discussion that has been open to all passers-by, there may develop a certain symbolic reserve concerning that beverage, such that incontinent drinking might seem disrespectful. In settings where being drunk is scorned as brutish behavior, and transgressions of propriety are not excused, regardless of one's state of inebriety, social pressures may help keep people sober.

In sum, the value of a comparative historical and sociocultural perspective is that it brings to our attention the wide range of "natural experiments" that have occurred among various human populations. To recognize the diversity of the human experience is valuable in itself. To understand that it can provide examples -- both favorable and unfavorable -- can transform such recognition into a potentially valuable inventory of options.



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This workshop has been an important first step in bringing a number of interesting and knowledgeable Latin Americans together to exchange ideas with some interested and knowledgeable people from other areas. It is crucial that those who best know and work within the Latin American systems of political, economic, and other social relations be the ones who identify whatever alcohol-related problems may deserve to be addressed, and that they fashion, from whatever sources, the means of prevention that they believe would be most fruitful.

Acknowledgements: This is the first in a projected series of papers emphasizing the integral role that sociocultural factors play with respect to public policies, prepared in connection with the Center for Alcohol Studies at Brown University. As usual, A.M. Cooper provided useful ideas and assistance throughout its preparation: Jose Amor y Vazquez helped round out the historical perspective; and the comments by Eduardo Medina Cardenas and Juan Carlos Negrete (published elsewhere in this volume) are much appreciated.

## DISCUSSANT

Eduardo Medina Cardenas

The existence of alcoholic beverages and their varied socially prescribed and proscribed uses have probably been the subject of more concordant or conjoint activities by anthropology and medicine than other areas of common interest to the social and health sciences. This liking for ethanol and the conditions surrounding its uses among all the human groups of which we know, despite the fact that it is physiologically unnecessary, has meant that any ethnographic inquiry finds something to record and to interpret; furthermore, since anthropology has advanced from the study of simple groups to the study of complex modern societies, these customs have turned out to be dynamically associated with such various aspects as community development, rural-urban migration,



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miscegenation, sociocultural change, development and under-development and so forth. For its part, medicine, insofar as it has been gradually showing a more preventive than curative attitude to sickness and a conception of health more related to well-being and quality of life than to the absence of specified diseases, has had to begin to look at its field of endeavor through new eyes. While applying its own corpus of knowledge, medicine has had to learn from other academic disciplines and from direct observations in the groups it seeks to assist.

There is no doubt that the problems resulting from the drinking of alcoholic beverages are somewhat more extensive and complex than the pharmacological effect of ethanol on the living organism or the various individual physical and psychopathological phenomena associated with its chronic and excessive use. Examples are what can be considered normal or abnormal consumption of alcoholic beverages, the individual and/or social-environmental variables affecting their use, the many negative effects of intemperate consumption, the questionable effectiveness of so many health programs despite the resources involved, and so forth. Furthermore, to consider addiction to ethanol a disease -- alcoholism -- is in many respects a flawed approach, since the medical model has not been able to account for, much less influence, the great many factors connected with the use of and access to alcoholic beverages.

In short, the epidemiological approach of public health has been substantially enriched by the findings of anthropology concerning drinking and the problems resulting from excessive use of spirituous liquors.

Despite the situation described, the convergence of anthropology and medicine has so far been due more to personal than to institutional interests, more to casual coincidence than to predetermined planning. Anyone who examines the many plans and programs of the various countries or regions can confirm this; such an examination shows that that convergence has been due not so much to the program interest of a particular medical care institution in using available anthropological knowledge as to the clearsightedness of persons who have anticipated the demands of their sphere of endeavor and, by their own efforts, have expanded their usual professional perspective. When these persons are in the management of a specified program, such activities show more sociocultural sensitivity; when this has not been so, a critical review of the principles underlying the use of the health resources and of the extent to which initial targets were achieved shows, in hindsight, that the lower level of efficiency was due to some extent to the omission of key sociocultural factors.



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Accordingly, the possibility of improving the efficiency of the resources and the effectiveness of activities designed to prevent excessive drinking and alcoholism still appear to depend in large measure on access to a body of sociocultural knowledge that is rather scattered, out of reach, and, for those not familiar with basic anthropological concepts, even unusable. On the other hand, all efforts to facilitate and institutionalize this meeting of minds from two very different fields deserve to be emphasized and encouraged.

Dr. Heath deserves a special place among those who have helped narrow the gap between anthropology and medicine in their approach to the use of alcoholic beverages. We who have known him, from his pioneering ethnographical work Drinking Patterns of the Bolivian Camba to his interesting lecture "Socio-anthropological Factors in the Pathogeny of Alcoholism," have been able to learn from the results of his field work, his theorizing about drinking, and his extensive and probably unequalled knowledge of the world literature on alcohol and its place in the cultural environment.

"Historical and Cultural Factors Affecting Alcohol Availability and Consumption in Latin America" appears in circumstances worthy of mention. Indeed, from the broad picture I have just outlined it may be deduced that:

1) It constitutes a new contribution toward narrowing the gap between anthropology and medicine in their approach to the study of alcohol.

2) The well-deserved prestige of the author guarantees the quality of the new contribution and enhances the importance of this scientific meeting even more.

3) By restricting the analysis to the Latin American region, he is able to give more depth to his explanation of aspects that are omitted or hardly considered when more extensive studies are attempted (for example, the importance of specified socioeconomic, geographic, historical, political and other factors).

4) It is worthwhile commenting on some facts from the sections entitled "The Pre-Columbian Period," "The Colonial Period," and "Cultural Variations in Modern History" that are still topical because they are to some extent recurrent.

   o Pre-Columbian societies and groups consumed fermented drinks in accordance with more or less strict rules of various kinds. Although Dr. Heath rightly finds that in the available accounts of these customs it is difficult



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to differentiate the "real" from the "ideal" culture, he supports what has so often been noted by other investigators about the feasibility of moderating consumption only if it is functionally integrated into the sociocultural context to which the drinker belongs.

The common, and socially approved, pattern was to drink to the point of intoxication (ceremonial or ritual drinking). Such a mode of consumption was normal within its own context. Because it was integrated in some way with other customs, it did not greatly disturb them.

- The nutritional qualities of fermented drinks were important; although it was not explicitly spelled out in that period, the chicha or beer that was consumed did represent a significant dietary supplement. This undoubtedly supported those economic, symbolic, and political values to which we now tend to give more emphasis, i.e., the attributes of fermented drinks as trade goods, as offerings to deities, and as products to be distributed by the central authorities, reinforcing their domination of the social structure.

- The attitude of the colonial authorities towards drinking by the native populations is another chapter in that very heterogeneous and dramatic period of contact and acculturation. The European standard of frequent, although moderate, drinking came into conflict with the native custom of periodic but intemperate consumption, now more frequent and with well-known negative consequences.

- Dr. Heath emphasizes the attempt of the authorities to introduce preventive legislation without having a full knowledge of the dynamic factors associated with the drinking of the dominated population. In addition, the ambiguity, inconsistency, and/or variability of such rules, more motivated by the interests of the authorities than by a real concern for the well-being of those groups, are well-known.

- In this field as in others there was a struggle within the ruling class between the business groups, more motivated by economic motives and the desire for profit, and other groups that sought to protect, educate, and/or convert the native population to Christianity (government officials, priests, etc.).

- The sociocultural gap between the rulers and the ruled originated from the various sterotypes that further distorted objective understanding of those phenomena.



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The entire possible range, from integrating ceremonial consumption to individual pathological drinking, was understood rather as manifestations of behavior typical of decadent, exhausted, lazy, vicious, and/or weak population groups.

- The ethnographic contributions of various anthropologists who have investigated groups of Indians and/or mestizos in modern times are outstanding. Better understanding of the social role of the use of alcoholic beverages is complemented by epidemiological studies carried out by health professionals among low-income and marginal strata of the population. The integration of these studies has to a certain extent guaranteed a correct understanding of the factors affecting the drinking phenomena; furthermore, it has also provided a basis for extrapolating the variables identified to other groups or contexts in our present complex urban societies.

A brief summary of two of the conclusions of Dr. Heath's paper is warranted.

One conclusion is that to continue to attempt to characterize certain specific groups or subcultures on the basis of their patterns of drinking is unhelpful at present, because of tendencies to repeat descriptions of early studies using this approach without contributing anything to a dynamic understanding of them. It would be better to add depth to the comprehensive epidemiological approach, that is, the approach based on the triad "agent", "host", "environment"; and in addition, to conduct multidisciplinary studies that combine comparative research on prevalence with diagnostic and psycho-evaluative measurements and relevant sociocultural characteristics.

The rarity of alcoholism, despite generalized drinking among the adult population, is another important impression given by Dr. Heath. However, he finds alcoholism a vague concept, to say the least, because of the lack of common, unambiguous concepts and parameters among scholars both in the social sciences and in health.

More comments could be made on the excellent work of Dr. Heath, especially since the subject is virtually inexhaustible both as regards its academic aspects and its implications for preventive medicine. From a review of these aspects, it appears clear that specified sociocultural circumstances tend to generate specific patterns of drinking, or inversely, that to ignore such determinants of drinking in a group will result in misunderstanding their significance. I should now like to add a few other comments that the paper suggests to a medical reader:



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- Moderate consumption obtains only if the sociocultural environment offers a coherent context. The secularization of modern life tends to weaken the common rules in this regard and, therefore, to facilitate anomalous behaviors; furthermore, the low socioeconomic level, the marginality, and the anomie of many urban population groups will generate greater intemperance.

- The nutritional contribution of native fermented drinks is probably irrelevant in the modern urban context, in that their consumption is due to many different reasons. Today, the diet of a great many people is determined by a limited monetary budget, which must be distributed among products that can be acquired in the market place and whose purchase is often influenced by the non-objective factor of advertising.

  On the other hand, the useful nutritional qualities of home-brewed fermented beverages are not found in those produced by modern industry, and much less in hard liquors. In these, only the caloric contribution of ethanol is significant and, therefore, they are not a dietary supplement.

- The interests of those that benefit from the production, distribution, and marketing of these beverages and of those who must face the adverse consequences of excessive consumption are frequently far apart and even opposed. Those who earn income from the manufacture, taxation, or sale of alcohol find it hard to understand, much less to agree with, those who must protect the social group from the risks of drunkenness, from the organic damage of alcoholics, and from the many individual, family, and social problems of chronic excessive use.

- Many more interdisciplinary investigations by anthropologists and physicians are necessary. Separate studies by each discipline of customs and manners or epidemiological data too often repeat one another. Although they may refine earlier contributions, they add no significant new facts to the body of knowledge available.

  Such joint research necessarily presupposes a prior interpretive effort. Thus, the basic conceptual categories used by scientists in each field should be improved and standardized, the methods used should be improved, and the information obtained should be critically exchanged. Until such contacts are institutionalized, this approach will not be easy.



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What anthropology alone can contribute concerning the availability and consumption of alcoholic beverages in Latin America cannot cover other critical factors that affect the physician in his preventive and curative work. The following considerations, which are offered by way of example, also suggest the advantages of the joint approach already mentioned.

First, the study of consumption should be refined not only in relation to the socioeconomic and/or cultural contexts, but also by age group and sex. For the physician, the present increase in excessive drinking by women and adolescents is a noteworthy phenomenon.

Second, and especially in the case of adolescents, the pattern of drinking is mixed with the use of other psychotrophic substances such as marijuana, stimulants, and/or volatile solvents, if not with hard drugs such as cocaine and opiates. Hard drugs still appear to be more widely used in the English-speaking countries than in Latin America.

Third, the many factors involved in the use of all these substances should not only be investigated by anthropology and medicine, but also with the assistance of other sciences such as sociology, economics, psychology. Indeed, any aspect of complex modern society should be approached comprehensively, even though the interdisciplinary approach is still far from easy.

Fourth, and I return to my initial comment, the contribution of anthropology has helped to improve the usual medical model for prevention in these areas. But it must go beyond that point; it must ensure that the body of knowledge obtained also reaches and affects the decisions and actions of the higher government authorities. At our technical and academic level, there are usually no important differences in approach to what are the most appropriate ways of preventing excessive drinking and alcoholism; that is not necessarily the case with government authorities who are influenced by other value judgements. That is to say, anthropology and the other social sciences can make a significant contribution to the development of political models of preventive health activities which, together with epidemiological models, should be extended to intersectoral and intracommunity activities.

Finally, the mere exchange of interdisciplinary information at all levels improves the efficiency of any system. This workshop can effectively contribute to the prevention of alcoholism not only in that it affords the participants an opportunity of engaging in a dialogue, but also to the extent that its conclusions are accessible to both the senior health authorities and the professional health workers of our countries.



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## DISCUSSANT

Juan Carlos Negrete

Professor Heath's review shows his extensive knowledge of the field and his familiarity with Latin American history and ethnology. Of course, he himself is a pioneer contributor on the subject, from his original field work in Bolivia through his several writings on the sociocultural model of alcoholism to his excellent classified bibliography on alcohol and culture published last year. Written as it is by an anthropologist, this paper's main emphasis is on original native patterns and the changes which have resulted from the early interaction between the aboriginal populations and their European colonizers. Professor Heath's historical analysis sheds light, not only on the general development of Latin American drinking behaviour, but also on some of the most relevant social attitudes and values which provide its cultural frame of reference.

Although this review includes a section on "Cultural Variants in Modern History," containing valuable descriptions of some current cultural traits, it appears to pay less attention to cultural changes wrought by urbanization, industrialization, the input of the more recent immigrants, increasing contamination by foreign life-styles, and the pressure of a much more developed alcohol industry. Social customs in Latin America are being subjected to a process of international homogenization. The easier and more intensive trans-cultural contacts, as well as growing access to public sources of information and to the international mass media, serve to expose large sections of the Latin American population to the same cultural messages that are influencing other societies. In other words, Latin American cultural patterns are constantly evolving and appear to be changing at a much quicker pace than ever before. Any description made of them at this point must acknowledge such a dynamic process.

Professor Heath, who has kept in active contact with Latin America over the last 25 years, proposes a differentiation between a number of alcohol use patterns which he has seen developing during this time. His list includes the so-called "upper class whisky culture," which well illustrates some of the changes caused by international cultural diffusion in recent years. Latin American upper classes are readily adopting what they believe to be sophisticated lifestyles prevalent in leading foreign societies. Women



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drink almost as much as men and the choice of beverage is determined by fashionable trends. Products available on the international market are much prized, and incredibly high markup prices are paid for them. To be able to treat guests to an "imported" whisky has become a status symbol among the privileged classes in Latin American society.

One long-established cultural tradition with a direct bearing on alcohol availability in Latin America is the continued production of home-brewed alcoholic beverages. Dr. Heath asserts that it had been practiced by native population long before the arrival of the first European colonizers. He also remarks that, curiously, it was known mostly in the area that fell under Spanish control and not in what is now Anglo America. It would appear that brewing techniques were unknown, also, to the scattered inhabitants of Patagonia and the Argentine pampas. The absence of native alcoholic beverages in either the Arctic or southern Patagonia may easily be justified on the basis of the unfavourable geo-climatic conditions prevailing in those regions. However, sugary substances were available for gathering or could have been grown for the purpose of alcohol making in other parts of North America as well as on the humid pampas, but the local native groups did not do this. A reason could perhaps be found in the degree of development required. In order to master the technique of alcohol-making, a social group must be able to operate on a long-term basis, to engage in efforts that will fructify only after a waiting period. To make use of a psychological paradigm, the capacity to postpone gratification is as much a sign of cultural development in a group as it is of psychological maturity in an individual. A practice such as brewing implies a rather settled way of life with time and effort devoted to growing, harvesting, processing, and preserving. These activities were not typical of the less organized hunting and gathering cultures which inhabited the alcohol-free regions.

Home-brewing is still widespread throughout Latin America; homemade "chicha" and sugarcane beverages produced in domestic stills represent a large proportion of the available supply in the central Andes region. Private, independent and uncontrolled production of "pulque," sugarcane distillates, wines and "pisco" (grape aquavita) is currently taking place throughout most countries in Latin America in significant volume. The estimate in Costa Rica, for example, is that the illegal production of sugarcane "guaro" equals that of the state liquor monopoly. Understandably, this cultural pattern greatly jeopardizes public prevention campaigns aimed at reducing alcohol availability.

Another major cultural obstacle to the implementation of preventive measures is the traditional Latin American disregard for rules and regulations; Professor Heath, somewhat apologetically, suggests that, indeed, this may be a cultural trait throughout the



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region. His reference to a Mexican folk-hero whose ability to evade restrictions delighted audiences throughout Latin America is a telling example. In Brazil, a much admired personal ability is to have jeito (know-how), that is, the ability to bypass red tape and legal hurdles and have one's way. In Argentina, a great deal of social prestige is accorded to those capable of "beating the system"; in the local slang, these individuals are called piolas or cancheros. Thus, Professor Heath need not have hesitated to underline a cultural characteristic that is certainly prevalent throughout Latin American society. By all the evidence, ignoring or circumventing established legal restrictions is not seen as necessarily immoral or even reprehensible in Latin America. Such behavior is perceived rather as a justifiable reaction against "the authorities."

By and large, Latin Americans tend to disassociate themselves from those in power; one senses in the population a total lack of identification with the authorities, as if the latter were alien to the society under their rule. This, of course, may be a situation originating from the days when the government was in the hands of the European colonial authorities and the native populations had no participation in it. Later on, and to a large extent up to this date, positions of authority have been reserved to a privileged and small sector, quite distant from the mass of the population. As long as these masses perceive no difference between the law and the authority imposing it, they are unlikely to see anything wrong in their unwillingness to comply.

Although poor observance of rules and regulations limiting the availability of alcohol is perhaps more prevalent among the peasants, campesinos, and native populations, this attitude is by no means confined to such sectors of the society. Professor Heath gives an account of the inconsistent behavior exhibited during colonial times by the Spanish themselves with regard to the restrictions imposed by the Crown on the sale and use of alcoholic beverages. He quotes an old Spanish saying: "Laws are to be acknowledged but not observed." Little wonder, then, that there are practically no effective measures governing the availability of alcohol in Latin American societies. Beverages can be obtained from public outlets at any time and by anybody. On Sundays and other days on which stores are to be closed to the public, for instance, it is not unusual to see children purchasing liquor through the back door. They are sent by their elders, who are most likely engaging in one of those day-long libations that Professor Heath so rightly describes as a typical Latin American pattern.

Another important traditional feature identified by Professor Heath as part of Latin American culture is the frequency of drunkenness and the degree of social acceptance this behavior enjoys. Historical evidence would suggest that this tradition has



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its roots in pre-Columbian society. Native groups then used alcohol and other psychoactive substances for the express purpose of inebriation. Drunkenness was not only not avoided but, on the contrary, pursued intentionally. Today a similar attitude influences the alcohol use pattern of their descendants. For a large proportion, to drink is still synonymous with getting drunk. In fact, popular language often makes no distinction between drinking and drunkenness. For instance, when it is said of someone, "el bebe" (he drinks), it is meant that he drinks to excess. This particular cultural connotation of the verb "to drink" must be taken into consideration when alcohol use in Latin America is surveyed, especially among the less educated.

The recent WHO general population study in Mexico to which Professor Heath refers in his review found that more than one-third of the adults interviewed replied "No" to the question: "Do you drink?". Anyone who has had the opportunity to observe the same population behaving spontaneously in natural settings must doubt the correctness of such an answer. It well may be that the Mexican respondents felt they were being asked whether they get drunk and, sensing an implicit criticism in the question, gave an answer which they assumed would please the interviewer. It must be said that a non-judgmental or lenient social attitude towards drunkenness is more typical of the lower classes and more widespread in those Latin American countries with larger concentrations of native and mestizo (half-breed) populations. In Argentina, Uruguay, and the southern part of Brazil, where recent European immigrants constitute a sizeable majority, frequent drunkenness is clearly less prevalent. These immigrants, mostly from Spain, Portugal, and Italy, have brought with them a tradition of sobriety established in their original cultures. In addition, they found in their new environment geo-climatic conditions permitting them to continue with their European pattern of drinking wine, as opposed to the stronger beverages utilized elsewhere on the continent.

Perhaps because of pressure from an expanding liquor industry, the large Amerindian and mestizo populations around the Caribbean basin and in some Andean countries have tended to substitute distilled beverages for their traditional low-grade brews. Fermented drinks were, of course, more suited to their cultural pattern of prolonged celebration and fiesta drinking, which also involves a high volume intake. The switch-over to distillates changed the content but not the form of their habits and resulted in much more severe intoxications. Foreign visitors to Central America, for example, may be a little surprised that patrons in public drinking places often order drinks to their tables such as whisky, rum or even cognac--not in individual measures, but by the whole bottle. The comparative consumption figures in Table 1 illustrate the regional tendencies just described.



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TABLE I

Absolute Alcohol Consumption*
and Beverage Class Preference**

| COUNTRIES | Year | Absolute Alcohol | Percentage distribution | | |
|---|---|---|---|---|---|
| | | | spirits | beer | wine |
| **LATIN AMERICA** | | | | | |
| Mexico | 1967 | 4.58 | 27.3 | 53.0 | 19.7 (a) |
| C.America(b) | 1967 | 6.07 | 74.2 | 24.0 | 1.8 |
| Peru | 1970 | 7.22 | 78.0 | 18.0 | 4.0 |
| Chile | 1972 | 14.0 | 10.8 | 10.7 | 78.5 |
| Argentina | 1965 | 18.2 | 13.5 | 3.6 | 82.9 |
| **EUROPE** | | | | | |
| Finland | 1968 | 4.12 | 50.0 | 34.0 | 16.0 |
| Sweden | 1968 | 6.96 | 49.5 | 38.0 | 12.5 |
| U. Kingdom | 1966 | 7.60 | 15.2 | 75.3 | 9.3 |
| W. Germany | 1968 | 13.04 | 27.3 | 60.4 | 12.3 |
| Italy | 1968 | 16.04 | 13.7 | 4.0 | 82.3 |
| France | 1966 | 26.12 | 18.0 | 12.7 | 69.3 |
| **NORTH AMERICA** | | | | | |
| Canada | 1967 | 8.80 | 34.1 | 57.7 | 8.2 |
| U.S.A. | 1970 | 10.44 | 44.1 | 44.8 | 11.1 |

SOURCE: Negrete, J.C. (1976) Alcoholism in Latin America. Annals of the New York Academy of Sciences 273:9-23.

*liters per person age 15+, in one year.
**percentage contribution of each beverage class to the total annual absolute alcohol consumption.
(a)includes "pulque"
(b)average of 6 countries, population age 18+: Guatemala, Honduras, Nicaragua, El Salvador, Costa Rica and Panama



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From the early field observations among the Camba of Bolivia, Professor Heath concluded that frequent alcoholic intoxication, when culturally integrated and socially approved, is not necessarily associated with deviant behaviour and does not fit the concept of alcoholism. In fact, he noted that the very notion of alcoholism was alien to the Camba. In this present review Dr. Heath also quotes several other ethnologists who, after studying native communities in Latin America, have concluded that alcoholism is not a problem in cultures where the use of alcohol serves such positive functions as helping group cohesiveness, sociability, and role definition.

Of course, the social scientists' view of alcoholism is one of deviant behaviour, that is, a form of alcohol use which does not conform with established and socially acceptable cultural patterns. However, alcohol dependence as understood in biological terms is unlikely to be seen as noticeably different behaviour in a milieu which provides so much opportunity for socially approved inebriation. Professor Heath's remark about the need to complement ethnographic observations of drinking behaviour with biomedical studies is very well taken indeed.

A word of caution should be given to the indigenists who tend to idealize pre-Columbian cultures and see no wrong in their ancient patterns. Their respect for the truly amazing degree of social organization attained by some of these cultures should not obscure judgement when interpreting the historical evidence about drinking behaviour.

In all fairness, however, the European colonization has profoundly altered the meaning and pattern of alcohol use among native populations. It has also introduced a new and problematic social element -- the mestizo population -- whose cultural frame of reference is undefined and stressful.

An interesting ethno-philosophical analysis of this change process is found in a paper by Pages Larraya (1976) on drinking patterns among Chaco cultures. This author deals with the total cultural change undergone by the aborigines through their exposure to European influence and sees the alteration in their drinking habits as only an epiphenomenon of acculturation. Pages Larraya asserts that alcohol intoxication took place originally within a ceremonial context; it was only a means to cause in the drinker a "transubstantiation," a change into a different -- somewhat supernatural -- identity in order to enable him to participate in various rituals. Through the teachings of foreign missionaries the native was induced to attach a meaning to alcohol itself; he learned that it was evil, and therefore, drinking was an act of wrongness. This moralistic view came to involve the natives' whole universe and



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belief system. They learned to look at the white man's world as the good one and to perceive their own as sinful and demoniacal. According to Pages Larraya, such a catastrophic self-perception led to the development of self-destructive patterns of alcohol use on the part of the natives. (Of course, he was analyzing groups less culturally developed and socially organized than the higher civilizations of meso-America and the Andes). In that sense the Chaco aborigines were perhaps more vulnerable to the deleterious effect of foreign influences. A comparative study on the prevalance of alcohol problems among different tribal groups in Oklahoma (Stratton 1978) lends support to the view that those less socially organized were more affected by contact with the white man.

Professor Heath concludes that in spite of heavy drinking patterns, the frequency of alcoholism is low in Latin America. Specifically, he is impressed by the apparent scarcity of the solitary, guilt-ridden alcoholic so commonly found in large urban centers of more industrialized societies. He remarks that epidemiologists in Latin America find higher rates of problem drinking in rural populations than among urban dwellers, and correctly notes that an opposite tendency is the rule elsewhere. Urbanization could perhaps be a disruptive factor for those rural populations which present a high degree of social organization, group control, or religious influence; however, it is likely to have a beneficial influence on the behavior of individuals from other rural areas in Latin America who find greater social support in the cities. Poverty, unemployment, seasonal and nomadic patterns of occupation, and the absence of organized social resources are factors that frequently make living in rural regions more stressful than in urban centers in Latin America.

Although it is possible to agree with Dr. Heath that alcohol causes less social disruption or deviant behaviour in Latin America than in, for example, Anglo America, data on mortality from alcohol-related causes indicate that alcohol abuse constitutes an equally major public health problem in both regions.



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## Chapter Notes and References

### Historical and Cultural Factors Affecting Alcohol Availability and Consumption in Latin American

#### Notes

1. "Latin America" is here used to include not only Central and South America, but also Mexico and the islands of the Caribbean zone.

2. "Historical" perspective is relatively deep, including reference to pre-Columbian patterns insofar as they appear to have influenced subsequent developments.

3. The term "cultural" is used in the broad anthropological sense, including existential, evaluative, economic, political, religious, and other aspects of the complex systems of belief and behavior that differentiate human populations, one from another.

4. For a well indexed bibliography of studies on alcohol use in historical perspective, in all parts of the world, see Heath and Cooper (1981); to keep abreast of current work, see the Alcohol and Temperance History Group Newsletter (occasional, since 1980).

5. The term "Anglo-America" is used here as a convenient shorthand label in keeping with a popular convention that contrasts "Anglo-" with "Latin America." It ignores the "Franco" component of Canada and other linguistic and ethnic variants, in much the same way that the "Latin" label ignores "Anglo," "Afro," "Dutch," and other components.

6. Originally published in 1569, the encyclopedic Historia de las Cosas de la Nueva Espana has been meticulously translated and annotated (A. Anderson and Dibble 1950-    ).

7. If 50 years seems a short time in which to encounter major historical revisionism, I suggest people consider events in their own nation's recent history. I used to believe that cultural traits were not easily lost, but observations of what happened to slide-rules, wire-recorders, and other phenomena have convinced me that major items can effectively "disappear" quickly from even a literate culture. This idea was most



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forcefully brought home when Lucille Hanna, my former high school teacher, recently lamented that the Roman Catholic Tridentine mass (in Latin) has virtually ceased to have meaning "within half a lifetime."

8. Some may not be aware that the first settlers of Anglo-America were similarly accustomed to using beer, mead, and other alcoholic beverages to slake their thirst. The movements toward temperance, and later prohibition, were not begun by the early settlers--not even by the Puritans, who were small in numbers and far more tolerant of drinking than is usually believed (Lender 1973). A brief but effective summary of the historical and cultural factors affecting the availability and consumption of alcohol in the United States is available (Aaron and Musto 1981); more detailed analysis, including periodic estimations of per-capita consumption, is in Rorabaugh (1979).

9. The word "norm" is used in several different senses in the social sciences, and this inconsistency is not always addressed in works that deal with norms in relation to drinking. Brief discussion of various kinds of norms is offered by Heath (1980).

10. For our present purpose, the word "Spanish" refers to anyone who might have been called "white." Although the distinction between European-born *peninsulares* and American-born *criollos* was important in certain respects, the distinction that is more significant and pervasive in terms of this discussion is that between *blancos* ("whites") and *castas* (all others, including Indians, mestizos, blacks, mulattos, zambos, et al.).

11. Although it was convenient to refer to the sixteenth through eighteenth centuries as "the colonial period," it seems more appropriate to refer to the nineteenth and twentieth centuries as "modern history." Many of today's Latin American nations were born in 1825; a few won independence earlier, a few later, and some areas still have a provincial, colonial, or analogous relationship with another nation.

12. We are fortunate in having more thorough coverage of the anthropological contributions to alcohol studies than is available for most fields of related interest. An historical perspective is available in Heath (1975); a thorough review of the literature, organized in conceptual and theoretic terms (Heath 1976) has recently been updated (Heath [in press]); an indexed bibliography provides easy access to the literature (Heath and Cooper 1981).

13. The reason why Roizen views this as "something of a mystery" is presumably because the response to a single multiple-choice



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question, translated from another language, is inconsistent with all of the other different kinds of evidence about Mexican attitudes toward drinking. This may be an instance where a "curious finding" is, in large part, an artifact of the method.

14. This statement is deliberately phrased in very general terms. The reference to "alcoholism" is intended to encompass a broad range of the several definitions that have been proposed by professional researchers in various fields, as well as "alcohol dependence syndrome." Although reference to "rarity" admittedly reflects a sociological and anthropological emphasis on dominant patterns, it seems not to be significantly discrepant with those other kinds of data which reflect the epidemiological emphasis on incidence-rates of cases, however aberrant the distinguishing patterns may be.

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# CHAPTER FIVE

## THE ANATOMY OF ALCOHOL POLICY: PREVENTIVE APPROACHES

Dean Gerstein

DISCUSSANTS

Marilynn Katatsky

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## INTERNATIONAL STUDY OF ALCOHOL CONTROL EXPERIENCES (ISACE): COMMENTS ON THE FINAL REPORT

James Mosher

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# THE ANATOMY OF ALCOHOL POLICY: PREVENTIVE APPROACHES*

Dean Gerstein

Public policies are important though not definitive guides to understanding government actions and their effects, in much the same way as a handful of recipes may inform the prospective diner but are no guarantee of the meal. This dictum applies as much to policies relating to alcohol as those relating to war, crime, banking, or farming.

This essay concerns the formative aspects of alcohol policies. In particular it gives detailed attention to preventive approaches in contrast to restorative ones. The discussion begins with the concept of governing ideas, with examples drawn from the history of the United States. A sketch of the various effects of alcohol use follows, these being the principal subjects of alcohol policy. Attention is then turned to the analytic, normative, and pragmatic issues that surround preventive policies relating to alcohol, such as: What kinds of policies can be discerned? What are appropriate roles for government in this area? What are the important effects of government programs concerning alcohol use? The discussion is meant for general application; it does not try to settle these matters in relation to specific policies, but to define and illustrate the questions and conceptual tools needed to understand and evaluate the alternatives.

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*This essay leans heavily on Alcohol and Public Policy: Beyond the Shadow of Prohibition, the report of the Panel on Alternative Policies Affecting the Prevention of Alcohol Abuse and Alcoholism (Moore and Gerstein 1981). However, this work departs from the panel's in a number of particulars, for which my colleagues cannot be held responsible. A paper by Mark Moore (n.d.) suggested the title.



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## Governing Ideas*

In the beginning of political dialogue, there are governing ideas. This is not to say that such ideas fall from the sky; they are always historically rooted in productive social and cultural soil. Rather, it is to say that among people with many and diverse interests, a thoughtful or successful exchange on any single political subject can proceed only if the dialogue has some basis for mutual understanding. This must arise from clear, straightforward, broadly-agreed-upon, though generally unspoken, conceptions that define the discussants' understanding of the subject.

There need not be only one, and no more than one, of these simple tacit conceptions regarding a given subject; there may be two or three or sometimes -- rarely -- more of these ideas may operate at a given time in a given society. But insofar as a governing idea defines what most people view as "plain common sense" about a topic, that idea will define the boundaries within which policy options can be exercised. If any new action of government is to be undertaken, it must be consistent with that idea. Moreover, while a large pluralistic society may have in it the institutional legacies of varying ideas that achieved dominance in one or another historical period, these legacies will be under steady pressure to change. If strongly competing ideas co-exist at a given time, society will either create a clean division of labor between institutions that reflect the differing ideas, or these institutions will be caught in a continuous ideological tug-of-war. Policy makers will to a large degree talk past one another -- failing to communicate -- in political discussion on the topic of concern.

In analyzing alcohol policies in the United States, a few such governing ideas can be discerned. Two of them reach well back into the country's history; they have become strongly entrenched and can be briefly characterized and labelled. First is the _colonial_ view, that drinking is a valued social custom, that overindulgence is a flaw in moral character, and that if necessary a dose of public discipline is the appropriate response (Rorabaugh 1979). Second is the _temperance_ view, that alcohol (or at least, strong liquor) is basically an addicting poison, that selling or consuming it can constitute a public hazard, and that use of the law to restrict (perhaps even ban) its sale is the necessary response (Aaron and Musto 1981; Levine 1978; Gusfield 1963).

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*As a general background on the role of ideas in collective action, see Parsons (1937). For more specific applications to alcohol, see Room (1974) and Levine (1978).



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Each of these ideas has proven to have staying power, sustaining institutional support in programs that implement public policy and in private beliefs and practices, even as the ideas have matured with sometimes disastrously misguided experience, and accommodated to shifting social tides. At the same time we can identify some more recent ideas whose staying power and ability to achieve a position of long-term dominance have not yet firmly or convincingly established.

The first of these is the perspective of alcoholism as a disease (Jellinek 1960). It holds that while the causes are as yet unknown, alcoholism is a disease to which a small minority of the population, perfectly normal in other respects, is vulnerable. Alcoholism can and certainly should be treated with one or more of several proven -- though not of course perfect -- therapeutic methods (cf. Wiener 1980).

Another governing idea is the view that it is in society's interests to control the distribution of alcohol. (Levine 1980; Fosdick and Scott 1933). This conception was quite strong about the time of Prohibition's repeal, and led to the current U.S. system of state and national alcoholic beverage control. Alcohol is considered a commonly-sought and certainly non-suppressable commodity, but one subject to exploitation by criminal greed, so that its marketing needs to be overseen by a strong regulatory watchdog.

The final (and currently least commanding) of the governing ideas is the public health perspective, in which alcohol is viewed as benign when used in small quantities, but increasingly damaging and risky to health when drunk to excess. In this view discouragement of excessive consumption by strong public health warnings, high taxation, and reasonable limits on availability are important measures in the interests of public health (Bruun et al. 1975).

The identification of governing ideas outside the United States cannot be done a priori, but requires careful analysis of historical and contemporary materials that display the ideological foundations of social and political movements regarding alcohol, and tell us how well these ideas have become entrenched in common ideology and institutional practice (cf. Moser 1979; World Health Organization 1981; Single, Morgan, and de Lint 1982).

It is clear that a sustained strategy via legislative and other means for limiting or preventing alcohol-related problems must build on the base of a governing idea. An established idea may conveniently support the available instruments of policy; a newer one may require sustained work to spread it and persuade people of its validity.



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It should be evident that a governing idea covers much more than government policy. A governing idea about alcohol principally concerns people's everyday assumptions and actions, and only secondarily how they expect governments to behave. These expectations of government will be shaped, also, by general philosophies of the state's role in society, as well as practical or historical judgments about how effective specific kinds of programs will be or have been.

What is most notable about a governing idea is that it can tie together in a penetrating and convincing way a judgment about the nature and size of the principal effect of alcohol use, a view of the appropriate role of the state, and a specific idea about the instrument or program which the government, if called upon to act, should use. It does this even though the grounds for tying these elements together may be logically vague or historically fortuitous rather than logically rigorous or empirically compelling.

The subsequent sections of this essay cover the basic categories of effects of alcohol use, the main kinds of policy instruments and normative conceptions that may be activated in preventive alcohol policy, and comments on the ways in which policy interventions may or may not produce intended results. No particular governing idea is propounded, though there are remarks relevant to several. In short, what follows is an outline of the comparative anatomy of alcohol policy, with special attention to preventive approaches.

## The Effects of Alcohol Use

Virtually every known human society uses beverage alcohol. There is consequently enormous variation in how it is used, what the socially visible results are, and how much concern or interest is shown in these results. These variations across societies are reviewed in detail elsewhere (e.g. Gastineau et al. 1979; MacAndrew and Edgerton 1969; Marshall 1980; Single, Morgan, and de Lint 1982; Sulkunen 1978; World Health Organization 1981). Since my intention here is simply to define the axes of variation in government policies, only a few schematic remarks need be made here about how the effects of alcohol are conceived.

These effects vary in quality and in quantity. There are three basic dimensions of quality, that is, three types of effects: moral, physical, and economic. These effects can be positive as well as negative, and they are not mutually exclusive.

*Moral* effects refer to changes in personal satisfaction and social solidarity (Cahalan, Cisin, and Crossley 1969). On the



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positive side, alcohol use can give rise to relaxation or pleasant sensations, can mark important events, and can facilitate communal occasions. On the negative side, alcohol use can result in loss of motivation to live happily or successfully, leading to suicide or depression, withdrawal from intimate relations, or violent behavior. Alcohol can demoralize people who use it unwisely or unfortunately, and can further demoralize people who come into contact with or depend on such users. If the moral effects are of principal concern, the focus of policy debate or other communication tends to be alcohol's negative effects on family life, or in contrast, its positive role in cementing extra-familial friendships.

Economic effects refer to changes in wealth or utility. On the positive side, alcohol is a commodity that is often desired for itself and thus "creates jobs" and "puts capital to work" in its production and distribution. On the negative side there is destruction of property in accidents, poor management due to alcohol-impaired decisions, loss in productive labor capacity, and diversion of labor and capital from other uses to the alcohol trade (Berry and Boland 1977; Luce and Schweitzer 1978). Where economic effects are given priority, the negatives of job absenteeism and unfitness with consequent economic decline and dependency are contrasted with the substantial size of employment and profit in the alcoholic beverage industry, with its resulting benefits for retail trade and government tax revenues.

Physical effects involve health. The principal positive effect of alcohol appears to be as a sanitary calorie source and possibly a partial antidote to atherogenic or artery-clogging diets (National Institute on Alcohol Abuse and Alcoholism, 1981). The negative effects on health are both immediate (hangovers, addiction, fatal overdoses, injury, and death due to trauma) and chronic (organ damage such as liver cirrhosis, Korsakoff brain syndrome, hypertension, and weakening of the heart muscle). Focus on the negative health effects tends to be split between the mortality and major disabilities ascribable to diseases of the liver and other parts of the body among older heavy drinkers or auto crash fatalities among the young. The contrasting notion of a positive health valence for moderate drinking relative to abstinence or heavy drinking has gained currency (cf. Schmidt and Popham 1982).

For each class of effects, positive and negative, there is a basic range in quantity from small to large. It is possible, however, to distinguish four subtly different components of judgment about the overall size of an alcohol effect. First is judgment of the causal significance of alcohol as a generator of the effect. Alcohol may or may not be considered a key causal element. For example, in some regions an alcoholic beverage (e.g. wine or beer) is a dietary staple akin to bread or cheese; and even though the chronic drunkard is considered a social nuisance and an



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embarrassment or possibly a nightmare for his (very seldom her) family, the principal problem is viewed as a defect in individual or family character. Alcohol is no more blamed for the drunkard's behavior than gravity is faulted for making some children accident-prone. In addition, the size of the effect -- be it beneficial or damaging -- depends on a) the extent of the population "at risk" (how many people are potentially subject to it), b) the degree of its episodic or individual likelihood (whether the chances of its happening to any single subject in this population are high or low), and c) its individual impact or severity when it does occur.

For the most part, the degree of effect is not calibrated by scientific analysis of these factors, but is rather compounded from traditional beliefs, political rhetoric, and to some degree, empirical inquiry. The result is that most interested parties display a central concern with only one or two presumptively large effects selected from the array of possibilities. The one or two may be drunk driving, medical sequelae of chronic addiction, poor job performance, illegal production, violence, or revenue. In the next section we will consider how these concerns relate to other conceptions to form a governing idea.

## Defining Alcohol Policy

### General Considerations

Some general and obvious axioms that should be kept continuously in mind in thinking about alcohol policy (for it is remarkably easy to overlook the obvious) are that a) policy on one subject is always made with an eye to policy about other subjects; b) articulation of policy is only one function of governments; and c) governments are always a part of a specific society. A rationale for action which seems powerful to those whose concern is focused on a single subject may appear trivial or even inconceivable to other parties because it conflicts with an overall direction of government at the time, requires the use of capacities or resources that do not exist or have other priorities, or flies in the face of powerful contrary social interests or values. On the other hand, policies are often made possible because, in addition to strong intrinsic arguments in their favor, they happen to be consistent with an overall trend in power, or because an underutilized or easily available institutional means lies close at hand, or because the arguments line up neatly with a powerful extragovernmental social movement. Most often in a pluralistic society with a degree of decentralized government, one finds that any cogent policy idea can imbue some patch of political life.



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With these general axioms granted, it is time to ask: what is a governmental alcohol policy? In the broadest sense, a public policy is a conception of an ideal form of collective or aggregate behavior in the society (or in the case of "foreign policy", in the behavior of other societies) that the government espouses or wishes to encourage. The desired behavior may be identified positively, e.g. continuous economic growth, or proscriptively, e.g. putting an end to violent crime. These conceptions of the desirable can be called policy ideals. In the case of alcohol policy the ideal might range from no alcohol use to as much alcohol use as people wish, but in most instances it takes the general form: stop alcohol abuse and alcoholism.

Such ideals are usually far from the level of day-to-day government activity. Much closer to the surface are what can be called incremental goals, such as an x-percentage increase in gross national product (GNP) or a slowing of the increase in crime rates. In the U.S., examples of alcohol policy stated as such goals at one time or another have included stabilization of per capita consumption, increasing alcoholism treatment "slots," rapid reduction of illegal alcohol production, larger government revenues from alcohol taxes, decreases in the number of drunk-driving deaths, and spread of responsible drinking practices.

Yet the most useful way to analyze the range of possible preventive alcohol policies is neither in terms of basically unreachable ideals nor periodically-adjusted incremental goals, but rather in terms of policy instruments, the specific mechanisms or programs used to implement the policies. Looked at this way, we can quickly recognize two fundamental divisions of alcohol policies: preventive and restorative.

## Preventive and Restorative Policies

Preventive policies meant to affect alcohol-related problems have been fully defined as follows:

> They are all policies that operate in a non-personalized way to alter the set of contingencies affecting individuals as they drink or engage in activities that (when combined with intoxication) are considered risky. . . . None of these policies depends on a continuing personalized relationship between a program and a drinker. Instead, they operate through the remote manipulation of a relevent set of incentives and contingencies: the terms and circumstances under which alcohol is available, the attitudes of people surrounding the drinker, and the benignity of the physical and



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> social environment toward drunkenness. [Such] programs operate generally throughout the society. The incentives and contingencies are established for everyone (Moore and Gerstein 1981:53).

In brief, preventive policies are non-personalized and general.

Restorative policies, in immediate contrast to preventive ones, first identify individuals who have created or suffered problems that are directly due to drinking, and then begin and maintain for some period of time a continuing face-to-face relationship between these individuals and a service or institution. The relationship is based on the individual's having met some fairly narrow or explicit legal or clinical criterion; the termination of this arrangement is usually based on a criterion of the individual's performance or relation to the institution. The different varieties of agency-client status include "treatment," in which a process of medical or psychological healing is involved; "rehabilitation," in which there is training in cognitive or psychomotor skills and orientation; and "punishment," in which the individual is penalized for engaging in willful criminal activity. Since the focus of this paper is preventive policies, further analysis of these restorative approaches will be suspended, and we will turn to the subdivisions of preventive approaches.

There are three kinds of preventive policies: a) regulating the terms and conditions of availability of both alcohol and places in which to drink it (regulating supply); b) trying to influence people's drinking practices directly through pedagogical efforts and legal stipulations (shaping drinking practices directly); and c) making the external environment less hostile or risky so that potentially damaging consequences of intoxication are reduced (reducing environmental risk). These three types are related to each other quite directly. Supply policies try to control two of the elements that are necessary to every alcohol-related problem: alcohol itself and places in which to drink it. Policy on drinking practice presumes that alcohol and drinking places (public and private) are available and tries to influence how people take advantage of them, in terms of how much, how often, or what activities drinkers pair with consumption. Finally, a policy designed to reduce environmental risk presumes that people will be drinking, getting drunk, and putting themselves in danger in various ways; the object of these policies is to limit the severity of the consequences by making the environment less hostile.

It should be noted that each of the three types of preventive policy can subserve a number of governing ideas. But more pertinent to our purpose here is to observe that each type of policy subsumes a number of policy instruments that follow the general logic outlined, but vary in force, emphasis, and style.



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## Varieties of Preventive Policies

### Regulating Supply

Regulation of supply generally has for its objects the separation of criminal or irregular elements from the legitimate trade; the maintenance of civil order and decorum in drinking places; the limitation of excessive consumption*; or the keeping of alcohol entirely away from certain categories of people for whom (at a particular historical juncture) it is considered especially dangerous, such as people of a particular ethnic group, people occupied in hazardous activities, or children. The most typical supply policy instruments involve production controls, regulation of the ownership, number, location, and retail hours of outlets, price controls, and restrictions on purchase of alcoholic beverages contingent on age, race, or some other qualification. The most controversial of these instruments at the current time in the United States are price controls and age restrictions.

Prices and Taxes Prices can be controlled either by administering them directly by "fair trade" or price support plans, or by ensuring certain minimum price "floors" with excise taxation. The essential practical question that this kind of prevention policy needs to ask is: Do price controls affect the most deleterious drinking practices, i.e., chronic heavy consumption and periodic severe intoxication? In general, the weight of evidence affirms that prices do affect heavy drinking practices (Moore and Gerstein 1981: 68-83; Cook 1981). But some other arguments are equally relevant: normative objections that alcohol taxes are unfair to light and moderate drinkers, and that excise taxes on consumer items fall most heavily on the poor, who can least afford them; practical issues concerning the relative weight of taxes on beer, wine, and spirits; and in the United States, political objections based on the uneasy feeling that the use of heavy taxation as a preventive rather

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*Critics and advocates alike tend to focus heavily on this aspect of supply policies, to the point that these policies have come to be called the "control of consumption" approach (Pittman 1981). They might better be called the "control of production and distribution" approach, since the main burden of activating these policies falls on the commercial sector rather than the private consumer. The most influential advocate of control policies in the late Prohibition era put the case simply as: take the high profits out of alcohol (John D. Rockefeller Jr., in Fosdick and Scott 1933).



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than strictly a revenue measure bears too much resemblance to Volsteadism, that is, that this approach is tainted by the excessive moralism and disastrous results of national Prohibition (implemented under the Volstead Act).

This domination of the alcohol policy picture in the United States by the shadow of Prohibition is probably not applicable to many other countries. In similar fashion, the much lighter taxes here on beer and wine than on spirits have some particular historical antecedents. In general, a preventive policy would be most efficient if it taxed quantities of ethyl alcohol equally, whether packaged in weak or strong solution. However, an increase in any part of the alcohol tax structure would probably serve preventive objectives relating to excessive consumption, though somewhat less efficiently. It should be noted that the highly commercialized, relatively concentrated, and thoroughly regulated nature of the manufacture of alcoholic beverages in the United States is more conducive to collection of an excise tax than would be the case in a more dispersed, less commercial, or less closely regulated manufacturing economy.

The normative issues are twofold. First, is it fair for all drinkers to be taxed if only some drink dangerously or excessively? In part, the way the question is phrased misses the point: a high preventive tax is meant precisely to keep people from drinking so much and thus putting themselves at greater risk. Many people who become excessive drinkers were light or moderate drinkers at one time, so it is difficult to sustain the notion that this group of drinkers shouldn't be affected. It is in fact the heaviest drinkers who pay most of the tax, since they drink most of the alcohol. In addition, many of the damages from excessive drinking (e.g. injuries due to assaults and accidents) fall on people who were not drinking excessively themselves but were unfortunate enough to be around someone who did. Thus the preventive effect of taxes would benefit even to those who drink safely themselves.

The other normative issue is equity: the belief that alcohol taxes fall most heavily on the poor, and hardly affect the wealthy. In fact, econometric studies suggest that higher taxes on alcoholic beverages result in most people spending about the same on drinking, but drinking less; those who do increase their expenditure appear to be largely those who _can_ afford to do so without financial distress. Since wealthier people generally spend considerably more on alcohol to begin with, an increased tax would in fact affect them considerably.

_Age Restrictions_ The debate about age restrictions in the United States has not been over whether there should be any restrictions, but whether the right to purchase alcoholic beverages should be initiated at 18 years of age or at 21 years or somewhere



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in between. Complicating and dominating this debate are two somewhat different issues: drunken driving accidents and drinking by young people under the age of 18 (Wechsler 1980).

The downward movement of the minimum legal drinking age from 21 to 19 or 18 years in roughly half the states during the early 1970s parallelled reductions in the minimum voting age. These reductions, in turn, were the consequence principally of the Viet Nam war, when 18-year-old draftees were called on for a distant war of uncertain support and legitimacy, without the franchise to participate in the most fundamental rite of representative democratic politics.

The recent tide of reversals in this relatively small adjustment in the drinking age has occurred almost exclusively on the grounds that many 18, 19, and 20 year old lives are being lost in drunken driving accidents, and that these newly entitled purchasers are themselves illicitly increasing the availability of alcohol to even younger children. The evidence indicates that changes in the legal purchasing age do not greatly change the overall quantity of alcohol that those directly affected consume. There is, however, a considerable effect on where they do their drinking. When purchase is illegal, young people of these ages are excluded from bars and other by-the-drink service establishments, and thus spend considerably less time driving to and from such places. Instead they confine their drinking largely to private homes. There is then a measurable difference in auto crash fatalities in this age band (Douglass 1979-80). For the United States as a whole, these differences easily add up to hundreds of lives a year.

Although some attention has been paid to the effect of purchasing age minima on provision of alcohol to adolescents well below the controversial age range, there is really no persuasive evidence that adjustments to the age minimum have much effect on drinking behavior in this group.

This issue raises to visibility an important dimension of the policy issues surrounding alcohol use. There is clearly a strong national consensus that Prohibition in the 1920s was a bad mistake. It fostered violent criminal organizations, created open or barely disguised contempt for the law, and failed to eliminate drinking--although the consensus does gloss over the fact that drinking did retreat during Prohibition to the lowest levels in the history of the country, at least one-third less and perhaps only half as much as at present or immediately before Prohibition (Warburton 1932, Jellinek 1947/8). The great majority of people in the United States still clearly believe in the validity of prohibiting alcohol to a large portion of the population, including some who are voting citizens, because they are too young. This is a



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continued endorsement of partial prohibition, and of measures to implement it which do not destroy legitimate business. This endorsement gives dramatic evidence of the belief that alcohol is different from other kinds of beverages in that it is too dangerous to be made readily available to those not possessing the skills or judgment to use it safely and appropriately. But what is safe and appropriate use? What is being done to see that the necessary skills and judgment are in place by the eighteenth or shortly-following birthday? And what measures can or should the government take thereafter to see that these useful faculties are exercised? These are the prominent questions that arise in considering policies that try to shape drinking practices directly.

## Shaping Drinking Practices Directly

Adults are on the whole legally licensed to drink, but powerful forces constrain their freedom to exercise this license. Undoubtedly the most powerful constraints are the informal norms that children learn early in life in the home, and then go on to test, modify, and transmit to each other as adult expectations in families, friendships, and work relations. Whether governments undertake to shape drinking practices or not, these informal social and cultural controls will operate, and they are the major fact that any policy intervention must take into account.

If the state tries to construct a preventive policy focused on drinking practices, a number of difficulties arise. First, at the level of ideals, the problem is to define the kinds of drinking practices -- amounts, frequencies, and occasions -- that are considered safe and appropriate, and clearly set off those that fall outside these boundaries. The problem here is the sheer variety of drinking customs in a society with more than a single cultural heritage--and virtually all national societies are multi-ethnic. No matter where the boundary lines are drawn, there will be uproar. Inevitably, a set of boundaries on acceptability will exclude ways of drinking that substantial fractions of the population will consider to be quite normal and acceptable, and none of the government's business. The same set of lines will also permit drinking practices that substantial fractions of the populace will consider quite outrageous and unusual, leading them to accuse the government of giving positive assent to behavior that they consider frightening, hazardous, or wrong. The task of drawing a set of guidelines that minimize irreconcilable viewpoints is not an enviable one.

There are some ways in which policymakers can tune such policies so as to create less discord. In particular, not all lines need to be drawn with equal force.



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> A line defended by criminal statutes must command wider compliance (i.e., admit more of current drinking practices) and be focused on behavior that produces more adverse external effects than a line defended by weaker measures such as economic incentives, civil sanctions, advisory educational programs, or exemplary actions of government. This suggests that one might want to establish a variety of lines with varying degrees of force. Criminal statutes should be sparsely used to discourage only the rarest and most dangerous conduct. Other programs could be used more liberally and establish somewhat more controversial goals (Moore and Gerstein 1981: 57-58.)

The instruments outlined here--statutory regulation of individual conduct or more simply, the law; education, information, and training programs under government auspices conducted in the schools, mass media, and elsewhere, or briefly, education; and actions of government meant to set a good example for private citizens or private sector institutions, i.e. symbolic action--are the ways in which governments can try to implement conceptions of safety and appropriateness in drinking practices.

Assuming that consensus can be reached about which practices are sufficiently hazardous or deviant to merit one or another level of action, the government must face the countervailing considerations of effectiveness and of competition for resources. In the shaping of drinking practices, there will be strong resistance to any effort that tries to move very far beyond discouraging what informal norms already condemn, or approving what these norms already esteem. In order to effectively overcome such resistances, for example by strengthening discouragement into effective deterrence or backing approval with efficient education, the government must be prepared to devote itself to these tasks either at the expense of other tasks or as an additional difficult job.

Drunk Driving and the Law The handling of drunk driving may serve as an example. If the problem is to prevent people from driving drunk, it is important to recognize how little likelihood there is that any individual episode of drunkenness at the wheel will be detected when it occurs (Borkenstein 1974). The chronic violator is certainly likely to be caught sooner or later, and caught once, is more likely to be caught again. But most of the drivers responsible for drunk driving accidents are "first offenders" in terms of previous police detection--and detection as a result of an accident does not seem a powerful preventive strategy (Ross 1981). Yet major efforts to launch extra police on special patrols in the late night driving lanes where most serious drunk



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driving accidents occur, efforts that can attract media publicity without which there will be little preventive effect, are quite expensive (Levy et al. 1978; cf. Reed 1981). There are limits to how much of the police budget can be shifted into drunk driving deterrence if the community is not willing to forego or reduce police action on assaults, robberies, arson, drug transactions, rapes, and so forth. As it stands, of the 10 million arrests annually recorded in the Federal Bureau of Investigation crime index for the United States, over 1 1/4 million are already for drunk driving. Another 1 1/4 million are for public drunkenness.

There is considerable sentiment for increasing the drunk driving penalties now on the books, or for applying them with fuller force instead of disposing of these violations so frequently with plea bargains, diversions to treatment, probation, and suspended sentences (Alcoholism Report 1982a,b). But there are no empty jail cells awaiting drunk drivers. Jail cells are scarce, expensive resources that the justice system must marshall carefully. Every decision to imprison someone for a length of time necessarily means delaying or denying imprisonment for some other violator whose conviction could be subject to this sanction. When the question is whether we free the arsonist or thief in order to imprison the drunk driver, the answer does not come easily.

Education, Alcohol, and Children. The area of education faces somewhat similar issues, but somewhat different ones as well. The rudiments of education -- reading, writing, and arithmetic -- are the principal things that schools are meant to teach. The quantity of educational time that can be devoted to "health and safety" is limited. There is little doubt that the safe and appropriate use of alcohol should be an important part of this curriculum. The questions are what is to be taught, and how?

What children learn from their teachers in school is largely how to behave in non-family-oriented environments, how to work successfully through a series of graded, progressively more difficult lessons, and how to remember and make use of such factual knowledge as when Columbus landed in the New World. By example, cajolery, and discipline, teachers transmit habits of thought, of civility, and of interest in the practical world and its lessons. By system, trial, and error, particular skills can be trained. In the context of prohibition for children and detached professionalism among teachers, what can serve as a lesson plan in safe and appropriate drinking? If other areas of curriculum are considered, the contrast becomes quite clear: it is not expected that students will learn how to multiply without practicing multiplication tables, or that anyone can learn to read without taking books home for study and bringing homework in for criticism and praise? If we wish children not to drink at all, this message can certainly be transmitted. But if adults can tell children nothing more than "not



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until you're older", this does not go very far toward inculcating safe or appropriate behavior once they are older.

The most effective basis for educating children to prevent problems in the use of alcohol is to recognize that most of them will have to learn for themselves, and what they need most especially is the benefit of adult experience and example in gauging the times, places, amounts, and risks involved in drinking and not drinking. Alcohol education for schoolchildren should focus on present situations instead of the distant future, and temper respect for legal prohibition -- which needs to be stressed for its protective significance (drunkenness is a poor learning condition) -- with respect for the real experiences that children have, which they must interpret and learn to control for themselves.

## Reducing Environmental Risk

Even the most strenuous efforts that might be devoted to reducing unsafe or inappropriate drinking practices cannot be expected to eliminate or radically curtail them. If we accept this premise, it becomes sensible to explore preventive policies that are designed to reduce the damage associated with whatever drinking practices actually occur.

> This approach -- manipulating the environment so that risks of harmful effects are reduced even in the presence of drunken behavior -- has been characterized as "making the world safe for drunks", a characterization that tends to evoke moral uneasiness or even outrage in some quarters, rooted in the longstanding view that drunkenness is moral error that should get its just deserts. . . . The approach can be more accurately, if more awkwardly, described as "making the world safer for, and from, people who are affected by alcohol"(Moore and Gerstein 1981:100-101).

It is not difficult to understand the objections that some people might have to policies that do not seem to attack directly the causes of alcohol-related problems, but instead seem to tacitly accept excessive or ill-timed drunkenness and arrange to make its consequences less stern. Aside from the practical point that deploring a condition does not make it less real, there are some sound normative arguments defending this approach. First, protection against the consequences of drunken behavior is beneficial not only to drunks. To select a dramatic example: an intoxicated pilot, mechanic, bus driver, railroad engineer, or switch operator menaces the lives of many others in addition to his or her own. Second, while drunkenness may have a greater voluntary component than fatigue, absent-mindedness, irritation, or a previous



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injury, the resulting impairments and associated risks of "human error" are similar. Measures taken to reduce the harm of drunken mishaps will reduce the harm of other mishaps to the same degree.

Finally, there is ample precedent in other areas for government intervention to reduce discomfort or illness without special regard for the morality or legality of contributory actions. Preventive measures as well as therapeutic ones are used to control venereal disease, without cavils or barriers concerning marital status or particular sexual practices. Neither cigarette smokers nor obese people are denied otherwise-available public funds for treatment of heart disease, while blood pressure testing and cardiopulmonary resuscitation training are encouraged even though many -- indeed most -- such victims have been indulgent in diet and deficient in physical discipline.

The two principal categories of environmental risk are interpersonal hazards and physical casualties. In regard to the first, the most common impression about drunkenness and interpersonal conflict is that drunks endanger others; yet there is much suggestive evidence that intoxication leads more often to victimization <u>of</u> the drunk than by the drunk. "Rolling drunks" is a substantial criminal pastime; and a history of alcoholism can cost people important life chances regardless of their current and prospective state of sobriety.

In regard to the casualties, since alcohol intoxication tends to make people clumsy and inattentive, it has been implicated to some degree in many kinds of trauma (Aarens et al. 1977): drownings, burns, falls, and momentum injuries, notably motor vehicle accidents. If everyday materials and machines were made less likely to rip, trip, bludgeon, or burn people who might be less than fully efficient (whether due to drunkenness or some other reason), alcohol-related (and other) casualties would be fewer. Further, "since alcohol-related casualties tend to be concentrated in the most severe categories -- deaths and permanent disabilities -- safety improvements will affect alcohol-related injuries most dramatically." (Moore and Gerstein 1981:102).

The major example of safety technologies that can prevent a large number of alcohol casualties are automobile safety devices that increase the crashworthiness of vehicles with respect to occupant injury; e.g., automatic restraining-belt systems (lap-shoulder loops) and "air bags" (impact-triggered pneumatic barriers). There are, of course, many crashes in which no restraining device would prevent mortal wounding, but it would be instructive if news reports of serious traffic accidents indicated not only the sobriety of the dead and the survivors, but which were wearing seat belts.



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There are a number of ways in which safety technologies can be advanced by government policy: educating consumers to desire them, sponsoring research and development to improve them, offering favorable tax incentives or credits, requiring that manufacturers make them available as paid options, or requiring all automobiles to have them. A similar range of policy options is available for other safety devices (e.g., household smoke detectors, "dead man" controls on train engines, self-extinguishing cigarettes.) There seem to be substantial grounds for those who are broadly concerned with preventing alcohol problems to take an interest in safety issues and policies (Mosher and Mottl 1981).

## Conclusion

This essay has outlined a series of useful analytic, normative, and pragmatic policy concepts that arise in connection with the prevention of alcohol-related problems. The effects of alcohol that come into play when considering these policies have been sketched; the nature and significance of governing ideas have been described and illustrated; a scheme defining types of policies in terms of the instruments -- government programs or mechanisms-- used to achieve them has been offered; and this scheme has been filled out with some examples of preventive policies, covering the principle issues involved in their selection and implementation.

Creating and carrying out alcohol policy will never approach the purity of chess or laboratory science, but policies do have consequences which can be for better or worse. Well-organized practical thinking is often part of the difference between better or worse policy results. It is the aim of the present piece to aid such thinking.

## DISCUSSANT

### Marilynn Katatsky

I would like to thank Dr. Gerstein for his marvelous, very articulate presentation. Having read Alcohol and Public Policy myself, I can appreciate just how much work went into distilling the key concepts and issues that Dean highlighted for us today.

Basically, I am here to present the view from the trenches -- what it is like out there in the field -- and to ask from that



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perspective whether this paper has relevance for the countries in the Region of the Americas.

This whole discussion of alcohol problems, as we have heard, should be put into the context of what has been happening in the alcohol field in the region over, say, the past 20 to 30 years. I would like to bring you up to date with what has been happening in the political arena as we see it from the health side, particularly where discussions on alcohol control policies are just beginning to take place.

It is of interest to note that in July, 1981 the Central American Ministers of Health discussed this issue of alcohol and alcohol control, and Dr. Arroyo, who is with us today, presented a review of legislation in the Central American isthmus. In that review, he defined some of the major issues that were particularly relevant there; for example, the fact that there was considerable emphasis on fiscal considerations in their legislation. Many difficulties in implementing the legislation were discussed. Also, Dr. Arroyo emphasized such problems as the lack of evaluation of legislation and the existence of a number of outdated and conflicting policies.

As a result of the discussions in Central America in 1981, the Ministers of Health set forth recommendations to establish interdisciplinary, multisectorial committees or commissions which would compile existing legislation, evaluate its impact, and recommend necessary legislative changes based on scientific criteria. Much of what they recommended would be desirable, but it is highly unlikely that these countries will actually implement recommendations. One recommendation was lowering of the specific percentage of alcohol in alcoholic beverages as a means of reducing alcoholrelated problems. Another was to promote the passage of legislation to require dissemination of information on the negative effects of alcohol through the mass media and formal educational system.

I think the Central American Ministers Conference discussions represent a departure from the tenor and content of previous considerations of this topic wherein, for example, emphasis had been placed on the need to do epidemiological research on alcoholism, to adopt policies which would favor treatment and prevention, and to develop the necessary manpower.

Clearly the change in focus towards alcohol-control-related issues is indicative that recent WHO initiatives in this area have had some impact. Similarly, the Sixth Meeting of the Conference of Ministers Responsible for Health of the Caribbean Community, which took place in Grenada in July 1980, resolved that efforts "to reduce the level of consumption by persuasion and education as well as legal and fiscal measures should be considered." In addition,



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conference participants called on the member governments to consider banning alcohol advertising in the mass media.

At the national level there were also some strong indications that governments were moving towards consideration of alcohol control policies that might reduce alcohol consumption in the population, and concommitantly, the rate of alcohol problems. I think we have seen in Argentina, for example, an interest on the part of that Government to review some of the United States and Canadian experience in particular. It is our understanding that introduction of some form of alcohol control legislation is now pending in Argentina.

While few countries really have looked very carefully at methods of controlling the availability of alcoholic beverages, several have instituted programs to influence and reduce consumer demand. There are a number of reasons why there is this emphasis on demand. First of all, it is something that the health sector can influence. It is something on which people working in the Health Ministry and the Education Ministry can get together and actually have an impact. They can develop a program and set ut up, and it really does not take a whole lot of coordination with other sectors. Obtaining the consensus of the Ministers in a variety of Ministries, of course, would be difficult because you have a number of competing interests involved.

There is one book I thought I would mention in passing simply because I liked it so much, and I don't know that it has gotten as much play in the discussion today as it should. This is the Addiction Research Foundation book on Public Education and Social Policy, which I found very helpful in understanding some of the forces at work in Latin America. The book highlights the importance of public attitudes in the policy making process and outlines some of the key issues very clearly.

While one estimates a time lag of about 20 to 30 years in the more developed countries, such as Canada, betweem certain research findings and subsequent changes in public attitudes and policy, the lag is much longer in the lesser developed countries. Public education in the more developed countries will shorten that lag. However, the obstacles, not only to public education but to achieving the necessary level of sophistication in the population, are a lot more formidable in the less developed countries.

Another reason why we are seeing less interest on alcohol control policies and a greater interest on intervening with consumer demand is that in Latin America there has been considerable emphasis on the disease concept of alcoholism. Indeed, that concept is not fully accepted in all circles; yet it is the most prevalent concept that we find in Latin America.



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In our survey of public attitudes about alcoholism and the causes of alcoholism generally, people in five countries we surveyed were of the opinion that alcoholism is solely the responsibility of the individual. For the majority of those surveyed, if it is not some type of moral question, then it is some sort of disease question, but it implicates the individual as opposed to society. So, I think you have to recognize and grapple with public attitudes about alcoholism, because they seriously affect the way a government is going to formulate policy.

Another issue we might mention is that there are a lot of vested interests in the disease model of alcoholism in Latin America. There are many people who have worked long and hard to make the disease model of alcoholism more widely accepted, and those people definitely have much vested in promoting that concept. You also have Alcoholics Anonymous which represents a very important force in the Region I think, in terms of shaping public attitudes in general; that group would certainly not have very much to gain from a shift in thinking on this point.

In any case, in looking towards the future in this Region, I would like to say a bit about what we might expect to see in terms of future legislation and policies. In the short term, I don't think that we are going to see any significant deliberate attempts at changing supply. I think we can expect to continue to see emphasis on the demand side, with an increasing number of educational programs. Costa Rica is one example of a country with a very extensive educational program on alcohol. I think we are going to continue to see many of these.

We may begin to see a few governments taking steps in the areas of taxation, reduction of alcohol content, and so on. However, I don't think there will be any very systematic, broad-based attempts at reducing alcohol problems through government intervention.

I must again insist that my remarks are totally personal opinions. I am not a political scientist, and I have checked the background of everybody in this room to make sure that we did not have any political scientists here; therefore, I feel that my political opinions are entirely as good as anyone else's guess. To summarize, I just do not think that we are going to see a trend toward supply reduction strategies and policies in Latin America for a very long time.



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## DISCUSSANT

Irving Rootman

There is no doubt in my mind that the aim of Dr. Gerstein's excellent paper has been and will continue to be achieved. That is, drawing on the outstanding work of the National Academy of Sciences panel on Alternative Policies Affecting the Prevention of Alcohol Abuse and Alcoholism, it most certainly has aided us in organizing our practical thinking about alcohol prevention policies and will aid others outside of this room. I think that we all owe Dr. Gerstein and the other participants in the panel, some of whom are among us, a sincere vote of thanks for their efforts. They have succeeded in illuminating the landscape of preventive alcohol policies with a light of unparalleled intensity and clarity. In fact, I find very little in the paper which has been presented, or in the report on which it leans, with which I disagree.

Having said this, however, I do have some concerns and comments about the paper and the report which I would like to bring to your attention.

The first has to do with the emphasis on government and its role in developing and implementing alcohol policies. While I would be the last person to deny that government has a critical role to play in this field, I do feel that governments are not the only bodies that can develop and implement policies for the prevention or management of alcohol problems. Such policies can be and are developed and implemented by a variety of units at different levels including schools, treatment agencies, voluntary associations, work organizations, and community groups. It might even be argued that such bodies are potentially more effective than governments in that they are closer to the situations of concern.

It was, in fact, this kind of thinking which stimulated the development of the WHO Community Response to Alcohol Problems project which I have had the privilege of managing for the past two and a half years. This project was initiated with support from the National Institute on Alcohol Abuse and Alcoholism in 1976. To date, three countries -- Mexico, Scotland and Zambia -- have participated. Dr. Campillo presented some of the findings of one study carried out as part of the Mexican project. While these findings are certainly interesting, they do not fully express the significance of the project. Its importance is primarily to stimulate appropiate responses to alcohol problems, including those of a policy nature, at local, intermediate, and national levels.



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Although the project is still ongoing in the three countries, there are some signs that it has already succeeded in stimulating responses at all of these levels. For instance, in Zambia, as a result of the project, Community Action Groups have been established in the participating rural and urban communities. These groups differ in their composition, concerns, and approaches to alcohol problems. All of them, however, have taken alcohol problems seriously and have attempted to develop solutions that fit the local circumstances, drawing in part on the information obtained as part of the community response project. As an example, a goal of the group in one community was to reduce home brewing. This group arranged for additional stalls at the market so that home brewers could sell other products, thereby removing the economic necessity for home brewing. We do not as yet know whether this action was successful, but it illustrates how a local group can develop and implement a preventive policy.

In addition, in both Mexico and Zambia national meetings have been held which considered the implications of the project for national policies to respond to alcohol-related problems. While not all of the recommended policies emerged directly from the completed studies, many did, and the project served as an opportunity to focus national attention on alcohol problems and possible preventive policies. Whether or not such policies will be implemented remains to be seen, but it should be noted that not all of the recommendations required government action. Some were directed to action by other bodies such as voluntary organizations and industry. It may in practice turn out that more will be accomplished by the policy actions of such institutions than by government.

Thus, the community response project suggests to me that the development of policies to prevent alcohol problems by non-governmental bodies is possible and desirable. I am certain that all of you can think of other examples to support this point. It, therefore, would be a grave error if we lost sight of such possibilities by an exclusive focus on government. Fortunately, most of the principles and concepts articulated in Dr. Gerstein's paper can be applied to policy development at these other levels as well.

A second concern is that most of the experience described in the National Academy of Science report and crystalized in Dr. Gerstein's paper is North American or European. This probably does not make much difference with regard to the relevance of the conceptual framework for other countries. It may, however, be very important with regard to the relevance of the particular policies that have been given as examples. As Dr. Caetano clearly pointed out in his paper, circumstances in Latin American countries are substantially different from those in the United States and Canada.



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The community response project demonstrated a similar point. Dr. Smart's conclusion therefore, that "it is very doubtful that results from the more developed world can be applied without change to Latin American and the Caribbean" must be heartily endorsed and emphasized.

It is clear to me from Dr. Gerstein's presentation that he agrees with this point of view, but others may not. It is thus necessary to reiterate it whenever possible and to try to ensure that its implications are recognized in countries that may wish to develop preventive policies.

One such implication is that a critical step in development of preventive policies by any country should be an early attempt to define the magnitude and nature of the alcohol problems that the country itself is facing. Recent WHO work in this area, including the community response project, may be helpful in this regard.

Another implication is that it is important to evaluate the impact of preventive policies tried in particular developing countries and to make the results available to other developing countries. The establishment of regional clearing houses as suggested by Dr. Caetano is one mechanism for accomplishing this. Another might be regional workshops or conferences on alcohol policy development which could be designed to share not only the results of research, but also the experiences involved in policy development and implementation.

This brings me to another concern arising from Dr. Gerstein's paper--namely, how does, or should, a government or other body actually go about developing and implementing alcohol prevention policies? Unfortunately, Dr. Gerstein's paper is silent on this question, but it is an important one and it must be addressed in order to fully understand why alcohol policy development can never approach the purity of chess or laboratory science. Perhaps this is a topic which we might consider in our discussions, as I am sure we all have some practical experiences to bring to bear on it. One idea which we may, in particular, wish to consider is the value of national or sub-national coordinating committees to develop alcohol policies.

A final concern which I have with Dr. Gerstein's paper has to do with the emphasis on alcohol. While such an emphasis is certainly understandable in terms of the mandate of the National Academy of Sciences panel, I wonder if it doesn't to some extent inhibit our creative thinking about preventive policies. After all, we know from our research that alcohol use covaries with other health-related behaviours such as smoking, cannabis use, nutritional, and sexual practices. Thus, another possible preventive strategy is to attempt to influence alcohol consumption and associated consequences



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by influencing other health-comprising or health-enhancing behaviours. In the terminology used by Dr. Gerstein, such a strategy might be described as "shaping drinking practices indirectly." Alternatively, one might refer to it as a "health promotion strategy." Such a strategy certainly has implications for policy development.

This is not to say that the strategies outlined by Dr. Gerstein should not be pursued. They should however, be pursued with due regard to circumstances and consideration of other possibilities.

## THE INTERNATIONAL STUDY OF ALCOHOL CONTROL EXPERIENCES (ISACE): SUMMARY OF THE FINAL REPORT

James F. Mosher

The International Study of Alcohol Control Experiences (ISACE), which was conducted with the help and coordination of the World Health Organization's European regional office, brought together alcohol-policy researchers from seven countries--the United States, Canada, Ireland, Finland, Poland, Switzerland, and Holland. Its purpose was to study within an historical frame the relationships between alcohol control policies, drinking patterns, and alcohol-related problems in different societal settings. The study extended from 1978 to 1981; it resulted in a two-volume report, several dozen research papers, and a wealth of historical and statistical data. For my presentation today, I will first briefly describe the background to the study, including its original goals and methodology, and then will report its major findings and conclusions.

To some extent, the foundation for the ISACE project was laid by an earlier project involving Finnish, Canadian, British, Norwegian, and U.S. researchers which culminated in the 1975 report Alcohol Control Policies in Public Health Perspective (known as the Purple Book). That study documented two important relationships: first, the study found strong evidence that consumption in a population influences the rate of long-term physiological complications from drinking, such as cirrhosis; second, a particular population's rate of consumption was found to be influenced by societal controls of alcohol availability, notably price. The researchers concluded: "changes in the overall consumption of alcoholic beverages have a bearing on the health of the people of any society. Alcohol control measures can be used to limit consumption: thus control of alcohol availability becomes a public health issue."



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The Purple Book was written in the context of a worldwide rise in alcohol consumption during the preceding century and was a radical departure from the well-established disinterest in alcohol control policies among most public health policy-makers. The disease model of alcoholism, which has provided the basic framework for most policy decisions, has relied virtually exclusively on treatment and educational strategies for dealing with alcohol-related problems. The report's aim was quite explicitly to provide new alternative prevention approaches. The researchers stated: "...it will have served its purpose if it stimulates debate and, in the process, leads to a renewed interest in the potential importance of control policy in the prevention of alcohol problems" (p. 12). In this aim, it may be considered to have been quite successful. For instance, in the last years of the 1970s attitudes and activities of the World Health Organization in the alcohol area shifted quite dramatically to include substantial attention to alcohol consumption levels and alcohol control policies as important elements of a public health approach. This shift culminated in a 1979 WHO Expert Committee report, with recommendations regarding the public health aspects of control policies in more sweeping and more directly political terms than found in the 1975 report. In the United States -- after a long period of avoidance on the part of the public health establishment -- serious discussion of the issues involved has recently emerged, including the recent National Academy of Sciences panel report titled Alcohol and Public Policy (Moore and Gerstein 1981).

The Purple Book was only an initial step in the understanding of alcohol control experiences from a public health perspective. Two important dimensions were most apparently lacking in the 1975 study: the relationship of controls, consumption, and social (as opposed to physiological) problems related to alcohol (drunk driving, accidents, work, family life, etc.); and a historical and comparative analysis of the impact of cultural, political and societal factors on these three key variables.

ISACE's primary agendas concerned these two dimensions. Thus its methodological emphasis was on undertaking comparative case studies of national (or regional in the instances of California and Ontario) experiences, centering on the period of worldwide rising consumption from 1950 to 1975. An ambitious program of research data collection focused on alcohol controls, consumption, and consequences as well as potentially explanatory background information. As the project progressed, the unique historical experiences found in each study site became obvious. The participants therefore decided that the final report needed two volumes: one to include the seven individual case studies, and another to attempt to integrate the findings of the study in a comparative frame.



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Although ISACE served to emphasize the cultural specificity of drinking patterns, problems, and alcohol control policies, many unifying trends can also be reported across study sites. I will review the highlights very briefly. There were sharp increases in per capita consumption in all participating countries, with the greatest increases occurring in countries with the lowest consumption rates at the beginning of the study period. Alcohol became more integrated into family and social life, and the number of drinking occasions increased. These broad changes, however, did not replace traditional drinking patterns. The study sites, despite experiencing this unifying trend toward an "international" drinking culture, all maintained their cultural distinctiveness. The new drinking occasions, new beverages, and new drinking styles were instead added onto the existing, traditional drinking culture.

Changing drinking patterns, then, constituted one aspect of the broad changes in lifestyle and cultural patterns that occurred in this period. The rates of drinking problem indicators changed simultaneously. (I should here digress for just a moment to say ISACE used an "alcohol-problems" approach, in which specific alcohol-related damages were disaggregated. The project decided not to attempt to define "alcoholism," noting the varying approaches to that concept. Instead we chose to treat alcoholism as a separate alcohol problem.) The ISACE project grappled, often unsuccessfully, with the difficulty of interpreting problem indicators, including those for alcoholism, across cultural settings. Alcohol problems were viewed differently in each society, and the methods of defining them and recording their extent made comparisons extremely difficult. Even the most reliable statistical indicators -- alcohol-related cirrhosis and traffic deaths -- were not treated uniformly across study sites. Statistics concerning trends in the rates of alcoholism, treatment admissions, and public drunkenness arrests were the least reliable and the most likely to reflect changes in the societal handling of alcohol problems.

The ISACE study documented these difficulties and attempted to use them to their best advantage. Several trends were discovered: a) all study sites did report increases in cirrhosis deaths and alcohol-related traffic fatalities, although the increases were not directly proportional to increases in per capita consumption; b) drinking problems became less strictly confined to social outcasts and visibly deviant subgroups; c) the social handling of alcohol problems, as well as the cultural perceptions of these problems, changed radically during the study period; d) treatment facilities expanded rapidly, and this trend included a great proliferation in types of alcohol-related services, with a concomitant decrease in the role of police and social authorities. Interestingly, these trends were found to at least some extent in all study sites, although the particular mixes of various problems found in each site differed markedly. Those mixes remained distinctive during the study period despite radical changes in their composition.



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ISACE described the most recent trend concerning problems management as a shift of emphasis from "the bottle" to "the man." Alcohol problems became a matter defined in terms of specific individual defects, which meant that there was no need to control the drinking of the vast majority of drinkers. The trends concerning control structures in the study sites reflected this new interpretation of alcohol problems. Control structures generally accommodated, or at least did not interfere with, the large increases in per capital consumption and number of drinking occasions. Because of the wide variation in control structures across study sites, this accommodation took many different forms. For example, in Finland retail expansion required major legislative reforms, including laws permitting sales in restaurants and off-premises retail shops in rural communities. In California and Ontario gradual loosening of licensing restrictions occurred, while in Switzerland and Holland little legislative action was necessary.

Control structures, then, generally responded to economic factors related to the changes in the alcohol market itself. At the production level the alcohol industry became increasingly concentrated, as local and small-scale production became economically more difficult. Agricultural priorities played a large part in defining the producing industry's role in the economy, which usually resulted in various measures to expand production. The retail structure also witnessed dramatic changes. New outlets emerged, as alcohol became associated with various new life situations. Leisure industries, restaurants, sports and arts promoters all became increasingly dependent on alcohol sales. As the number and size of these vested interests in alcohol increased, so did their influence in national affairs. Thus the trend toward increased production and distribution of alcohol tended to fuel itself, as governments found it much easier to open new outlets and manufacturing establishments than to redeploy existing ones.

As these findings indicate, ISACE became in part an exercise in documenting diverse economic, social, political, and cultural factors which interplay with drinking practices, problems, and alcohol control structures. The dramatic changes in drinking practices reflect corresponding changes in lifestyles and leisure activities; the emergence of the welfare state had a profound impact on the definition and measurement of alcohol-related problems; diverse economic and historical factors helped determine changes in the control structures in response to an increased demand for alcohol.

This picture translated into considerable uncertainty regarding the resolution of ISACE's original assignment. We found that a given control regulation — minimum drinking age, retail practices, taxation policies, etc. -- had varying impacts in different societies. Although ISACE was able to conclude that



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relationships did exist between drinking practices, problems, and control policies, little guidance was forthcoming concerning those relationships on an abstract level.

This complexity and uncertainty, however, did not mean that the common experiences that were found did not provide important implications for prevention policy. ISACE offers six basic conclusions to its international audience for consideration in developing alcohol policies:

1) The state's dual roles -- economic and health -- regarding alcohol have been carefully separated during the last three decades. Health issues carry little weight in those agencies determining economic policy regarding alcohol, and health and welfare agencies generally ignore economic issues. Because control measures do affect the incidence of various drinking problems, even if in a complex and culturally specific manner, these two agency functions need to be combined in particular societal settings.

2) Preventive alcohol policies provide a desirable alternative to those strategies which tend to single out individuals for special handling. Special handling means labeling individuals as deviants, and in a period of declining resources for social welfare may well be translated into punitive rather than therapeutic responses.

3) Although the increases in consumption and problems during the study period cannot be attributed to the relaxation of controls, most governmental responses reinforced these trends. Further relaxations should, therefore, be made with caution and with a sense of experiment. As mentioned earlier, it is very difficult to rescind a step toward relaxation once the vested interests are in place.

4) Control and treatment responses appear inadequate to deal with many event-based alcohol-related problems, such as traffic casualties and violence. Use of governmental powers to manipulate the environment of drinking in order to reduce the adverse consequences of drinking (without necessarily reducing consumption or changing drinking patterns) should therefore be carefully considered.

5) Governments should reconsider any fiscal or other incentive promoting investments in the production and distribution of alcoholic beverages. The prospect of increasing excess capacity in the alcohol industry raises the issues of intensified international competition and of economic pressures pushing alcohol producers to conquer new markets in less developed countries.



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6) As suggested by the fifth concern, new mechanisms at the international level may be needed to address the health and social costs associated with alcohol. Exporting countries gain the economic benefits of the alcohol trade without any of the costs associated with domestic consumption. The World Health Organization and other international organizations should give close attention to trade policies and arrangements affecting the international availability of alcohol.

These conclusions were designed to be relevant to the international audience, but obviously their relative importance will vary according to the particular circumstances of each society. I suggest that, despite the very limited representation in ISACE, they can provide some guidance as we deal with the issues of this conference. Perhaps an overall lesson from the project is the need for careful attention to specific cultural, historical, and economic factors in each society as they affect alcohol policy and drinking patterns and problems. Only with careful study and help from the regional and international communities can an effective overall alcohol prevention policy be developed.

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# Chapter Six

## THE IMPACT OF PREVENTION LEGISLATION: AN EXAMINATION OF RESEARCH FINDINGS

Reginald Smart

DISCUSSANTS

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## A SURVEY OF ALCOHOL-RELATED LEGISLATION

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# THE IMPACT OF PREVENTION MEASURES: AN EXAMINATION OF RESEARCH FINDINGS

Reginald G. Smart

The last five years have seen a remarkable turn away from an exclusive emphasis on treatment as a preventive measure for alcohol problems and towards government controls and restrictions. There seems to be general acceptance now in many, but not all, areas of earlier resistance that governments should help to prevent alchohol problems and that certain types of policies and laws are more helpful than others. For a long time it was argued that the main role of government was to provide treatment facilities and that governments had little to do with how many or what type of alcohol problems occur in a society. Even World Health Organization reports (1980), which earlier emphasized alcoholism and treatment needs, state the case clearly for government policies related to the prevention, not of "alcoholism," but of alcohol problems. The problem now is to distill all of the available empirical and theoretical study into some clear conclusions which can be the basis for preventive programs. The aims of this paper are to come to these conclusions.

Several major reviews of this area were made in the past several years, starting with Alcohol Control Policies in Public Health Perspective (Bruun et al. 1975) sponsored by the World Health Organization. A book by Moser (1980), The Prevention of Alcohol-related Problems summarizes data on controls from some 80 countries. A large-scale study of alcohol policy and controls has recently been published by the National Academy of Sciences (Moore and Gerstein 1981). Two volumes are in press from the WHO International Study of Alcohol Control Experiences (ISACE), which looks at alcohol controls in seven countries (Makela et al. 1982). In addition, there are many smaller papers on individual controls or policies. All of the large studies can be said to reach a roughly similar conclusion -- that governments can reduce alcohol problems by means of control policies.

With such a large amount of material to be considered, some selectivity is essential. This review concentrates on empirical, as opposed to theoretical, studies and pays particular attention to those areas in which there has been most recent work, namely:



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- overall studies of availability and consumption
- changes in laws governing outlets and hours of sale
- price and taxation
- laws relating to age of purchase and consumption
- advertising controls

The main aim is to decide on warrantable assertions in all of these areas, and a secondary aim is to indicate the needs for further research, especially in the countries of the WHO Region of the Americas.

## Overall Availability and Consumption of Alcohol

Almost all government legislation about alcohol serves to increase or decrease its availability. Most empirical studies directly related to alcohol availability and consumption have been concerned with discrete changes in alcohol control polices or procedures. A major problem is that usually "availability" changes slowly.

The trend in most countries over the past 20 years has been for a gradual liberalization in alcohol control laws. However, few single changes can be expected to have a detectable effect on alcohol consumption or alcohol problems. For example, there have been more than 30 liberalizations of minor aspects of the control laws in Ontario during the past 20 years. Similar changes occurred in other Canadian provinces during the same time. What proportion of the large increase in alcohol consumption could be attributed to increased availability or to any of the individual changes? How do we answer this question when several changes were usually made at the same time and no changes appeared in isolation? Large increases in affluence had also occurred, the sobering influence of the temperance movement had declined, and advertising of alcoholic beverages had increased. Furthermore, people's desire to drink grew. Methods for isolating the influence of each of these factors do not seem at hand.

Politicians who enact changes usually argue that they are merely keeping up with public opinion, i.e., that increased desire to drink precedes rather than follows increases in availability. Currently, it is difficult to dispute this proposition. The report of the World Health Organization on alcohol control policies (Bruun et al. 1975) concluded that "the availability of alcohol is an important factor in the general level of consumption." A statement of the Addiction Research Foundation on alcohol policies (Addiction Research Foundation 1978) stated that "the cumulative effect (of all



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the individual liberalizations) has represented a major alteration in availability, and therefore, has undoubtedly contributed to increases in consumption and attendant problems ..."

Unfortunately, there are only a few studies examining the total range of variables which may affect availability. Bacon (1977) studied nine communities in five states and concluded that variations in availability had little effect on consumption. There appear to be no studies which have empirically examined general availability in a variety of countries for effects on consumption. Smart (1977b) examined the relationship between overall availability, per capita consumption, and alcoholism rates in the United States. He found that the correlation between per capita consumption and availability was positive and significant. However, the correlation between per capita consumption and urbanism was also positive and the correlation with income was even greater. Partial correlations showed that much of the statistical relationship between per capita consumption and availability is accounted for by income and urbanism. Thus, changes in availability may have little effect upon either consumption or alcohol problems if changes in level of income or degree of urbanization are not also considered.

Later studies by Harford (1979) and Colon (1981) have shown that availability is not a single dimension; specifically, differences between on-premise and off-premise availability will have different impacts as regards liver cirrhosis. The ISACE study by Makela et al. (1982) concluded that "while the overall increase in alcohol consumption could not be attributed to the general relaxation of control regulations in the study societies, the policy approach taken by most governments reinforced the increasing acceptance of alcohol into people's everyday life, and made way for expanding the supply." The authors of this study put more emphasis on general increases in affluence and urbanization and the way temperance influences have decreased as causal factors. They also point out that alcohol has become more closely associated with leisure pursuits and their commercialization. The authors also show the increasing economic importance of alcohol as a commodity, an element in international trade, and an agricultural product.

At present, existing analyses do not allow us to assign any great importance to overall availability as a factor in increased alcohol consumption. Much larger social, cultural, and economic changes seem equally important and in the aggregate probably more important in some countries.

### Alcohol Outlets and Hours of Sale: Relationships to Consumption and Problems

Virtually all countries have numerous controls on the number and type of outlets and the hours of sale for alcoholic beverages. Some idea of the variation in types of control on a world-wide basis



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can be gained from Moser's book (1980). We can make international comparisons, as well as more local before-and-after studies, when controls are changed. Most changes in outlet frequency or type and in hours of sale are small in nature. Often they are local and may apply in a single state or province or even a small city. Limited variables studied include the sale of liquor by the drink, the introduction of Sunday sales, the lengthening of hours of sales, etc. Broader changes examined include prohibition and the shortages brought on by war or other dislocations of a social nature.

Several studies (Mass Observation 1943; Popham et al. 1975) found that correlations between drunkenness rates and outlets per population base are negative. In any given area it is likely that public tolerance for drunkenness correlates with the number of outlets. Also, correlations between numbers of outlets and per capita sales are insignificant (Popham et al. 1976), but the variation studied has not been very great. It seems unlikely that adding or taking away a few alcohol outlets makes much difference to most areas unless the number drops to zero.

Small Changes in Number of Outlets and Hours of Sale

Numerous small changes in a single control measure have created little effect. For example, Bryant (1954) found no effect on consumption with the introduction of liquor by the drink. Dewar and Sommer (1962) found no effect from replacing the male beer parlour with a tavern serving both beer and wine to both sexes. Smart and Docherty (1976) failed to find the expected effects from the introduction of on-premise consumption on drinking driving problems.

Popham et al. (1975) studied the introduction of lounges and taverns in Ontario, which prior to 1947 had only dull and unattractive beer parlours frequented mostly by men. The lounges allowed the sale of all types of alcoholic beverage by the drink; many provided entertainment and opportunities to dance and made special efforts to attract women and middle-class customers. Per capita sales increased more in Ontario than in neighboring Manitoba, but drunkenness convictions and liver cirrhosis deaths increased more in Manitoba. Of course, this change did not simply increase availability, but greatly enhanced the attractiveness of on-premise drinking environments.

Smart (1974b) compared sales of alcoholic beverages made in self-service and clerk-service package stores in Ontario. In self-service stores all alcoholic beverages are displayed, much as in any grocery supermarket. In the clerk-service stores, customers make selections from a list and a clerk brings the purchase from the rear of the store. Displays of beverages are small or non-existent. Customers in self-service stores made larger



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purchases than those in clerk-service stores. They also reported more impulse buying and a higher average consumption during the previous week.

Numerous periods when liquor store personnel were on strike have also been investigated. They present one of the few opportunities to study reduction in availability, as most changes are toward liberalization. The best known study is one by Makela (1974) of the Finnish Alko personnel strike. This strike lasted five weeks and affected retail outlets, but not restaurants or the sale of light beer (3.7 percent alcohol or less). Effects on consumption by "average citizens" were very small; however, arrests for drunkenness and disturbance of the peace declined substantially.

Smart (1977a) studied two liquor store strikes in Canada. They were for short periods of time (four and nine weeks) and completely affected only package store sales, with lesser effects on hotels and restaurants. Neither of the strikes reduced the totals for traffic accidents, impaired driving, or traffic fatalities. However, during one strike period arrests for public drunkenness substantially decreased. This finding shows, as does data from the Alko strike period, that persons whose drinking is excessive and beyond control can be affected by alcohol availability. It is known that most of those arrested for drunkenness are typically socially deteriorated or skid-row alcoholics.

Studies of strike periods in Manitoba have shown similar results (Harper et al. 1981b), with fewer admissions to a medical detoxification facility during a liquor strike but no decline during a beer strike. Overall consumption was lowered only during the liquor strike.

Brown (1978b) found an especially large effect resulting from a beer strike in New Zealand, where typical beer consumption is very high and other beverages are not popular. The four-week strike had a major effect on drunkenness and other alcohol-related offences, as well as traffic accidents.

Some interest has been taken in changes of hours of sale. They have been a favorite means of regulation, but few controlled, empirical studies of their effects are available. Shadwell (1923) contended that of all wartime measures in Britain affecting availability, shorter selling hours were the most important. However, such a large variety of changes were made that the value of any one is difficult to assess (Smart 1974a).

A positive correlation between opening hours of beer parlours and arrests for drunkenness has been found in several studies (e.g. Popham 1962). However, the same hourly pattern of arrests occurs on Sunday in Toronto when beer parlours are closed. Popham (1962) has suggested that "hours of sale reflected the drinking pattern of at least one segment of the community rather than the reverse."



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Raymond (1969) has studied the change in on-premise closing hours in Australia. Traditionally, taverns closed at 6:00 p.m. to allow workers to drink after work but still get home for dinner. This led to the "6 o'clock swill," that is, hurried drinking from about 5:30 onwards. When hours were extended to 10:00 p.m. in Victoria, Raymond found no effect on total personal injury accidents. However, the peak hour for accidents changed from 6:00 - 7:00 p.m. to 10:00 - 11:00 p.m.

A trial Saturday closing of Alko stores in Finland was evaluated by Saila (1978). A chronic problem in Finland has been public intoxication, especially on Saturdays. Alko stores were closed on Saturdays for eight months, stopping off-premise sales of spirits and wine, although light and medium beer was available at grocery stores. The closure reduced public drunkenness and alcohol-related violence, as well as total consumption. There was no evidence of an increase in non-beverage alcohol or illicit alcohol consumption.

Numerous small to medium changes have apparently had no special study. This would include: opening hours for package stores; Sunday store openings; holiday closings; closings on voting days; and introduction of beer and wine into grocery stores. This is unfortunate as small changes are frequently introduced, and the alcohol research community often has little to add to the policy decision-making process if no empirical studies have been done.

From the studies discussed above, one might agree with Popham et al. (1975) that "variation in indicators of the prevalence of inebriety is not dependent upon outlet frequency." Outlet frequency also does not appear to govern average consumption. The effects of changes in hours of sale on consumption are variable from one study to another and difficult to predict. In short, small changes in availability of the type examined above typically have small or insignificant effects on drinking and drinking problems. However, a major effect on consumption and problems of intoxication is found where stores can be closed for a whole day each week.

## Some Large Changes in Alcohol Availability

Most situations involving large changes in availability involve prohibition, wartime shortages, or the introduction of stores to previously dry areas, such as in Finland.

The effects of prohibition on drinking have been well studied in the United States (Warburton 1932), Canada (Popham 1956) and Finland (Bruun et al. 1960). In all of these, prohibition created a major reduction in per capita alcohol consumption and in such alcohol problems as drunkenness, liver cirrhosis, alcohol-related death rates, and the like. To some extent the changes were



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temporary, as the largest changes were early in the period of prohibition. Arguments made against prohibition, especially in the United States, were that it encouraged illicit trade in alcohol and fostered the development of gangs and criminal elements. A National Academy of Sciences study (Gerstein and Moore 1981) concluded that "the prohibition era ... left a sour taste on the national palate" and led to a rejection of control measures and of alcohol prevention in general. Probably these arguments have some validity for many countries. It therefore becomes a matter of individual judgement whether national prohibition was really worth the effort.

Limited prohibition has been introduced recently into some northern communities in Canada in response to social problems associated with very high alcohol consumption. A study by Smart (1979) showed variable effects on drunkenness, assault, and impaired driving charges. However, in the most isolated communities, where prohibition was most successful, there was a substantial reduction in alcohol problems after prohibition. Such limited prohibitions might well be expanded to other native or isolated areas or to those with local options concerning alcohol.

Many difficulties exist in assessing the considerable effect of wartime restrictions on drinking. They present situations which can never be duplicated as part of government policy. Also, too many other variables occur during wartime to be sure that reductions are primarily responsible for changes in drinking patterns.

The best studies of wartime restrictions were probably those affecting Britain during the 1914-1918 war (Shadwell 1923; Smart 1974a). Shadwell concluded that "excessive drinking can be effectively checked and the disability caused by it reduced by appropriate measures." He saw the principal measures to be curtailment of hours of sale, limitation of supply, and raised prices. Although important, neither the separate value of each factor nor their combined value can be assessed. A historical analysis (Smart 1947a) shows that the following also influenced the effects of wartime restrictions:

1) During the years 1916 to 1918 there were restrictions on beverage output and importation.

2) Many people had little time to drink as work loads increased up to 60 hours per week.

3) Bombings, and blackouts made people less willing to move outside their houses for drinking occasions or off-license purchases.

4) A general wave of patriotism perhaps led some people to reduce their drinking in keeping with the examples and exhortations of national leaders.



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5) The war probably increased prohibitionist and moderationist feelings which had existed before the war. In fact, per capita consumption of alcohol and drunkenness convictions had peaked around 1900 and were on the way down at the time of the war.

6) Shortages of policemen and physicians made the detection of drunkenness and liver cirrhosis deaths less likely.

Several interesting studies of availability have examined the introduction of alcohol outlets to isolated areas of Finland. As in Norway and Sweden, Finland has had a long temperance tradition, a low per capita rate of alcohol consumption, and a spirits-drinking tradition. Access to alcoholic beverages is still difficult in many parts of Finland; liquor stores are difficult to find and often crowded, although beer is more available. For many years no alcoholic beverages at all were sold in most rural areas and small towns in Finland. A limited number of stores were introduced in 1951 to market towns. Numerous comparisons of drinking and drunkenness patterns were made between those towns and others which did not have stores (Kuusi 1957). The major findings were that the opening of stores increased the frequency of drinking, especially of beer and wine, decreased the use of illicit spirits, but had little effect on excessive drinking or drunkenness.

Another Finnish experiment in the years 1969-1970 involved even larger changes in availability (Makela 1972). Previous to 1969 liquor stores were not allowed in rural areas and licensed restaurants were few in number. Public opinion favored liberalization of these control laws so that: a) the number of liquor stores was increased substantially (132 in 1968 to 167 in 1970); b) the number of fully-licensed restaurants was increased by about 80 percent; c) some 17,431 new medium beer outlets were introduced; and d) 3,000 medium beer bars were opened.

The aims were to liberalize the existing laws and to make available low-alcohol beverages which would substitute for the favored spirits. It was hoped that this would control the explosive intoxication resulting from the rapid drinking of spirits so typical in Finland.

As might have been expected, total per capita consumption increased about 48 percent in the first year after the changes. Also, numbers of heavy users increased proportionately. There was little sign that beer-drinking substituted for spirits-drinking as had been expected. Beer accounted for much of the increase, but there was no compensatory reduction in spirits use. Of course, it is uncertain whether the findings from this study could be generalized to other countries with different drinking situations. Because of the rapidity of the change, it is very likely that the



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increased availability contributed most to the increase. It is difficult, however, to be sure that public desire to drink more was not an important contributor interacting with increased availability.

Governments other than Finland have made attempts to substitute one beverage for another, usually beer or wine for distilled spirits. Not all efforts at substitution have been evaluated, but some have. The introduction of low and medium beers in Finland served to increase overall consumption. The introduction of light beer in Ontario was found by Whitehead and Szandorowski (1977) to be mostly a substitution of one alcoholic beverage for another. However, there was some increase in consumption with the change to light beer with meals. There are some signs that the unavailability of one beverage (as during strikes) leads to limited substitution of others but a decrease in overall consumption (Single 1979). This research indicates that most attempts at substitution are likely to fail unless appropriate changes in price and availability are made at the same time.

## Government Controls and Alcohol Use in the Future

It is worth speculating about what the future may hold for the relationships between availability and drinking. One approach is to examine worldwide trends in drinking. Sulkunen (1976) reported data from the World Alcohol Project (WAP) on alcohol consumption and drinking patterns in more than 30 countries over a period of about 20 years between 1950 and 1970. Unfortunately, no data were gathered on the levels of availability in various countries and hence cross-national comparisons are not feasible; nor were many developing countries from Latin America or the Caribbean included. Nevertheless, some of Sulkunen's conclusions, providing grounds for speculation, including the following:

1) There has been a world wide rise in alcohol consumption in the years 1950-1970.

2) The rise has been greatest in countries where spirits are the preferred beverage.

3) There is homogenization of drinking habits throughout the world. That is, beer is becoming more popular in wine-drinking countries; wine in spirits-drinking countries, etc.

4) The homogenization is not at the expense of traditional beverages, but in addition to them.

There is evidence now from a variety of countries -- for example, Canada, The United States, Finland, Poland, etc. (see Makela et al. 1982 for a review) -- that alcohol consumption has



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stabilized or has even slightly decreased since about 1975. This may be either temporary or a long-term trend such as the "long wave" of postwar consumption increase. The reasons for this reduction probably include stabilization of real income, a new emphasis on healthy life-styles and fitness, and changes in the demographic composition of the population, for example, adding large numbers of young light drinkers to the drinking population. We can ask what effect this stabilization will have on alcohol control policies. Will it mean that governments will increase availability in order to stimulate more drinking and hence more tax revenues? Will there be decreases in real prices for alcoholic beverages?

There are some limited indications that the great increases in availability seen in the years 1950-1970 in almost all countries are on the wane. Many governments appear more cautious now than formerly. Prohibition has been introduced in Poland and Pakistan; age laws have been increased in many areas of Canada and the U.S.A., and advertising restrictions or outright bans have been put into force in many countries. It may be that a generally more restrictive approach in government controls is the current zeitgeist.

## Price and Taxation

Virtually all governments set the prices of alcoholic beverages, either indirectly through various taxation schemes or directly by selling through government monopoly stores. The ISACE study (Makela et al. 1982) found that "the proportion of the final price of alcoholic beverages that is attributable to taxation varies greatly among beverages and among societies." Generally, distilled beverages were more heavily taxed than others and over half of the final price may be due to taxation. Since governments constantly adjust alcohol prices in response to economic and taxation needs, those concerned with alcohol policy might also consider health matters when setting price levels.

Price controls have been a major recommendation arising from research on distribution patterns of alcohol consumption. It has been argued (Popham et al. 1975) that both per capita consumption and alcohol-related problems, such as liver cirrhosis, can be reduced by substantial changes in the real price of alcoholic beverages. Recommendations by the single distribution theorists have usually been more moderate: a) that the present real price of alcoholic beverages merely be maintained and not lowered as inflation increases; and b) that there be a uniform price control policy whereby prices are based on the amount of alcohol in each beverage.

Probably no control factor has been so often studied as has price. Several early studies of drastic price-taxation increases in Denmark and Belgium found substantial decreases in the consumption



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of distilled beverages and a less marked drop in total consumption (see reviews of Bruun et al. 1975; Popham et al. 1975). The tax increases levied were much higher than could now be done in most Western countries. For example, the tax on distilled spirits in Denmark was raised by a factor of 11, chiefly because of wartime shortages.

Our knowledge of how price changes can affect consumption and alcohol-related problems is based on econometric analyses rather than experimental or quasi-experimental study. Such studies examine how naturally occurring fluctuations in price relate to per capita consumption and alcohol problems, usually liver cirrhosis. Such studies are deceptively easy to do, but in the aggregate their results have been difficult to interpret.

The first large econometric study was done by Seeley (1960), who examined time series data for Ontario. He examined the ratio of alcohol prices to disposable income and found that it varied inversely with both alcohol sales and liver cirrhosis death rates. This prompted the suggestion that if real prices were raised by 20 or 30 percent over several years it could be determined whether there was a real effect on consumption and liver cirrhosis. The suggested experiment has apparently not yet been done.

An important element in the argument about prices and consumption is the question of the elasticity of demand for alcoholic beverages. If demand is relatively inelastic with regard to prices, then there is little any government can do short of increasing prices to phenomenal levels. Some products, such as bread in Western countries, have an inelastic demand and few substitutes. If prices are increased, then people simply spend more without decreasing their consumption by a significant amount.

Arguments about price inelasticity for alcoholic beverages are now very topical. Popham et al. (1976) and Bruun et al. (1975) have reviewed a large number of empirical studies and concluded that "when other factors remain unchanged, a rise in alcohol prices has generally led to a drop in the consumption of alcohol." The National Academy of Sciences study (Moore and Gerstein 1981) concluded that "an increased tax on alcoholic beverages has the particular effect of improving the chronic health picture" and therefore recommended such increase in conjunction with preventive programs. Others (e.g. Parker and Harman 1978) have claimed that income, not price, is the main determinant of alcohol consumption, and that demand for beer and spirits is relatively inelastic and hence not modifiable by price changes. A review and re-analysis by Ornstein (1980) has shown that neither point of view is entirely correct; that is, there was no support for the view that "income effects dominate price effects," nor is there "inelastic demand for spirits" (at least in The United States). The main conclusion of Schmidt and Popham was supported; that is, consumption is sensitive



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to price changes, but "the sensitivity varies across beverages." Ornstein concluded that "demand estimation is a difficult and inexact business" and "the results are strongly affected by the data and econometric techniques used."

Econometric analyses have not led to very clear conclusions about what type of price increase could be expected to lead to what decrease or change in alcohol consumption or problems. Demand for beverages may vary considerably across jurisdictions and in response to many factors other than price, including income. Heavy drinkers may not be much affected by price increases, and cheaper beverages can be substituted for the more expensive. In general, price seems to affect consumption but we cannot offer very definite suggestions to governments as to how to change prices to achieve any desired preventive effect without undesired losses.

Perhaps all that can be learned from econometric studies has been learned already, and new experimental approaches should be tried. The original paper by Seeley called for a large-scale social experiment, and this is still needed today.

Another area for the experimental study of price has been opened up by Babor et al. (1978). They studied "happy hour" conditions in an experimental bar situation. Male volunteers were given access to alcoholic beverages for a 20-day period. Some were charged 50 cents per drink and others (the happy hour group) 25 cents during a three-hour period. Both casual drinkers and heavy drinkers significantly increased their consumption during the happy hours. However, heavy drinkers increased much more than did casual drinkers. The happy hour consumption was not a substitute for consumption at other times.

Research of this sort should be extended into other situations where cheap alcoholic beverages are made available, such as cocktail parties, receptions, Oktoberfests, and certain kinds of air travel. Variables associated with increased consumption, such as disposable income and personality characteristics, could also be investigated. The experimental situation allows a control over variables which has been difficult to obtain in econometric analyses. Perhaps governments could be persuaded to decrease the number of situations where alcohol is given away or sold at very low cost.

A final problem with controlling alcohol problems through reducing per capita consumption relates to the selection of the problems to be controlled. The best correlations between consumption and related problems are for consumption and liver cirrhosis. Much research indicates that alcohol problems and consumption are not consistently correlated (see Makela 1975), and hence actions controlling one problem may not control another.

Lately, research has indicated the beneficial effects of small amounts of alcohol (up to two drinks per day) (Yano et al. 1977;



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Barboriak et al. 1977) in preventing coronary heart disease. Current analyses are indicating (Popham 1982) that the protective effect of alcohol may not peak at two drinks, but increase with the amount taken. In that case, encouraging the population by whatever means to drink less may mean a later increase in heart disease. Just how this is to be balanced against the expected reduction in liver disease cannot be seen at present.

## Changes in the Drinking or Purchasing Age for Alcoholic Beverages

Expectations about the consequences of reducing the drinking age vary in accordance with the view generally taken about alcohol control policies. For some it is seen as a preventive measure. For example, Wilkinson (1970) argued a "forbidden fruit" theory in which alcohol becomes especially attractive to young people because of its illegality. According to this view, drinking norms develop once it becomes legal for young people to drink, thus helping to prevent later problems. Wilkinson recommended lowering the drinking age to 18 in all jurisdictions. On the other hand, those in favour of the "distribution" theory (for example, Popham et al. 1975) argued that liberalization contributes to higher per capita consumption and hence to alcohol-related problems.

Some argue that changing the law should have no effect on consumption at all. Since many young people drink before the legal age, lowering the age only legalizes the status quo. We also know that many European countries, such as Britain, have always had low drinking ages with relatively low per capita consumption and alcoholism rates. However, France and Italy also have low drinking ages and lead the world in both alcohol consumption and its problems. International comparisons may be of little value compared to before and after studies in single jurisdictions.

Apparently no aspect of alcohol control legislation has been so often changed in recent years as the legal age for drinking or the purchase of alcoholic beverages. In some jurisdictions age laws govern only the purchase of alcoholic beverages, but in others, such as Ontario they govern purchase, possession, and consumption. During the years 1970 to 1975, all 10 Canadian provinces and 26 of 50 American states decreased the legal purchasing or drinking age. Smart and Goodstadt (1977), Wechsler (1980), and others have summarized research bearing on the effects of these age reductions. In general, the available data provide evidence of: a) increases in youthful drinking after the age reductions (Smart and Schmidt, 1975); b) increased admissions to treatment facilities for young people (Smart and Finley 1975); and c) substantial increases in alcohol-related accidents and fatalities both for those given the right to drink and those in the next lower age category (Williams et al. 1974; Brown and Maghsoodloo 1981; Whitehead et al. 1975).



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However, where large studies have been done, the effects of these laws have often been small and variable from one jurisdiction to another (Douglass and Filkins 1974).

After public pressure, the drinking age has been increased in Michigan (18 to 21); Maine, Massachusetts and New Hampshire (18 to 20); Iowa, Minnesota, Montana, Tennessee, Ontario and Saskatchewan (18 to 19). We now have data from a variety of sources on the effects of the increase in the drinking age in Ontario from 18 to 19 years (Vingilis and Smart 1982).

Although it seems clear that reducing the drinking age increased youthful drinking and drinking/driving problems, it is not clear that increases in the age would decrease them substantially. For one thing, with the exception of Michigan, all states and provinces which increased drinking ages did so by only one or two years (18 to 19 or 20), whereas the earlier reductions had usually dropped the drinking age three years (21 to 18). Therefore, a relatively smaller segment of the drinking population was affected by the increases. Also, "grandfather" clauses were often included so that those who had already reached the lower age could legally continue to drink when the age was raised.

Unfortunately, data on the effects of increasing the drinking age are very sparse. Only a handful of studies bear directly on the question. One investigated school officials' perceptions of drinking problems among youth; others investigated trends in police statistics and accident rates.

In an anonymous study (Anon 1979) questionnaires were mailed to high school principals in Michigan after the legal age was increased from 18 to 21 in December 1978. A majority of the principals reported that after the age was increased there were fewer alcohol-related problems in their school (74 percent), less drinking among younger students (69 percent), less drinking at school functions (67 percent), and less drinking during school hours (79 percent). It was concluded that raising the drinking age had made a positive difference in the drinking of high school students.

Roy and Greenblatt (1979) conducted a comparative study of drinking-driver defendants in Massachusetts in February and October 1979. This research was undertaken to evaluate the effectiveness of a new drinking law which raised the legal drinking age in Massachusetts from 18 to 20 years on April 16, 1979. When an October sample was compared to an earlier sample in February, a 26 percent increase was found in the number of teenagers (15-19 years of age) who were charged with drinking/driving offences, while an 8 percent decrease was found in the number of 20-25 year olds who were charged with these offences. Although tests of significance were not offered, sufficient information was available for analysis. While teenagers comprised about 14 percent of the February drinking/driving



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defendants, they accounted for over 17 percent in October. However, the overall totals for both months were almost the same. The unexpected increase in charges could be due to intensive police enforcement and/or youthful disobedience of the law. The authors suggested that youths might be drinking more in cars because they could not legally drink in liquor establishments. However, not enough information was available to determine whether enforcement practices had changed. Teenagers were also found to have a higher than expected frequency of multiple offences, including operating to endanger, use of motor vehicle without authority, leaving the scene of an accident with property damage and personal injury, crimes against property, and public order offences. Thus, the results demonstrated an increase in offences rather than the expected decrease.

Several studies of the age law changes have been made in Michigan. Wagenaar (1980) collected accident mortality rates based on a 20 percent random sample of all reported motor vehicle crashes in the State of Michigan from 1972 through 1979. The three dependent variables were: a) police reported "had been drinking" accidents (HBD); b) police reported "had not been drinking" accidents (HNBD); and c) late-night, single vehicle with male driver accidents (3FS). The three age groups investigated were: 18-20, 21-25, and 25-45 year olds. The results indicated an insignificant downward trend for non-alcohol-related accidents for all age groups, and a significant downward trend for alcohol-related accidents and the 3FS accidents for 18-20 year olds, but a significant increase for the 21-24 year olds in the HBD category and insignificant increases in the remaining categories. Wagenaar concluded that raising the drinking age was "an effective countermeasure for the major cause of morbidity and mortality among young people."

In Ontario, the drinking and purchasing age for alcoholic beverages was reduced in July 1971. Soon after, reports from school officials indicated that disciplinary problems involving students had increased greatly. Data were also widely publicized which indicated large increases in alcohol-related accidents among young people (Whitehead 1977). Citizen groups and an association of school principals petitioned the government to raise the drinking age. A government-appointed commission held a series of public inquiries about youthful drinking, examined the evidence and eventually concluded that the drinking age should be increased (Ontario Youth Secretariat 1976). The legal age was increased from 18 to 19 years as of January 1, 1979; those aged 18 before January 1, 1979 could still legally drink. The new law required age-of-majority cards with a photo and increased penalties for serving underage drinkers.

A new study from the Addiction Research Foundation (Vingilis and Smart 1982) analyzes four types of data relevant to the effects of the increase in the Ontario drinking age. The data are from:



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- surveys of drinking and drinking problems in large samples (n = 4687 and 5794) of high school students;
- a study of perceptions of 531 vice-principals;
- a trend analysis of young drinking offender charges; and
- a trend analysis of drinking/driving statistics.

It was expected that because of the nature of the change (one-year increase only) the effects would be small but positive. Since research on the deterrent effects of legislation has consistently shown initial positive effects of short duration, it was predicted that any effects would be most visible during the first few months of the new law.

The results of the four studies indicate few statistically significant changes since the raising of the drinking age. The high school surveys found that among the regular drinkers, there was no significant change between 1977 and 1979 in the proportion of older versus younger students reporting occurrences of slight intoxication or heavier alcohol use in the prior month. The vice-principal study found that the majority of vice-principals reported observing no changes in drink-related behaviors. The data on drinking-offender charges showed no significant differences after the legal drinking age change. Similarly, no differences were found for driving convictions or fatalities.

There was some evidence of minimal, though interesting, effects of the drinking law on those in the non-regular drinker category. The high school survey found after the law change a significant decrease among 18 to 19 year olds, but a significant increase in those under 18 who reported drinking and getting "tight" during the prior month. Additionally, between 20 and 30 percent of the vice-principals reported a decrease in drink-related behaviors. Charges against young drinking offenders have moved slightly downward since the increase in the drinking age; however, this trend is insignificant and, with no control group, difficult to interpret. In summary, these findings tentatively seem to suggest some minimal effect for 18-19 year old high school students, but not for the regular (once a week or more) or the younger drinkers.

The conviction and fatality statistics are not sensitive enough as measures; they seem to show that too few high-accident-and-arrest- risk youths are changing their drinking patterns for a cause/effect relationship to emerge. These results are contrary to Wagenaar's findings (1980) in Michigan, where significant downward trends in fatalities did occur. However, there the legal age



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increase was from 18 to 21 years of age. The minimal effect in the Ontario study was predicted, as the one year increase was not sufficient to cause a major impact on youthful drinking behavior.

There seems to be a small and selective prevention effect from increasing the drinking age by one year and a greater one from increasing it by three. Research of greater refinement and with fewer methodological problems is needed to validate these preliminary findings.

## Advertising of Alcoholic Beverages

A surprising amount of energy has been expended on controls on the advertising of alcoholic beverages. In the past five years legislative debates and discussions have looked at alcohol advertising in Canada, the United States, England, Finland, Mexico, Honduras, Norway, Spain, Switzerland and Sweden (see Moser 1980 for a review). New advertising bans have been imposed in Pakistan, Sweden, Norway, and Poland, but studies of their effects have not been found. There are long-standing bans on alcohol advertising in many Islamic countries such as Egypt, Saudi Arabia, and Kuwait, as well as in India and Russia. Alcohol advertising seems to be one area of legislative prevention in which politicians and government officials in all countries are willing to act. There seems to be no country in which alcohol advertising is not subject to government controls as to content, time, and space.

Much of the concern at the political and policy-making levels is about the possible impact of alcohol advertising on actual consumption, both immediately and as it affects the younger generation. Probable sources of concern are the sheer volume of alcohol advertising relative to public-service announcements for moderation (McEwan and Hanneman 1974; Smart and Krakowski 1973), the use of lifestyle appeals (Jordan and Goldberg 1977, McEwan and Hanneman 1974), the possibility of resort to subliminal erotic appeal (Key 1976), and the implications of possible influence over the editorial and news treatment of alcohol problems in the media.

Representatives of the alcohol industry typically maintain that their advertising does not affect overall consumption in the population at large, but rather influences market-shares and brand choices _within_ the industry. Research to date has not answered the questions of whether alcohol advertising does increase aggregate consumption (that is, consumption across brands), although many studies seem to support the industry position.

Unfortunately, the impact of alcohol advertising on consumption is a difficult area to research. Simon (1969) put it this way: "The effect of liquor advertising is among the harder advertising effects to measure . . . Liquor executives commonly say



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that no one knows and no one can know the effects of liquor advertising." In particular, he pointed to two problems: a) the difficulty of pinpointing which sales reflect which exposure to what advertisments in which media; and b) the possible diffusion and cumulation of advertising effects over time. Blane and Hewitt (1980) are similarly pessimistic about the current state of knowledge: "Examination of what is known about advertising in relation to sales and marketing leads to no clear-cut conclusion concerning its effect on consumption." They particularly emphasized the difficulty of interpreting the direction of causality in any observed correlation between alcohol sales and advertising expenditures. That is, it seems just as likely that increased sales will stimulate advertising expenditures as that advertising will stimulate sales. The following section reviews several studies that show their concern was justified.

Fortunately, the past five years have seen a considerable development of empirical studies of alcohol advertising. Researchers employed econometric and trend analyses, quasi-experimental studies and experimental paradigms.

## Econometric Analyses

Econometric analyses are essentially multiple regression analyses of sales as a function of several variables, including advertising spending or volume. A number of studies have examined alcohol sales in relation to a predictor set which includes advertising (Bourgeois and Barnes 1979; Grabowski 1976; McGuiness 1979; Peles 1971a, 1971b; Simon 1969).

Bourgeois and Barnes (1979) examined the per capita consumption of alcohol in the 10 provinces of Canada over 24 years, and conducted separate analyses for beer, wine, liquor and total consumption of absolute alcohol. Their results were complex, to put it mildly. Beer consumption was reported to be positively related to print-advertising expenditures, but negatively to those for broadcast advertising. Liquor, on the other hand, related negatively to print advertising and positively to broadcast advertising -- a surprising result since there is no broadcast advertising of liquor anywhere in Canada. Wine sales related positively to broadcast advertising only. Finally, there was no significant impact of either print or broadcast advertising on sales of total alcohol. Presumably, the contradictory effects on beer and liquor sales cancelled each other out. These somewhat implausible results may reflect several problems, tor example: a) only five data points were available for advertising expenditures; and b) questionable assumptions had to be made to allocate advertising expenditures into provincial shares.



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Grabowski (1976), noting that the question of whether advertising primarily affected sales or vice versa was a general issue in economic theory, examined his data for both kinds of influence. His results for advertising's effect on sales were negative. However, he found, for alcohol as well as other product categories, that sales strongly predicted advertising expenditures. When companies have a popular product with growing sales, they tend to increase advertising.

McGuiness (1979) examined demand for alcoholic beverages in the United Kingdom over the period 1956-1975. He found significant evidence that advertising had a modest impact on liquor sales, but there was no comparable evidence of impact on the sales of beer, wine, or cider.

Peles (1971a, 1971b) came to the conclusion that generally advertising affects market shares of beer sales within the alcohol industry rather than total beer sales. He also showed that advertising does more for the market share of large producers than of small producers. Peles pointed out that advertising does seem to increase the total demand for other product categories, either stably (e.g. cigarettes) or temporarily (e.g. automobiles, where sales in a given year are at the expense of sales in the succeeding year).

A pioneering study by Simon (1969) did not bear on total product-category demand, but rather on market share. He found great product loyalty, indicated by annual retention rates of 75 percent. He reported that alcohol advertising brought diminishing returns at each level of increased expenditure. Finally, unlike Peles (1971a), he concluded that the profit returns on advertising are higher for smaller than for larger advertisers.

Jurisdictional Quasi-Experiments

Campbell (1969) was the first to advocate quasi-experimental studies of the effects of large-scale social changes. One kind of social change that can be studied in this way is the effect of introduction or removal of restrictions on alcohol advertising.

Smart and Cutler (1976) studied the effect of the 1971 alcohol advertising ban in British Columbia by comparing consumption figures for B.C. and Ontario, the most comparable jurisdictions. They concluded that their data" . . . lent little support for the view that the B.C. advertising ban reduced alcohol consumption" (p.20). However, the effectiveness of the ban was compromised by continued exposure to advertising in national newspapers and magazines, and broadcast advertising from Alberta and the state of Washington across the U.S. border.



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More recently, Ogborne and Smart (1980) studied the 1974 beer advertising ban in Manitoba. They reported that beer consumption showed a significant increase under the ban, comparable to the pattern in Alberta (where there was no ban) over the same interval. The same problem of continued exposure to out-of-province advertising applied here as in the Smart and Cutler (1976 ) study. The research team also found no significant relationships between the comprehensiveness of advertising restrictions in the various states of the United States and measures of alcohol consumption or alcoholism.

Experimental Studies

Few experimental studies of alcohol advertising have been done. Brown (1978a) assigned 30 social drinkers the task of estimating the liquor and mix content of vodka and tonic mixtures of varying concentration. The task provided an opportunity for measurable differential consumption of the vodka. Subjects were alternatively exposed to cigarette and alcohol advertising in a counterbalanced within-subject experimental design. Subjects drank significantly more vodka after exposure to alcohol advertising than after exposure to cigarette advertising. Brown concluded that alcohol advertising increases the subsequent consumption of available alcohol. However, there is an alternative interpretation: possibly, the alcohol advertising heightened subjects' awareness of the range of alcohol alternatives. Because tonic heavily masks the flavor of liquor, and vodka is easily masked in the proportions used by Brown (0:10, 1:9, 1:7, 1:5, and 1:3), the subjects might have drunken more because they were trying harder to identify the liquor in use, being in a state of heightened appreciation of alternative possibilities.

Kohn, Smart, and Ogborne, in an as-yet-unreported study (1979), examined the impact of two kinds of print advertising for Heineken's beer -- social context or lifestyle advertising and product-quality advertising -- on short-term and long-term alcohol consumption. Short-term consumption was measured by giving subjects a 5 dollar food voucher to eat in a local licensed restaurant from which the experimenters obtained feedback on subjects' alcohol consumption. Long-term consumption was measured by a retrospective telephone interview (at least six weeks later) on consumption of both non-alcoholic and alcoholic beverages. Experimental subjects were asked to evaluate either five social-context advertisements or five product-quality advertisements in a typical market-research manner. Control subjects were questioned about their evaluations of the shopping mall where the data were collected and received the same voucher as experimental subjects. Although the data are not yet fully analyzed, it was found that advertising exposure had no significant effect on purchase of alcoholic beverages at the restaurant, neither when combining all categories of alcohol (i.e.



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wine, domestic beer, imported beer, and liquor) nor when considering them separately. The telephone interviewers, also, found no long-term effect.

What can be concluded about the effects of alcohol advertising on total consumption? It would be useful to have more studies of advertising bans, especially those in Scandinavia, as well as more experimental studies. Also, the effects of advertising over a longer period of time, as for example a generation, need to be examined. At present, however, the evidence that advertising has much effect on specific or total sales of alcoholic beverages is very weak and inconclusive. It may well be that all the legislative efforts at control in this area will have little impact. Efforts might better be directed elsewhere, for example towards price or availability controls.

## Research on Legal Control in the WHO Region of the Americas

To date, the studies of legal controls and alcohol problems have looked at Europe, North America, and Australasia. Similar studies are almost non-existent in Latin American and Caribbean countries. Indeed, good data on alcohol consumption over time seem to be almost unavailable for many such countries. For example, the World Alcohol Project (Sulkunen 1976) contained data on 33 countries, but only Cuba and Peru were included from the less developed countries of the Americas. An earlier World Health Organization report (Moser 1974) developed data on alcohol problems and programs in Chile, but no other Latin American country.

A more recent report (Moser 1980) does, however, have a wide variety of information on alcohol consumption and controls in the region. Probably many countries now have sufficient information to do studies of legal controls and consumption. However, there are still virtually no Latin American or Caribbean studies of: a) availability and consumption; b) the working of individual alcohol controls directed toward advertising, age, hours of sale, etc.; c) the influence of price on consumption; and d) price elasticities for various beverages. An exception is the work of Beaubrun (1977) on the close correlations between the price of rum, consumption, and accidents in Trinidad and Tobago.

It is very doubtful that results from the more developed world can be applied without change to Latin America and the Caribbean. Local consumption habits and the sociocultural milieu are so different as to make such application very risky. Perhaps a few examples will suffice. In many areas of Latin America locally produced beverages, such as pulque, chicha, and rum, are often not controlled or taxed by the government. Attempts at price or legal controls of other alcoholic beverages may simply lead to a shift



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towards the locally produced varieties. In many rural areas, too, it may be economic to drink alcoholic beverages because they contain calories and are cheaper, safer, and more available than water or milk (Negrete 1976). Lastly, such countries often have large areas where alcohol consumption is increasing rapidly, due to tourism or a large influx of workers, as for the petrochemical industry. Typical- ly, such situations are difficult for governments to control and alcohol problems are often substantial.

Clearly, there is a need for studies of prevention and legal controls in Latin American and Caribbean countries. Such studies might be done with the aid of the World Health Organization or other international agencies. A start has been made in Mexico with a WHO-sponsored study of community responses to alcohol problems. However, this study does not bear directly on the working of legal controls.

## Conclusions

The available empirical studies allow only some tentative conclusions about the prevention of alcohol-related problems. Research in this area is expanding quickly and any conclusion can easily become dated. At least the following can be suggested:

1) There is widespread agreement that governments have a role in prevention of alcohol problems which includes, but goes well beyond, the need to provide treatment for alcoholics. That role is to examine how current policies and laws respecting availability, price, and advertising of alcoholic beverages affect both sales and alcohol problems and to seek methods of reducing problems through government action.

2) Overall studies of availability show that it has increased along with affluence, urbanization, and the general acceptability of alcohol in society. Although availability of alcohol has increased in many countries, its effects on consumption are impossible to separate from broader social and cultural changes.

3) Numerous small changes in hours of sale and numbers of drinking establishments have no significant effect on the amount of drinking. However, many larger changes in numbers of outlets, for example in Finland in the 1960's, do have a great effect. Strikes by liquor store employees and closing stores on Saturdays have both affected consumption and drunkenness. Prohibition, both total and partial (as in northern Ontario), has had considerable effect on consumption and problems. When governments wish to decrease consumption through changing availability, drastic measures will usually be required.



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4) Per capita alcohol consumption seems to have stabilized in many countries over the past five years. At present we do not have good explanations for this phenomenon, nor do we know what effect it will have on government revenues and the tendency of governments to create new demand or increase availability.

5) There are some indications that the great increases in alcohol availability since World War II may be ended, at least temporarily, in many Western countries.

6) Both econometric and experimental studies suggest that sales of alcoholic beverages usually behave much as sales of other consumer goods. People buy more when they are cheap and less when they are are not. However, the exact relationships between price and consumption are variable and subject to many factors difficult to control and study. Experimental studies of situations where price is manipulated may give better results than pursuing large-scale econometric studies.

7) Some studies show that alcohol use lowers the risk of coronary heart disease; many show that it increases the risk of liver cirrhosis. Governments, in selecting alcohol control policies, may be required to decide between these effects.

8) Lowering the drinking age appeared to increase consumption, alcohol-related traffic accidents, and admissions to treatment for the age group affected. Raising drinking ages has been shown to decrease consumption and, where the change is substantial, decrease alcohol-related accidents.

9) Research on advertising of alcoholic beverages does not indicate that it has an important effect on sales or consumption. Legislative efforts at prevention of alcohol problems are misdirected if focused on advertising.

10) Research on availability, price, consumption, and problems is needed in Latin American and Caribbean countries. Research from other countries cannot be easily generalized to these countries.

11) The empirical evidence in total suggests that prevention of alcohol-related problems depends upon holding availability and prices constant or even reducing availability, keeping access for young people limited and hoping that the present trend towards a plateau in alcohol consumption continues where it has begun. In certain countries it may be possible to make large changes in price or availability, but in order to have a substantial effect they must be very large, probably larger than most governments will consider.



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# DISCUSSANT

Michael H. Beaubrun

It would be difficult to disagree with the overall conclusion of Dr. Smart that "the available empirical studies allow only some tentative conclusions about the prevention of alcohol-related problems." Yet, there is increasing worldwide consensus that availability and price are everywhere clearly related to consumption and to problems due to alcohol, though sociocultural factors modify the picture considerably.

It is true that correlations are not ipso-facto evidence of causation, and it is not easy to separate the variables involved. However, the sheer weight of the increasing evidence from econometric and experimental studies strongly suggests that there is a cause and effect relationship, and there are sufficient instances of "natural experiments" to justify our advocacy of some control strategies aimed at reducing availability, provided we recognize the limits of such controls.

I will try to avoid going over the ground covered in the excellent review by Dr. Smart of the available research and will try instead to discuss some of the implications of his findings and to relate them to our Caribbean experience.

## "Supply Side" Strategies

Dr. Smart found a significant, positive correlation between per capita consumption and overall availability in the United States (Smart 1977b). Yet he notes that the correlation of consumption with income was even greater, and there was a close positive correlation with urbanization.

Makela et al. (1982), in the ISACE study, also emphasized the importance of affluence and urbanization, as well as liberalized attitudes and other sociocultural factors. The conclusion is that it is impossible to separate availability from income and other social and cultural factors.



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Economic Availability A field study of drinking practices in suburban Kingston, Jamaica, conducted in 1966 (Beaubrun 1968) showed a very clear correlation between drinking and social class as defined by housing area. Here, too, income seemed the most important single variable. We have no studies of the effect of liberalization of controls or of the effect of liquor store strikes, but economic availability in Jamaica seemed related to heavy drinking. In most of the Caribbean islands, alcohol is freely available and can be purchased in supermarkets, groceries and, in some places, even in vending machines. The only real curb on availability is economic availability determined by income and price.

Cirrhosis mortality rates in the Caribbean bear a rough relationship to the ratio between income and the price of beverage alcohol. Tourism centres like the Bahamas, Puerto Rico, Martinique, Aruba, and the Virgin Islands have very high rates. There the price of alcohol is low and incomes relatively high by Caribbean standards. Mortality rates from alcohol-related causes are higher in the Virgin Islands than in any state in the United States. (U.S. Department of Health and Human Services report 1981)

Alcohol Outlets and Hours of Sale: Relationship to Consumption and Problems It is not surprising to find that small changes in hours of sale and numbers of outlets had few significant effects, but that larger changes did. It would be important to study not only the frequency of outlets but their location.

We have the impression that the location of bars near to places where men are paid poses a distinct hazard. In those Caribbean Islands where there are oil refineries, sugar factories, and other industries, bars located near the entrance of the work place do a roaring trade on pay day, and even in the absence of research findings, we have gone on record as recommending that no bar should be located near the place where workers are paid (Beaubrun and Mahy 1980).

Price and Taxation The single-distribution theorists have usually made price control their major recommendation based on the clear reciprocal relationship between real price and consumption, which in turn is related to health and social damage (Sealey 1960, Popham, Schmidt and de Lint 1975). The inverse relationship between price and liver cirrhosis mortality demonstrated in Ontario has since been shown to relate to other damage as well. Hospital admissions for alcoholism in Scotland showed a similar inverse relationship with real price of alcohol (Semple and Yarrow 1974), and we have found in Trinidad and Tobago an even closer reciprocal relationship between real price and road traffic accidents (Beaubrun 1977).



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In the Trinidad study, the correlation we obtained between the relative price and accidents over the 10-year period 1966-1975 was so close (R = -0.978) that it seemed unbelievable. Subsequent small changes in the figures put out by the central statistical office may reduce the level of this correlation but it still remains highly significant. What is most significant is that breaks in the graphs showing sudden decreases in road accidents in 1968 and again in 1973 were correlated with significant increases in the excise and purchase taxes on alcohol reflected by rises in relative price. In each of those two years, purchase tax on rum was increased by 100 percent. In 1968, there was also an increase of the excise tax on alcohol from TT $9.50 to TT $12.00 per imperial proof gallon. These tax increases were introduced as revenue earning measures, but their effect on the accident rate was dramatic.

A closer look at the accident statistics shows us that most of these accidents were caused by drivers under the age of 25, who were unlikely to be alcoholics as yet. A recent field study of drinking in Tobago showed the mean age of heavy drinking was 25 to 34 years (Patrick and Patrick 1980). Increases in the price of beverage alcohol are more likely to be felt by young people who have less money in their pockets, and this may be why price effects on the total accident rate are so great.

These graphs were presented to the upper house of the Parliament of Trinidad and Tobago in December 1977 during a budget debate. In January 1978, the rum manufacturers increased the price of rum by 25 percent and the accident rate showed a corresponding decline (Beaubrun and Mahy 1980).

One of the major problems in implementing control strategies is the problem of mobilizing the political will. Politicians will in the main do what they feel the voters would want, and the best approach to them is through the public. But, there is also the problem of convincing ministers of finance or chancellors of the exchequer that strategies proposed as a health measure will not interfere with tax revenue. It is therefore important also to conduct econometric studies which clearly indicate what tax increases are compatible with both improved health and improved revenue. A recent econometric study by Duffy in the United Kingdom examined the influence of "prices, consumer incomes and advertising upon the demand for alcoholic drink in the U.K." Among other things, it clearly showed that tax revenue could be increased and consumption reduced quite significantly by raising the rates of duty, especially on spirits (Duffy 1981).

Another finding of that study supports the conclusion arrived at by Dr. Smart, that studies to date indicate that advertising controls are a relatively ineffective way of restraining alcohol consumption (Duffy 1981).



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Changes in the Drinking or Purchasing Age Limits The studies reviewed seemed to negate the "forbidden fruit" hypothesis (Wilkinson 1970). Lowering the drinking age increased consumption and drinking/driving problems. Increasing the drinking age seemed to result in fewer alcohol-related problems.

Our field study in Jamaica in 1966 showed that heavy drinking was related to the age at which Jamaicans start to drink. This finding was significant at the .05 level, suggesting that any measure which could delay the start of drinking might result in fewer excessive drinkers and, therefore, fewer drinking problems.

There may be other ways of delaying the start of drinking. We have already spoken of the strategy of pricing alcohol outside the reach of youngsters. It is important that the price of beer be clearly higher than that of a soft drink like Pepsi or Coke. In some of our islands, however, this is not so and we have even encountered situations where soft drinks would only be served as a "chaser."

Sometimes, too, there are legal age limits which are not enforced at all. In most Caribbean countries there is a legal age limit, but children walk into supermarkets and buy alcohol without being questioned.

Dr. Smart concludes that the "empirical evidence in total suggests that the prevention of alcohol-related problems depends upon holding availability and prices constant or even reducing availability, keeping access for young people limited, and hoping that the present trend toward the plateau of alcohol consumption continues where it has begun."

With this view I am in complete agreement. There is need to index taxes and prices of beverage alcohol so that the real price does not fall in relation to income. And yet, this measure alone would not be enough, for each country has sociocultural factors which modify the picture.

In 1980, a meeting of the ministers responsible for health of the Caribbean community passed Resolution 26 on the subject of alcoholism. That resolution adopted reduction of consumption as a goal of health policy, and member governments were urged to adopt strategies aimed at reducing availability as well as strategies aimed at reducing the demand for alcohol. The authors of that resolution stated that they wished to draw attention especially:

> . . . to the fact that the most important single method of reducing demand is price manipulation by taxation, as well as to the assertion that: "Alcohol is so much a part of our way of life in the Caribbean that it would be a mistake to attempt to reduce



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> consumption by too drastic a programme of fiscal and legal measures. The aim should be to attempt to lower consumption gradually over the next decade by a combination of education about the hazards of alcohol use combined with such fiscal and legal measures as may be necessary to prevent the real price of alcohol from falling, while we attempt to moderate our drinking life-style. (Caricom Health Ministers Meeting 1980).

Demand Control Factors

A criticism that might be made of this review is that its scope was too limited. It dealt exclusively with legislation affecting availability, concentrating on price manipulation, controls of marketing, numbers of outlets, and age limits. In a supply and demand model these would all be "supply side" strategies. The only measure discussed which might be seen as affecting "demand" would be the control of advertising.

The Breathalyser and Scandinavian-type laws have not been mentioned, nor have compulsory driver education programs for "driving while intoxicated" (DWI) offences. The final report of the U.S. Department of Transportation on "Deterrence of the Drinking Driver: An International Survey" (Ross 1981) has been given to us and it would be appropriate to have mentioned some of these findings.

International experience shows us that in the short run Scandinavian-type laws, especially if coupled with some responsible implementation, and high visibility, result in significant reduction in accidents and mortality but that in the long run this deterrent effect tends to be lost even in a few years, as public perception of the threat of being caught recedes. Certainty of detection is the important variable and not severity of punishment. Celerity of punishment has yet to be properly evaluated.

Even in the light of the tendency for effects to diminish in the long term, we cannot easily ignore the tremendous saving of human life represented by the early gains, which alone would justify the legislation. We must, however, continue to search for better ways of enhancing the perceived threat of detection.

As Dr. Heath's paper was concerned with evaluating existing research, it may not be appropriate to discuss preventive legislation which has never been tested or assessed. However, there have been some proposed measures, such as legislation requiring a technological device that would require a certain degree of dexterity in order to start a car.



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One method of legal intervention which, if it had been supported in the Appeals Court, might have had a significant effect on drunken driving was a California case which nearly became a precedent. This was the case where the proprietor of a bar was held to be responsible in law for the accident in which his drunken customer became involved. Had this judgement been upheld it might have made bartenders refuse to sell drinks to people who were becoming intoxicated. I am told that for a while it did have just this effect -- until the case went to appeal.

Concluding Remarks

Controls are odious, particularly in democracies where a high value is placed on personal freedom; yet there is some evidence to show that controls are still the most effective method available to us for changing behaviour. Treatment and education have done little to date to stem the tide of this world-class problem.

In an earlier lecture, I referred to the words of Shakespeare's Sir Toby Belch who, when chided for his drunken revelry, said to Malvolio: "Dost thou think, because thou art virtuous, there shall be no more cakes and ale?" Sir Toby, like the rest of us, resented having his pleasure controlled.

## DISCUSSANT

Maria Elena Medina-Mora

Using Dr. Smart's excellent paper as a point of departure, I will concentrate my remarks on the impact of preventive measures in Latin American countries. There is agreement that some policies or interventions could have more effect than others. The problem is to decide how and under what circumstances they will be effective, to whom they should be geared, and what sociocultural conditions facilitate or limit the preventive potential of the different types of measures. Only then can we make concrete recommendations.

The country of Mexico is a particularly useful example to study preventive measures, because it is representative of a number of others with similar characteristics such as stage of development, socioeconomic change, cultural norms and values, patterns of consumption, diversity in the existing legislation, and a lack of research to support possible policy recommendations. In any case,



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recommendations for preventive measures must take into account the general context, including the availability or limitation of resources, the level of literacy, cultural barriers, etc.

The data reviewed by Dr. Smart clearly show that small and isolated changes in controls bring about only short-lived and moderate changes in consumption, and help diminish confidence in the judgement of those who proposed such changes. Any alternative proposed must be a complete alternative, an adequate one. It must be evaluated from all points of view, insofar as possible, pertaining to both the economic and social effects, but also the collateral results that could be derived.

In many regions it might be economical to drink alcoholic beverages because they have calories and are cheaper, less harmful, and more available than other beverages such as water or milk. In such situations it would be necessary to raise the standard of living simultaneously with increasing control of alcohol availability, or else side effects might become more dangerous than permitting the sale of alcohol.

Mexico has already had some experiences with limitation of availability of alcoholic beverages. The federal district, for a period of five years, beginning in 1950, prohibited the retailing of beverages with alcohol content greater than five percent. In the short term this measure apparently led to a reduction in alcohol consumption and a decrease in the numbers of problems associated with drinking. The results in the long term were disappointing. The metropolitan area of the Mexican capital includes a fraction of a neighboring state, an area that has seen development of some of the most important industries in the country. With limits on the availability of alcohol in the federal district, there was a proliferation across the border of night spots, package stores that were open 24 hours, and places where one could buy and drink large quantities of alcoholic beverages. Soon this area was known as the "belt of dissipation." By 1955 the laws pertaining to the sale of liquor in the federal district were changed and liberalized, although the new code did limit the construction of package stores to a distance of 500 meters from schools, work centers, hospitals, etc.

Effective preventive measures must also take into consideration purchasing patterns, consumption norms, and values and attitudes connected with use of alcohol. Research results show differing patterns for those who buy in self-service supermarkets and those who buy in smaller stores. Since in Mexico alcoholic beverages can be bought in supermarkets, one might recommend controls for these particular establishments on the theory that impulse buying in self-service stores is responsible for a higher volume of sales. However, market information indicates that less than 20 percent of sales are made in the self-service supermarkets.



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Furthermore, in these stores the customers are housewives of the higher economic class who come in to stock up for the family and usually buy imported liquors. In contrast, in the small stores customers purchase much larger volumes of liquor, usually for immediate use (Rosovsky 1982). Customers of the smaller stores are generally males from the lower socioeconomic strata; usually they consume a moderate level every day, augmented on special occasions, weekends, days of pay, holidays, and the like (Calderon 1981). Thus, a measure to discourage impulse buying in self-service supermarkets would affect just a small part of the population, while a strategy aimed towards the small establishments might be more effective.

Not only are the patterns of consumption and purchase important, but also the cultural factors, norms, and values that are reflected in the patterns of consumption. Similar patterns have been observed in regions throughout Latin America (Negrete 1979). Dr. Smart states that on the basis of current evidence general availability of alcohol does not appear to be an important factor affecting consumption. The social, cultural, and economic changes, when grouped together, will probably loom ever more important in some countries. For example, in Mexico and other countries of Latin America where consumption of alcohol and drunkenness are considered part of the male role, and where strong sanctions exist against consumption of alcohol by women, one would not expect women to increase consumption in proportion to relaxation of controls. In February 1981, in the federal district of Mexico City, laws preventing women from entering the canteens or bars, and restricting where they could buy liquor, were repealed. Although now women could buy alcohol anywhere, no significant change in alcohol consumption has occurred. Even if an increase in consumption by women is measured eventually, researchers will have to look at such possibly associated factors as relaxation of social norms and greater equality of the sexes.

Existing legislation should be evaluated. There are a number of laws that have been proposed to regulate alcohol consumption in Latin America. However, in many cases these laws are not put into practice. They are not enforced because quite often the law is too elevated, too lofty, and isolated from reality -- a consequence of sociocultural differences between the few who are politically active and the majority of the population. Before considering new measures, it would be wise to evaluate existing legislation and to educate the population about the health, social, and economic problems associated with alcohol consumption.

Three examples illustrate the applicability or lack thereof of current regulations:



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- The law prohibiting the opening of liquor stores near industrial parks, health facilities, or schools has been rendered moot by the explosive growth of Mexico City and the proliferation of these facilities.

- Strong enforcement of one regulation, whose objective is to control availability of alcohol by limiting the sale of alcohol to 20 percent of total sales in the small neighborhood grocery stores, would lead to bankruptcy of neighborhood stores. Due to the competition on food prices from the large supermarkets, the small stores turn to the sale of alcohol to survive.

- In the month of December 1981, a decrease in the number of accidents, arrests, etc., occurred in one Mexican state that carried out an experiment to see if alcohol consumption would drop when sale of liquor was limited to certain hours and days of the week. Although it is too soon to evaluate the real effects of these measures, they represent an isolated example of innovation and experimentation.

We know there are many interests in the alcohol industry that might be affected by measures to control alcohol. One suggestion for countering industry pressures is to establish a government monopoly controlling production and sale of alcohol. However, in Costa Rica, where such a monopoly exists and sales of alcohol have stabilized, there has been a large volume of bootleg alcohol produced and sold illegally. Uruguay was also not successful in reducing consumption with a government monopoly (Negrete 1981).

Furthermore, the alcohol industry does represent a considerable amount of economic activity. Countries that wish to promote their economic development will have to deal with the dichotomy that although they want to reduce the production of alcohol, they also have an interest in increasing tax revenues. Quite often the issues involve more than just the relationship between public and private interests. Within the public sector, for example, various agencies are concerned with the promotion and restoration of health, and others are trying to stimulate the economic development of the country. Mechanisms to coordinate different governmental initiatives might be beneficial in setting congruent policies.

To date the research has been modest in scope, and further research is required. One recommended direction would be towards developing useful indirect indicators to measure the effects of changing policies. It would be useful to mount studies to evaluate the measures already in existence prohibiting the sale of liquor on election days, on national holidays, etc. Research on patterns of sale and consumption might lead to developing and evaluating new



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interventions in order to discover those policies which will have the most benefit in countries experiencing rapid socioeconomic and political change.

Finally, there is no question that changes in the social mores pertaining to alcohol are taking place and that preventive measures cannot await the results of research that is going to come in the future. For this reason many of our policies will be based to a considerable extent on the experience of other countries. For the moment we will have to consider the results shown from raising the legal age for drinking and the effects of massive education programs.

## STUDY ON ALCOHOL-RELATED LEGISLATION IN CENTRAL AMERICA AND PANAMA

Jaime Arroyo Sucre

The use and abuse of alcohol is part of the cultural traditions of the peoples of Central America and Panama. While the adoption of alien customs in recent years has led to changes in consumption patterns, traditional customs have remained substantially unchanged, and per capita consumption shows an upward trend. The countries have recognized the problems arising from these circumstances on many occasions. Their study and discussion is always a matter of concern, not only to health workers but also to all professionals and the community at large. Because drinking customs are so important in the social, cultural, economic, and religious life of the community, they have been approached in a variety of ways, frequently opposed and in conflict with one another.

Priority has rarely been assigned to the health aspects of the problem and we professionals, and other persons interested in these tasks, have been unable to provide scientific and technical data to support passage of adequate legislation. The magnitude of the problem to be faced is evident if, in addition, we bear in mind: that in some countries morbidity and mortality rates suggest other priorities; that the economic structure of these countries encourages the cultivation of grains and the production, marketing and consumption of alcohol; and, especially, that the population at large and even health workers accept and tolerate these habits.



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Throughout the history of public health, government action has been one of the most important factors in disease control and health promotion. Political decisions embodied in laws are the basis for their execution. Legislation governing the dynamic balance of the ecological triad -- causal agent/environment/susceptible host -- constitutes a basic instrument for preventing alcohol-related problems.

Although the countries of the area recognize the seriousness and magnitude of the problems relating to alcohol consumption, few of them have compilations of existing legislation on the topic. At their XXV Meeting in 1980 the Ministers of Health demonstrated their interest when they called upon the Pan American Organization to prepare a study that would collect, analyze, draw conclusions, and make recommendations on existing legislation (Resolution VIII of the XXV Meeting of the Ministers of Health of Central America and Panama). It was that resolution that gave rise to the document that is the basis of my presentation today.

## PAHO Study: Methodology

The first stage of the investigation was devoted to collecting the information available in Panama, Honduras, Guatemala, Nicaragua, and El Salvador. To obtain comparable data, a general questionnaire was prepared covering laws relating to the causal agent, the environment, and the susceptible host. The questions dealt with the types and characteristics of alcohols for consumption; production, importation, distribution, quality control, sale, and consumption; control of places of sale and their business hours; and the age, sex, and occupation of purchasers and/or consumers. In addition, specific aspects such as the operation of motor vehicles, employment, education, penal and civil matters were also included. A separate questionnaire covered the promotion of advertising for alcohol consumption.

Given the scope of the problem, the questionnaire is, of course, not exhaustive, but it does represent a first attempt to gather information on the existing legislation of the countries. It needs to be fleshed out by national surveys designed to obtain a better understanding of the problem and to develop better preventive legislation.

The information was obtained through interviews with officials designated by the health authorities of the countries. In most cases they had only a very general knowledge of the legislation, but they all subsequently sent the author information on codes, laws, rules and regulations. When the data were compared, differences were found between what the officials had said and what the laws prescribed.



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The interviews and the questionnaires together gave us an idea of what legislation exists in this regard, and of what was being enforced in each country. Although differences were found between the statutes on the books and the realities of the legal system, these will have to be covered by subsequent investigations, which obviously should be carried out by officials or researchers within each country.

## Legislation in Central America

All the countries of the area have comprehensive alcohol legislation. Laws enacted at the beginning of independence are still in force and reflect the legal system that ruled our relations with Spain during the colonial era. Legislation has been primarily centered on economic and fiscal matters. The governments have promoted grain cultivation and the production, distribution, marketing, and consumption of alcohol, taking into account tax and fiscal advantages and the generation of economic growth and export activity. In most of the countries these activities, including quality control, are the responsibility of the Ministry of Finance, and in some of the Ministry of Health, albeit only tangentially.

### Alcohol Tax Laws

The legislation on the production, importation, distribution, sale, and consumption of alcoholic beverages is abundant. In most of the countries the pertinent legal rules are part of the tax or commercial codes, or of what are called "alcohol decrees or laws." The differences between what was said in the interviews and what the law prescribes and the difficulties encountered in obtaining copies of the relevant provisions showed that the legislation is scattered in many sources and that, from the point of view of health, it is of little use and rarely applied.

To overcome this difficulty, one of the countries is studying a draft National Alcohol and Alcoholism Code, which brings together the scattered legislation and will fill the gaps in it (Newsletter No. 6, National Alcoholism Institute, San Jose, Costa Rica).

Since the Ministries of Health are responsible for the well-being of the population, they must have the legal means to perform this function as it relates to a widely consumed and very harmful substance. In most of the countries, even the quality control of alcoholic beverages is in the hands of the Ministry of Finance or the Internal Revenue Service. The most important chemical analysis is the determination of the alcoholic strength of the beverages, but for tax collection purposes, rather than for protecting the health of the consumer.



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## Alcoholic Content

The amount of alcohol permitted or in some cases required in different types of alcoholic beverages is similar in the various countries of the area. Surveys of drinking patterns indicate that most drinkers are more concerned about the quantity -- the number of drinks or rounds consumed. Accordingly, preventive measures similar to those used to reduce the percentage of harmful substances in tobacco products could be applied; that is, the alcoholic content of the beverages could be reduced. Manufacturers indicate that they can produce beverages with a lower alcoholic content but with the same taste. This type of measure would reduce production costs and thus enable some governments to extract more tax dollars without adversely affecting the health of the population.

## Production and Distribution Controls

Alcohol production, which was initially a state monopoly throughout the region, has in most cases now been transferred to private enterprise. Quality control is frequently the responsibility of the tax agencies, which disregard the possibility that alcoholic beverages may contain toxic substances. This risk is much greater in the case of contraband liquor, but none of the laws I have reviewed authorize the Ministries of Health to take appropriate measures in this regard.

The importation of alcoholic beverages is covered by many tax regulations. With regard to health, however, the only requirement is a registration with the health authorities which continues in force for a variable number of years. During this period, virtually no quality controls are carried out for the protection of the consuming population.

The tax regulations of the countries do prescribe the types of container and regulate their distribution. Although my review found no specific references to the role of health authorities, the laws not only permit but would facilitate control directed at improvement of health.

## Regulation of Sales and Consumption

The tax regulations rather accurately define the scope of sales. The provisions relating to the location of shops, their classification, and business hours imply mandates that facilitate the execution of preventive measures for some high-risk groups. However, in the opinion of the persons interviewed most such regulations are not observed, and the health authorities have no legal means of enforcing them. In this regard all my informants emphasized the lack of guidelines for establishing necessary



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cooperation between government agencies. Most of the rules were enacted to protect the health of purchasers, especially with respect to age. According to the opinions obtained, the provisions are not obligatory.

Almost all the Central American countries have regulations on the consumption of alcoholic beverages, although they are sometimes scattered throughout various statutes. Tax provisions define the different types of alcoholic beverages which are legally permitted. National laws or civil, social, police and other regulations may limit consumption for reasons of age, trade or profession, or in relation to working hours. There are no similar provisions based on health grounds.

Although all the countries have standards for the hours during which alcoholic beverages may be sold, they are not obligatory. According to the laws, alcoholic beverages may not be consumed in public places. Nevertheless, the persons interviewed were of the opinion that the tolerant attitude of the population not only facilitates but even encourages the habit of drinking in public.

The rules that govern the places in which alcoholic beverages are consumed find their legal basis in the health codes or regulations and are the same as for the sale of food stuffs. These rules are usually applied more flexibly to shops that serve alcoholic beverages.

With the exception of those mentioned in the foregoing paragraph, the other provisions are not embodied in what is usually considered health legislation.

Prevention of Alcohol-related Problems

In most of the countries, regulations on the operation of motor vehicles and alcoholism are part of the Traffic or Police Regulations. The role of the health services in determining blood alcohol content is not well defined, and in many countries the Ministries of Health do not have the necessary resources to deal with the problem.

Traffic education and alcohol consumption programs do not come under the authority of, and sometimes are not even coordinated with, health activities. They are the responsibility of other government agencies. Information indicating that permanent education programs are coordinated, promoted, and executed by the Ministries of Health and Education within the formal education system is available for only one country in the area.

Provisions on employment problems are part of labor legislation and cover the employer/employee relationship when the



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drinking of alcoholic beverages is involved and drinking is a cause for dismissal. In very few cases are references made to other aspects of the problem.

In general, pertinent laws are aimed at solving problems caused by the use of alcohol. Few establish those means of protecting alcoholics that would reflect modern knowledge of the topic.

Further, in most of the countries there is a legal void in respect to social legislation on the prevention and treatment of alcoholism and the rehabilitation of alcoholics. In one country, an article of a preliminary draft of the Constitution sets forth general guidelines for the care of alcoholics; in another, a preliminary draft of a code contains more specific guidelines for dealing comprehensively with the problem.

## Alcohol Advertising

Aware of the health hazards involved in the use of alcohol, the promotion of alcohol consumption in the media, the existence of laws for the control of advertising, and the need to focus health education programs on these toxic substances, the Ministries of Health requested PAHO to prepare a study.

The more knowledge is available on this topic and the more certain the risks caused by the use of these substances become, the more evident the need to control advertisements for them.

Most of the countries have laws that control advertising for consumption of alcoholic beverages. This control is exercised through multidisciplinary commissions appointed for that purpose. In some countries, the members of these commissions are appointed directly by the President of the Republic; in others, the law stipulates the posts whose incumbents will be members. In all cases, the participation of health officials is central.

In many countries, control extends to the press, radio, television, posters and billboards, as well as to other advertising media. It is not applied with the same strictness in all the countries, nor does it affect all media uniformly.

Control extends to the form, content, presentation, and objective of the message, as well as the activities it promotes and the behavior it fosters. The effectiveness of this control should be evaluated and, where necessary, appropriate changes introduced.

In most of the countries it is difficult to establish controls of the duration of the message, the frequency with which it is repeated, and the hours at which it is broadcast, all of which would influence who the recipients of the message are and what its impact



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on them is likely to be. Thus, the messages continue to affect children and youths, who are likely to be susceptible.

The legislation reviewed contained no provisions on the censorship of films, comic strips or other mass media in which the heroes appear drinking, nor do any of the laws forbid or limit the advertising of these substances.

## Conclusions

1. The study showed that there is abundant legislation on alcohol use. Most of the provisions are scattered and the health authorities are usually unfamiliar with them.

   Recommendation: The countries that have not already done so should appoint an inter-disciplinary committee to review and compile the existing legislation on alcohol consumption.

2. Many of the laws and rgulations in force are not health related, and some that could be useful are not applied.

   Recommendation: The above-mentioned committee should be responsible for analyzing the rules relating to health and recommending guidelines for their better application.

3. A comparison of existing rules and of rules desirable from the point of view of health would make it possible to develop appropriate guiding principles for new legislation.

   Recommendation: On the basis of the above-mentioned review and analysis, the committee should make recommendations on appropriate guidelines for amending or revising the legal provisions on these aspects.

4. Most of the countries have legal provisions that control alcohol advertising. Their enforcement has not been evaluated.

   Recommendation: Programs for the control of alcohol advertising should be evaluated.

5. During the survey, no laws or regulations were encountered enabling the mass media to be used to explain the adverse health effects of alcohol use.

   Recommendation: The advisability of proposing laws that will facilitate health promotion through publicity on the adverse aspects of alcohol consumption should be examined. This legislation should provide the necessary resources for ensuring that the quality and presentation of the messages is such that they can compete with commercial advertising.



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6. The classification of alcoholic beverages according to their alcohol content is sometimes rigid. In all the countries, the range of the alcohol contents defined by law is similar.

   Recommendation: The possibility of reducing the alcoholic strength of the beverages should be studied.

7. In most of the countries, the quality control of alcoholic beverages, whether produced legally, smuggled, or imported, is not the responsibility of the health authorities. The purpose of quality control is to determine the amount of the pertinent tax rather than to protect the consumer.

   Recommendation: The participation of the health authorities in the quality control of national or imported beverages should be better defined.

8. The laws and regulations reviewed do not give the health authorities control of the health aspects of the distribution of alcoholic beverages and derivatives or of the enforcement of the provisions relating to their sale (location, restrictions for reasons of health, etc.).

   Recommendation: The health authorities should study and propose legal means that would enable them to participate in the control of certain health aspects that are not covered in the distribution and sale of alcoholic beverages.

9. National statutes do not define the role of the health authorities in programs for the prevention of traffic accidents due to alcohol use. Frequently, no resources are allocated to these programs.

   Recommendation: The countries that have not already done so should study and clearly define the role of the health team in programs for the prevention of traffic accidents associated with the use of alcohol.

10. Most of the countries do not have any legal rules permitting the conduct of education programs on the risks of alcohol use in the formal education system.

    Recommendation: The countries that have not already done so should review their legislation with a view to the incorporation of a health education program on the risks caused by alcohol consumption in the formal education system.

11. The laws dealing with problems caused by the use of alcohol in labor, penal, civil and other legal areas have not been updated and omit aspects of the problem.



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Recommendation: Some countries should review the provisions on problems caused by the consumption of alcohol in labor, penal, civil and other legal fields.

12. In many countries the alcoholism laws are not consistent with present scientific knowledge.

Recommendation: The legislation on alcoholism should be updated. For that purpose, cooperation between the countries and/or technical advisory services by PAHO/WHO and other international agencies would be advisable.

13. During the survey no legal provisions regulating the coordination of the activities of the various government agencies dealing with problems due to alcohol use were encountered.

Recommendation: Strategies should be studied for proposing legal provisions on the coordination of the various government agencies dealing with problems due to alcohol use should be studied.

## Chapter Notes and References

### The Impact of Prevention Legislation: An Examination of Research Findings

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# APPENDIX A

## CONSENSUS VIEWS ON DEVELOPMENT OF ALCOHOL POLICIES

As noted in the Background and Overview of the Proceedings, the following statement of consensus views is the product of a deliberative process that began the last morning of the workshop. At that time, participants met in three small groups to review a draft statement prepared the previous evening by the workshop rapporteur. The draft presented the rapporteur's impression of the consensus that emerged among the participants during the first two days regarding current understandings about alcohol-related problems and prevention of those problems, particularly legislatively-based approaches to prevention. The draft was based on the studies and other empirical evidence contained in the papers commissioned for the workshop and the plenary discussions centering on, but not restricted to, those papers during the first two days. In reviewing the draft, each of the small groups suggested changes, deletions, additions and revisions in the draft to more accurately reflect their own understandings. The chairmen of the small groups reported these reactions at the final plenary session of the workshop and shortly thereafter submitted written reports to the IOM staff.

Based on those comments, the IOM staff redrafted the statement of the consensus views and circulated it to the Advisory Committee members for final review. Their comments were incorporated into a final statement that was delivered on April 14 to the Office of International Health, (OIH), U.S. Department of Health and Human Services, for its use in preparation for the World Health Assembly technical discussions on alcohol in May 1982. It was emphasized that the statement comprised a perceived consensus of the majority of the participants, not necessarily the views of each and every one, inasmuch as time had not permitted a complete distribution to all participants for review.

In early May the statement as delivered to OIH was sent to all other workshop participants listed in Appendix B, with a request that they review it and send back any qualifying or dissenting views. Several responses were helpful in further clarifying the statement, although its basic content did not change. Two non-consensus views are reprinted in their entirety following the



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consensus statements. All other participants accepted the statement as distributed to them. The consensus statement that appears next thus reflects, with two exceptions, the views of all participants.

It must be emphasized again that the views expressed herein reflect a consensus of the workshop participants in their individual capacity. They do not represent the position of any government or country of a participant, the Institute of Medicine, the National Academy of Sciences, or the Pan American Health Organization.

1. IN THE COUNTRIES OF THE AMERICAS, THE MAJOR NEGLECTED BURDEN TO SOCIETY OF ALCOHOL CONSUMPTION IS THE HEALTH, ECONOMIC, AND SOCIAL COST OF PROBLEMS ASSOCIATED WITH EPISODIC INTOXICATION.

- Most societies have integrated patterns of alcohol use into their social and cultural norms of behavior. Episodic intoxication, which may be integrated into those norms, creates very serious and costly problems and burdens for the individual family and society.

  Whether or not associated with chronic heavy drinking, episodic intoxication is related directly to accidents, particularly motor vehicle accidents, with premature death or disabling injury both for the intoxicated party and others affected by the accident; violent and/or criminal behavior; family disruption; child neglect; and impairment of work capacity and attendant loss of productive capacity. Alcohol also has been linked to fetal damage when drinking occurs in relation to pregnancy. Chronic heavy drinking, in which intoxication occurs more frequently, also carries a high risk of long term medical consequences for the individual, both physical (e.g., cirrhosis of the liver and susceptibility to cancer) and psychological (e.g., dependency or loss of control), which in turn can cause further physical and mental disorders and suicide.

  In addition to loss of life and well-being to individuals and families, the burden to society of episodic intoxication and chronic heavy drinking is substantial in lost contributions to economic productivity and social development, as well as in the use of scarce resources for restorative and long term health care, and for rehabilitative social services.



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- o Each country of the Americas now needs to assess more adequately the specific nature and extent of the burden to each society of the full range of alcohol-related problems. Such an effort would include improved public record-keeping and reporting systems of alcohol-related problems, epidemiological studies, and targeted case studies. Research on alcohol-related problems should be conducted in the context of customary and normative drinking behavior in each society.

2. THE PUBLIC HEALTH AND HEALTH SCIENCES COMMUNITIES IN MOST OF THE COUNTRIES OF THE AMERICAS, WHILE CONTINUING TO IMPROVE TREATMENT OF ALCOHOLISM IN INDIVIDUALS, SHOULD DEVELOP GREATER INTEREST IN GROUP-ORIENTED MEASURES AIMED AT THE PREVENTION OF ALCOHOL-RELATED PROBLEMS.

- o Building on the increased flow of information and the results of studies identified in Item 1 preceding, nations in the Americas can target policy-oriented research and demonstration projects on prevention efforts. As part of these projects, empirical evaluation should focus on both intended effects and "side" effects of particular prevention strategies.

- o A substantial accumulation of alcohol legislation in many countries of the Americas appears to be unknown to present day policymakers and little enforced. There is a need for historical research on alcohol-related legislation, including the reasons for its enactment, in order to identify legislative efforts that have been effective or ineffective, or that have produced effects paradoxical to those that were intended. Such research could suggest future legislative action, as well as identify existing laws or rules that might be enforced as part of a prevention program.

3. AVAILABLE EMPIRICAL EVIDENCE SUGGESTS THAT A NUMBER OF PREVENTION-ORIENTED, MOSTLY LEGISLATIVELY BASED POLICIES CAN REDUCE THE BURDEN OF ALCOHOL-RELATED PROBLEMS.

- o Caution in Generalizing. Studies on the effects of prevention-oriented public policies are limited in number and have been done largely in a few industrialized countries. For these reasons, generalizations must be cautious.

- o Per capita Consumption. International experience suggests that the relationship between the growth of per capita consumption and the rate of alcohol-related problems cannot be ignored. Increases in per capita consumption of alcohol



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are associated with increased frequency of episodic intoxication and/or incidence of chronic heavy drinking, and these result in increases in at least some varieties of alcohol-related problems.

- Price to Consumer. Alcoholic beverages, like other commodities, are price-sensitive; significant increases in the real cost of alcohol, via taxation or related policies, reduce average per capita consumption. In many countries, the real cost of alcohol to consumers has been dropping because tax rates have not been adjusted to reflect inflation.

- Alcohol Availability. While minor reductions in the number of sales outlets or closing hours do not appear to measurably affect consumption, major changes have had a considerable effect on per capita consumption. In addition, prohibiting access to alcohol for specific categories of the population (e.g., significantly raising the legal drinking age) demonstratively reduces alcohol-related problems, such as alcohol- related traffic accidents, among the categories of people affected.

- Drunk-Driving Laws. Short-run reductions in harmful consequences of driving while intoxicated typically occur following the introduction of new, stringently enforced and well-publicized laws; longer-term effects appear to depend on continuation of intense enforcement and publicity.

- Environmental Interventions. Policies that result in reducing the problem consequences of alcohol-related behavior by reducing environmental risk are a promising category of interventions. Examples of such policies include increased use of automobile seat belts to reduce passenger/driver fatalities in motor vehicle accidents, and the use of smoke detectors to reduce deaths and disabilities from accidental fires.

- Advertising and Education. Evidence is not conclusive about the impact of advertising on drinking practices and problems, nor about the use of the schools and mass media in educational efforts to modify present and future deleterious drinking behavior; additional research needs to be done on these prevention strategies.



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4. **POLICY INITIATIVES TOWARD PREVENTING ALCOHOL-RELATED PROBLEMS SHOULD INTEGRATE PUBLIC HEALTH SECTOR BENEFITS AND COSTS WITH THOSE RELATED TO ECONOMIC DEVELOPMENT AND VALUES IMPORTANT TO THE SOCIAL, CULTURAL, AND POLITICAL FABRIC OF THE SOCIETY.**

- In countries where alcohol consumption is permitted, its production and/or consumption is a source of tax revenue and employment. In countries where tourism is either an existing or developing industry, alcoholic beverages often contribute a significant portion of associated revenues. With respect to individual and social use of alcohol, the obvious functions that have supported drinking customs throughout history are those pharmacological effects accompanying moderate drinking, such as relaxation, a sense of well-being, and mild tranquilization. All such factors, particularly those concerning increased revenue and employment, comprise significant elements in a society's approach to policy formulation on alcohol-related problems.

- In most countries there is a distressing lack of communication in alcohol policy formulation between persons concerned with the public health aspects of those policies and others concerned with the revenue and employment-producing role of alcohol. To address this problem, the public health sector in each country needs to begin a dialogue with other ministries and institutes of finance, commerce, justice, transportation and law enforcement. The fact that alcohol consumption patterns and levels are relevant to rates of alcohol problems means that alcohol production and availability must be treated legislatively and politically as a public health concern, as well as a fiscal and economic concern.

- There are significant international incentives and constraints, both global and regional, influencing national alcohol policy formulation. In each country, the views of entities concerned with trade agreements and controls on alcoholic-beverage-producing industries need to be considered in discussions of public health concerns related to alcohol consumption. Such discussions might be organized on a regional basis, with collaborative efforts among countries in appropriate geographic configurations. WHO and its regional offices, including PAHO, could have an important communication and coordination role to play in furthering international collaborative research.



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5. WHETHER OR NOT LEGISLATIVELY BASED, IMPLEMENTATION OF EFFECTIVE POLICIES FOR PREVENTING ALCOHOL-RELATED PROBLEMS MUST BEGIN WITH CREATION OF PUBLIC AND GOVERNMENTAL AWARE- NESS OF THE ENORMOUS BURDEN OF THOSE PROBLEMS TO THE SOCIETY.

   o Results of improved record-keeping and reporting systems and expanded research, noted in Item 1 preceding, can contribute significantly to the development of a successful public awareness strategy. Such a strategy will have to be aimed at showing that problems related to episodic intoxication, whether or not related to chronic heavy drinking, extend beyond the problems of alcoholism, are just as disturbing to the individuals involved, their families, and society, and therefore merit intensified national attention and action.

   o Prevention policy formulation in the alcohol area may focus primarily on public sector legislation and actions at various levels of government. In many countries, however, policy formulation also needs to involve critical private sector institutions and groups such as voluntary organizations, labor and industry, and religious, educational, social, and community organizations.

6. THE EXPERIENCE OF ONE COUNTRY FREQUENTLY CAN BE HELPFUL TO OTHER COUNTRIES IN DEVELOPING ALCOHOL POLICIES. IN THE FINAL ANALYSIS, HOWEVER, EACH COUNTRY'S PUBLIC AWARENESS STRATEGIES AND PREVENTION PROGRAMS REGARDING ALCOHOL-RELATED PROBLEMS MUST BE SHAPED BY ITS OWN UNIQUE SOCIAL, CULTURAL, POLITICAL AND ECONOMIC SITUATIONS.



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## Alternative Non-Consensus Views

Each participant was given the opportunity to submit for publication any disagreements with the consensus statements. Two such statements were received.

Harry Gene Levine: Like some other recent students of the alcohol field, I am interested in the way knowledge and facts are produced, promulgated and legitimized (See Gusfield 1981, Weiner 1981). Among the questions one can ask are: Why these facts and not other facts? Why is knowledge presented in this form? Why are these points singled out and emphasized and not others? Why, indeed, is there a "consensus" statement at all?

It is not clear what this is a "consensus" of. Is this a consensus of data and conclusions of the papers presented at the conference, or of all the statements made? Or is this a consensus of the general opinions of the alcohol and public health professionals assembled at the conference regardless of whether anything was said on the subject at the conference or not?

The first point of the document makes a number of statements for which, in my opinion, little or no evidence was presented at the conference for most of the countries of the Americas. There was virtually no evidence presented on the relationship of alcohol to "violent and/or criminal behavior; family disruption; child neglect; and impairment of work capacity and attendant loss of productive capacity....[and] fetal damage." There was no evidence to support the statement that the "burden to society of episodic intoxication and chronic heavy drinking is substantial in lost contributions to economic productivity and social development." (On this last point my paper drew the opposite conclusion). Finally, there was no evidence to support the statement that the countries of the Americas experience substantial losses because of the "use of scarce resources for restorative and long-term health care, and for rehabilitative social services" for alcohol problems. Indeed, the overwhelming thrust of the discussion at the conference was that there is little data available on the relationship of alcohol to social problems for most of the countries of the Americas.

The consensus statement also gives the impression that chronic heavy drinking and periodic intoxication are responsible for, or the cause of, these problems and "enormous burdens" (or at least a significant percentage of them). And it gives the impression that



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by doing something to prevent alcohol problems -- primarily by significantly raising price and reducing availability -- a country can save considerable sums of money and reduce a number of major social problems. This would truly be a wonderful thing if it were true. Unfortunately, it is not. Although this type of argument is often used to publicize alcohol problems, and to secure more funding for research, treatment, and prevention, there is no empirical data, in my opinion, to support the statement that alcohol consumption directly causes these problems.

The consensus statement recognizes this implicitly by using a terminology, common in the alcohol field, to suggest causality without saying so directly. Thus the statement points out that intoxication and heavy drinking are "associated with," "linked to," and "directly related to" the various problems and economic costs. While the tone and style of these statements sound substantial and authoritative, none of the phrases means that drinking or intoxication causes the problems.

Indeed, the terminology of "association" and "relation" leaves the distinct possibility that the causal relationship could go the other way -- that various economic and social problems cause harmful drinking and intoxication. Further, what is left off the list of "alcohol-related problems" is just as interesting as what is included. Left off are: poverty, inadequate sanitation, poor diet, unemployment, infant mortality, inadequate housing, war, urban slums, oppressive work conditions, recessions and depressions, lack of medical care, and so on. Like the other problems, all of these could be responsible for heavy drinking and intoxication as much as the reverse. However, there was no more evidence presented for these alcohol-related problems than for the others.

I do not mean to imply that the consensus statement is the result of intentional falsification. On the contrary, this is the work of careful and cautious people using the standard rhetorical format and language of the alcohol field; certain problems are "naturally" linked with alcohol, and others are not. Thus, although there was little data, in my opinion, for most of the claims made under the first point of the consensus statement, they could in good conscience be included because "everybody" knows they are true. And this consensus statement adds its own bit to what "everybody knows."

The promise of the consensus statement is that by following what are called "group-oriented prevention measures" -- primarily raising prices and reducing availability -- major social problems of the Americas will be reduced. I think this offers a false solution to real social and economic problems. Even if, for example, the alcohol consumption of the countries of the Americas was significantly reduced, I do not think there would be significant



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reductions in violent or criminal behavior, family disruptions, child neglect, or an increase in overall economic productivity. During the 1920s in the United States, for example when alcohol consumption dropped very significantly, there was no reduction in major social and economic problems. Indeed, under Prohibition the U.S. experienced the growth of organized crime, the youth rebellion of the flapper era, and the worst depression in America history.

Like automobile safety design, air and water pollution, infant mortality, cigarette smoking, toxic wastes and environmental hazards, alcohol consumption is a legitimate and important public health concern. However, overselling the evil consequences of alcohol does not help public health. Further, although reducing the incidence of public health problems brings material and quality of life improvements for many people, it will not usually produce societal-level economic benefits. Designing safer automobiles and reducing industrial pollution, for example, save lives but cost money. Similarly, reducing alcohol consumption will not produce the social and economic bargin this consensus statement promises.

Marcelo Selowsky: My first objection to the statement of consensus views stems from the fact that the workshop concentrated much too heavily on legislative controls and prohibition on the supply (availability) of alcohol. The fact that people are able to substitute the time and site of purchase, as well as to switch to other sources of alcohol (i.e., informal or domestic), was thus not carefully enough considered. This is particularly important in rural areas of developing countries. Also, it is not clear that from a broader welfare point of view, restrictions on the supply side make people happier (we are not interested in bringing down alcohol consumption per se but in increased welfare). What other behavioral changes can we expect by restricting the supply of alcoholic beverages? The alternative intervention, on the demand side, which I believe to be more consistent with these broader objectives, should have been given equal importance.

Second, I don't think the empirical evidence on the effectiveness of supply side versus demand side interventions is strong enough to make some of the statements included in the consensus statements.

Third, the role of taxation is discussed with a very narrow objective, namely, again, to bring down the consumption of alcohol. If the effect of alcohol taxation on low income groups reduces their



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net real income (the income left to buy other commodities), then the purchase of other commodities, such as food, medicine, and, clothing, will go down, particularly if their demand for alcohol is inelastic. How do we take this into account? Again, it is the result of looking at a very narrow objective -- consumption of alcohol -- instead of at the general welfare of those income groups.

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# APPENDIX B

## WORKSHOP PARTICIPANTS, GUEST SPEAKERS, AND INVITED OBSERVERS

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Legislative Approaches to Prevention of Alcohol-Related Problems: An Inter-American Workshop
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