



Published in final edited form as:

Contemp Drug Probl. 2009 April 1; 36(1): 1.

Concern about family members' drinking and cultural consistency: A Multi-Country GENACIS Study

Hildigunnur Ólafsdóttir, Kirsimarja Raitasalo, Tom K. Greenfield, and Allaman Allamani

Abstract

The data analysed come from the GENACIS project (Gender, Alcohol and Culture: an International Study) and involve population surveys for 18 countries (total $N = 34,916$) from five WHO Regions: African (Nigeria and Uganda); Americas (Argentina, Costa Rica, Uruguay and United States); European (Czech Republic, Denmark, Finland, Germany, Hungary, Iceland, Spain, Sweden, and UK); South-East Asian (India, Sri Lanka); and Western Pacific (Japan). The paper studies gender and country differences in the relationship between social pressure to drink less experienced by individuals, considering seeking help for alcohol problems, and alcohol consumption and problem levels (AUDIT). In most countries for both men and women, informal control was applied most often by the spouse or partner, while reporting such controls from any source seemed more common in low- and middle-income countries. In all countries studied, men reported substantially more social control efforts than women. The hypothesis was not maintained that drinking control and help seeking was more common for heavier drinkers and those with more drinking-related harms. However, there appeared to be a relationship between a country's aggregate level of drinking and the extent to which social control efforts were reported. Higher correlations between drinking and problem levels on the one hand, and spouses' and other family members' concerns on the other, may be suggestive of a cultural consistency in societal responses to drinking and alcohol-related problems.

Keywords

Social pressure; informal controls; alcohol consumption; alcohol problems; help-seeking

Introduction

Results from many studies have indicated that social pressure can influence drinkers to drink less, quit drinking, or to consider seeking help. Attempts have been made to study how various types of social pressure are related to each other and to such outcomes but studies of social pressure and help-seeking have mainly been carried out in industrialized countries (Holmila, 1987; 1988; Holmila, Mustonen & Rannik, 1990; Room, Greenfield & Weisner, 1991). These studies have shown that the family is an important locus of control, and a central factor in preventing harms from alcohol consumption or inducing help seeking. Family and friendship networks may be expected to be an even more important influence in resource-poor and middle-income countries than in richer countries, since where societal resources are scarce, the capacity of the individual drinker to fulfil family responsibility is relatively more crucial for its wellbeing (Room et al., 2002). In such countries, if the close network fails, there may be few other options for help and support such as access to organized mutual-help groups and professionals, given that in general, treatment options are less developed in poor than in richer countries.

In an analysis of 1984 U.S. National Alcohol Survey (NAS) data, Room (1989) found that comments and suggestions from family members and friends about drinking less or acting differently when drinking were quite common. This study showed that the control was mainly

from women to men and from the older to the younger generation. A U.S. trend study covering the decade of the 1980s found that by 1990 over one-third of all current drinkers had been pressured sometime in their life by at least one relative; 17.5 percent experienced such pressure from relatives (18.5% from anyone) in the last 12 months (Room et al., 1991). Similarly, another study carried out among Ontario adults showed that about 35 percent had within the last year said something to a friend or relative about their drinking or suggested they cut down (Room, Bondy & Ferris, 1996). Parents' influence on their adolescent children has been studied from the perspective of parental style (Miller & Plant, 2003; Adalbjarnardottir & Hafsteinsson, 2001). Children's role in parents' recovery process has been found to be positive for outcome after treatment but otherwise the role of children in trying to control their parents' drinking has received little attention (Koski-Jännes, 1991).

Spouses' attempts to control each other's drinking have been suggested as an important area for further study because couple relationships are characterized by continuity and complexity (Selin, 2004). The intensity of attempts to control other people's drinking can vary from simply giving advice to drink less, or making a mild comment on improper behaviour, to quarrels or threats to leave the spouse (Raitasalo, 2003). In most studies on social drinking control, spouses' efforts to influence each other usually refer to wives. The majority of drinkers are men and men's proportion of total alcohol consumption is large, varying from about 70 to 80% in the Western countries and being even greater in poor and middle income countries (Babor et al., 2003, Mäkelä, et al., 2006). Consequently, women more often become victims of men's excessive drinking than men of women's drinking, although problematic drinking causes difficulties for both men and women. Accordingly, men have been found to experience more social drinking pressure than women. In studies on social pressure, women's control of their husbands' drinking has been reported to be an integrated part of family life (Holmila, 1987; 1988; Holmila, Mustonen & Rannik 1990; Room et al., 1991). Historically, in the individually oriented Swedish Bratt-System this kind of female control was institutionalized, and the authorities sometimes collaborated with married women in administering the "ration-books" in order to control their husbands' drinking (Järvinen, 1991; Bruun, 1985).

Societal coercion to treatment is not unknown today though often restricted to such particular societal agents such as, for example, probation officers via the criminal justice system in the U.S. (Polcin & Greenfield, 2003). However, those receiving treatment report that all kinds of people in a range of relationships have confronted them about their drinking (Polcin & Greenfield, 2006; Polcin, Galloway & Greenfield, 2006). Polcin et al. (2006) have developed an instrument called the "Alcohol and Drug Confrontation Scale" (ACDS) which is designed to measure the quantity and frequency of such confrontations from various sources as well as perceptions of respondents about their relationship with confronters. Interestingly, spouses/significant others (56% of those with such relationship) and friends (60%) play a dominant role. Those in treatment who were more often confronted reported having more positive relationships with confronters than those receiving less confrontation. Therefore, although some widely used alcoholism screeners such as the CAGE (Ewing, 1998) include defining items with a negative valence like: "Have people ever *annoyed* you by criticizing your drinking?" the evidence suggests that concerted social pressure is not necessarily negatively received, at least by those actually induced to seek help.

Social harms associated with drinking are not only troublesome for the family but may also worry friends. Friendship involving both criticism and support has been found to be of importance in addiction-related self-help groups (Humphreys, 2004). Criticism of a friend's drinking can cause the loss of a friend but may also strengthen the friendship when interference and social support are appreciated and interpreted as caring mechanisms (Polcin & Greenfield, 2006). While various motives may lie behind friends' involvement in each other's drinking, productivity, reducing work-related injuries or avoiding accidents (particularly in

transportation-related occupations), and “maintaining a healthy workplace” are generally those of employers in their attempts to intervene in their employees' drinking. Workplace control can either be incorporated in general health programmes, or organized in specific substance abuse programs. In many rich countries, particular employee assistance programmes (Carson & Balkin, 1992) have been developed and their advocates recommend an individual approach rather than relying on drug testing (Bennett & Lehman 2003). Research on the scope and efficacy of such programmes has been limited to particular groups, but few general population studies have included data on how someone at work tries to influence his or her co-workers' drinking. In the Scandinavian Drinking Survey (including Finland, Iceland, Norway and Sweden) the proportion of the drinkers that had been criticized for their drinking by someone at work varied from zero to four per cent in the four countries that were surveyed. Workplace criticism was found to be equally as rare as having been arrested for public drinking by the police (Hauge & Irgens-Jensen, 1987). With advances in technology and requirements of increased productivity, workplace surveillance has increased, which has created new possibilities for control.

Another factor of relevance for social drinking control is the development of health promotion programmes in many workplaces. Such programmes may be either general or specific. Brief intervention programs are designed to motivate high-risk drinkers to moderate their alcohol consumption. As early intervention programmes are low-cost programmes, they have been implemented both in developed and poor and middle income countries (Babor et al., 2003).

Room et al. (1991) found an increasing percentage of Americans who had reported efforts to control each other's drinking in US National Alcohol Surveys carried out from 1979 to 1990. During this period alcohol consumption levels in the United States were falling and Room et al. (1991) interpreted the social control trend finding as an indication of the percolation of a “new temperance” consciousness into family and friendships. General changes in the society's attitudes to alcohol are, therefore, likely to shape individual responses to other people's drinking. In societies going through rapid development, like many of the countries in Asia and Africa, conflicts are likely to arise in families facing new drinking habits and new problems. How such strain results in social pressure and help-seeking may be related to individual reactions to criticism, how the person under pressure sees his or her problems, and the willingness to engage in self-change, whether through formal or informal means.

The aim of this paper is to study the relationship between social pressure experienced by individuals, their considering seeking help for alcohol problems, and the same individuals' alcohol consumption and problem levels. Data from an international project, Gender, Alcohol and Culture: An International Study (GENACIS), make it possible to examine these relationships in many general populations by gender and across countries. The paper is concerned with the order and patterning of different sources of social drinking control. The sources of influence or control have been divided into six categories: a partner (or spouse), a child, a family member, a friend, someone at work/school, and a doctor (or health worker); these sources and their interrelationships are studied within each country. We also examine how social drinking control is related to considering seeking help for alcohol problems. Furthermore, we explore to what extent the social intervention of family and friends, someone at work, or health professionals is related to the volume of drinking and problem indicators as measured by the AUDIT (Saunders, Aasland, Babor, de la Fuente, & Grant, 1993b).

Data and Methodology

Sample

The data for this study are part of the GENACIS project and have been gathered under the leadership of Sharon Wilsnack in work growing out of a Kettil Bruun Society Work Group

with support from the U.S. National Institute on Alcohol Abuse and Alcoholism (see Vogeltanz-Holm et al., 2004), the EU (see Ahlström, Bloomfield, Knibbe et al., 2001), WHO (see Obot & Room, 2005), PAHO and other institutions. For this particular study we had data from 18 countries and selected current (past 12 months) drinkers aged 18 and over only. The resultant total sample size was 34,916 (see Table 1). By design, the countries (or in some cases regions representing countries) to be included in the study represent very diverse societies regarding economic development, social structure, and status of gender, family structures, traditions for mutual help, and social and health systems. There are also substantial variations between these societies in the per capita consumption of alcohol, drinking patterns and the level of alcohol-related problems. The ratio between men's and women's drinking at all, and the level of drinking among those who drink, vary considerably across the surveyed countries or states which is particularly important with respect to the GENACIS focus on gender and culture. Among the study sites are rich and poor, as well as middle income countries from different parts of the globe. The African region is represented by two under-resourced countries, Nigeria and Uganda. The diversity of the Region of the Americas is reflected in Argentina, Costa Rica, Uruguay and the United States. As Europe has the highest alcohol consumption, the highest prevalence of alcohol-related problems and the most developed social and health care systems, it is important that as many as nine European countries are included in the study, The Czech Republic, Denmark, Finland, Germany, Hungary, Iceland, Spain, Sweden and, the United Kingdom. India and Sri Lanka represent the low alcohol consumption areas of the South-East Asian Region, but it should be noted that though in these areas fewer people may be drinkers (especially for the women), those (primarily men) who do drink often drink quite heavily. As an example from the Western Pacific Region, the study includes Japan, a highly developed country with a strong collectivism and a noteworthy male drinking culture. We regret that data for Canada and numerous other more recently collected GENACIS datasets were not yet available for this analysis.

It is important at the outset to note that there are many methodological differences in the surveys included here. The modality of data collection and the sampling approach varies across the surveys. In particular, some countries, particularly those in the poor and middle income world, are not represented by nationally representative samples which would have been beyond the resources available. In these cases a better sample was obtained of a representative region or of several regions, for example representing ethnic and cultural diversity (e.g., Nigeria and Uganda) or both rural and urban populations (as in India, represented by the Bangalore area of the State of Karnataka). Most of these surveys were conducted face-to-face. In the developed country studies it was often possible to select a representative sample of the nation such as, for example, the random digit dialing computer-assisted telephone interview survey conducted in the US in 2000 (the tenth US National Alcohol Survey). All surveys are not, therefore, consistently representative of the countries listed but do generally reflect the variability seen across countries very well. For conciseness, we present the data in tables designated simply by country. Table 1 presents some details of the surveys; for additional methodological information about the surveys, see Wilsnack et al. (2005).

Variables

Attempts of control of drinking reported by the respondent were elicited by a question “During the last twelve months, has any of the following persons attempted to influence your drinking so that you would drink less or less often?” followed a list of sources: spouse/partner, child (ren) female/male family member, female/male friend, someone at work or school, a doctor or a health worker. Female and male family members were combined to one category, as well as female and male friends, because in some countries they were not asked separately. The response options for each were “no”, “yes, once or twice” and “yes, three or more times”. There were some variation between countries in the formulation of the question and thus some

recoding had to be done in order to obtain as much comparability between countries as possible. As a result, the response options were combined into two categories, “yes” and “no”.

Help seeking was assessed by a question “Did you ever consider seeking help for your own drinking or alcohol-related problems?” The response options were “yes” or “no”. Again, some recoding had to be done because of the variation in question formulation between countries.

Volume of drinking was measured by beverage-specific quantity-frequency questions. The frequency and quantity of drinking beer, wine, spirits or other alcoholic beverages were asked in each country and from these the total annual volume of drinking in the metric of litres of ethanol was calculated.

Drinking related harms were measured by a score constructed of the AUDIT questions (Saunders et al. 1993b) with the drinking-related questions omitted (quantity and frequency of drinking and frequency of drinking to intoxication). This was because the volume of drinking was used separately in the analyses. (See also Knibbe et al., 2005). The 5-item problem-focused AUDIT is termed here AUDIT-5. The mean volumes of drinking and the mean AUDIT-5 scores are presented in Table 1.

Analyses

The analyses were carried out by using SAS 9.1 for Windows. All analyses were done separately for men and women. Only drinkers (those who had consumed any alcohol during the last 12 months) who were over 18 years of age were included in the analysis. The upper age limits varied but in most countries this was 65 years of age. It was not possible to separate those respondents who had or did not have the specific persons who would have controlled their drinking within their social milieu (e.g., whether or not they had a spouse or partner). So all respondents, regardless of whether they had these family members, friends or work mates, were included in the analysis. The correlations of drinking control and help-seeking questions with the volume of drinking and the harm score were calculated by using the Spearman's rho. The correlation coefficients were not compared across countries and across genders. Instead, to be conservative, they were compared within countries and within genders because the level of the coefficient's significance depends on the sample size. Smaller *ns* require that the coefficients be larger to obtain the same significance level than would be the case with a combined sample having much larger *ns*. Rough between-country comparisons of relative significance levels may still be made, if some care is taken to consider surveys' varying sample sizes (Sample sizes of men and women drinkers are given in Table 1).

Results

In most countries, the controller was most often reported to be the spouse or partner, both among men and women; however, there was more variation among women. Overall in all studied countries, men's drinking was frequently more controlled by others than was women's (See Table 2).

Strikingly, drinking control from any source, both among men and women seems to be most common in the low and middle income countries: Nigeria, Uganda, Costa Rica, Sri Lanka and India (see Table 2). Uruguay is an exception in this respect, perhaps because it is a culture with European-derived wine-drinking culture. Other controllers than spouse or partner, were most likely found among family members, but more seldom among children and friends. Only exceptionally would someone at work or school try to influence the drinker with the exception of Uganda and male drinkers in India.

That anyone has attempted to influence the respondents' drinking is most common for men in Sri Lanka, Uganda, Japan and India and in Uganda for women. Among European countries, drinking control seems to be most common in the Czech Republic, Hungary and the UK, which may be a reflection of heavy drinking habits in these countries (see Table 3). Doctors or health workers are those who have most often attempted to influence the respondents' drinking in India and Uganda (men's drinking also in Japan).

Considering help-seeking also appears to be the most prevalent for both men and women in the African countries (Uganda and Nigeria), and is at intermediate levels for men in other low and middle income countries (India, Sri Lanka and Costa Rica). Help seeking is also not uncommon, especially for men, in the US (See Table 4). Argentina and Uruguay, both drinking cultures, are somewhat different from other poor and middle income countries in this respect and are more like the European countries and Japan where help-seeking is rare.

The Spearman's correlation coefficients between volume and the AUDIT-5 score in turn, and sources of control and help seeking are given in tables 5 and 6, respectively. The coefficients can be interpreted as indicators of the extent to which the efforts to control are associated with alcohol intake (Table 5) and problem levels (Table 6). In general, it is natural that the higher the coefficient is, the more probable it is that others are reacting not only to drinking at all, but to the amount of drinking (Table 5) or the problems associated with heavy drinking (Table 6).

We hypothesized that reporting drinking control efforts and considering help-seeking would be the more common the more one drinks and the more there are drinking-related harms. These hypotheses were not maintained for all countries. While in Nigeria, Uganda and India the mean volume of drinking as well as the mean AUDIT-5 scores were high, in Sri Lanka and Costa Rica they were not.

With regard to specific sources of control, the correlation coefficients with both the level of drinking and the AUDIT-5 score are highest with control from the spouse, implying that the most likely person to attempt to control men's heavier and problem drinking in most of the countries is the spouse. This is true especially for men, likely because their drinking is heavier on average than women's in all countries. There are, however, some exceptions; in Iceland, seeking help has the highest correlation with the level of drinking. This may be explained by a large and accessible treatment system and a high number of AA groups. In Denmark, Costa Rica and Uruguay, another family member, and in India, children, are more often reported to be active controllers than spouses. Among women there is more between-country variation than among men.

There are fewer significant correlations between level of drinking and drinking control from other people among women than among men. For correlations with the AUDIT score there is not such an evident difference between men and women. This can be interpreted as implying that women's drinking is controlled independent of their drinking level but men are more prone to be controlled when they drink greater amounts. However, when tangible drinking-related harms occur (higher AUDIT score), both genders tend to report more efforts at controlling their drinking.

Discussion

In considering the consumption volume levels for men and women given in Table 1 and the social control efforts shown in Table 2, there appears to be a relationship between a given country's level of drinking and the extent to which social control efforts are reported. For example, in the two African countries included where men's and even women's alcohol intake is considerable, we observe also a large number of reported social control efforts of both men and women. With regard to gender, the South-East Asian surveys (India represented by

Bangalore in Karnataka State, and Sri Lanka) show a different picture with clear gender differences. In both places, large subsamples of men drink and drink heavily while many fewer women than men drink, especially in Sri Lanka. However, in the Indian survey in an area with many young “high tech” workers of both genders, reasonably large numbers of women do drink and when they do, they consume a lot. The efforts at social control are nevertheless greater for the men than the women in the Bangalore area survey as well as in Sri Lanka. However, although the rates of reported social control efforts are so much higher for men, they still are relatively high for the women in both these South-East Asian surveys, excepting control efforts from children in Sri Lanka, and to some degree from co-workers, who appear a bit less reactive to women's drinking in Bangalore than in Sri Lanka, perhaps because among women workers in what has been described as India's “Silicone Valley” drinking is now more socially accepted. In both cases, though, women workers receive relatively low levels of social control attempts from co-workers compared to the other types of potential intervener.

Doctors/health workers play a particularly strong role in drinking control efforts in Uganda and India, and to a lesser extent in Japan and the Czech Republic. The roles of doctors and health workers are important to examine and interpret in relation to drinking levels given in Table 1, and they are particularly important for the health sector. In countries with high drinking levels and problem indicators such as in Uganda, the Czech Republic, India and Japan doctors and health workers are among those most likely to intervene. In many countries doctors and health care workers often have competing demands. In addition, lack of training and continuing education in relation to health and social harms from drinking, that is in knowing what levels of drinking represent significant risks for morbidity, mortality and injuries associated with heavy drinking, for example, may also be among the impediments to harnessing these unused possibilities and thereby improving the quality of such medical help and advice as might be offered.

Higher correlations between drinking and problem levels, on the one hand, and spouses' and other family members' concerns on the other, may be suggestive of a cultural consistency in societal responses to drinking and alcohol-related problems. In contrast, in societies where there is little cultural agreement about what constitutes heavy drinking or alcohol problems, one would anticipate lower correlations (see Tables 5 and 6). This could also be expected in countries where alcohol consumption has been low but is rapidly rising. Similarly, with regard to help-seeking inclinations, if the survey respondents in a given country generally share notions of what levels of drinking and what kinds of problems should lead one to consider seeking help, the correlations with help-seeking will be higher than in places where perhaps other factors (including availability) might influence help-seeking attempts. Of course the ranges of drinking and associated AUDIT problem scores, as well as the base rates of intervening and of considering help-seeking, will very much affect the correlations as well, as one sees in the case of the African countries for social control (but not as clearly for help-seeking) in Tables 5 and 6. In the US, consistent relationships between the drinking variables and both people who report that they are under pressure to drink less and respondents considering seeking help for problems may be influenced by common social understandings and the country's availability of treatment. These of course are hypothetical conclusions and would need to be tested and confirmed before one can have confidence in them.

Acknowledgments

The data used in this paper are from the project, Gender, Alcohol and Culture: An International Study (GENACIS). GENACIS is a collaborative international project affiliated with the Kettil Bruun Society for Social and Epidemiological Research on Alcohol and coordinated by GENACIS partners from the University of North Dakota, the University of Southern Denmark, the Charité University Medicine Berlin, the Pan American Health Organization, and the Swiss Institute for the Prevention of Alcohol and Drug Problems. Support for aspects of the project comes from the World Health Organization, the Quality of Life and Management of Living Resources Programme of the

European Commission (Concerted Action QL4-CT-2001-0196), the US National Institute on Alcohol Abuse and Alcoholism/National Institutes of Health (Grants R21 AA012941 and R01 AA015775), the German Federal Ministry of Health, the Pan American Health Organization, and Swiss national funds. Support for individual country surveys was provided by government agencies and other national sources. The study leaders and funding sources for data sets used in this paper are: *Argentina*: Myriam Munné, M.S., World Health Organization; *Costa Rica*: Julio Bejarano, M.Sc., World Health Organization; *Czech Republic*: Ladislav Csémy, Ph.D., Ministry of Health (Grant MZ 23752); *Denmark*: Kim Bloomfield, Dr.P.H., Sygekassernes Helsefond, Danish Medical Research Council; *Finland*: Pia Mäkelä, Ph.D., National Research and Development Centre for Welfare and Health (STAKES); *Germany*: Ludwig Kraus, Ph.D., German Federal Ministry of Health (BMGS) and in cooperation with the Institute for Therapy Research, Munich, Germany; *Hungary*: Zsuzsanna Elkes, Ph.D., Ministry of Youth and Sport; *Iceland*: Hildigunnur Ólafsdóttir, Ph.D., Alcohol and Drug Abuse Prevention Council, Public Health Institute of Iceland, Reykjavík, Iceland; *India*: Vivek Benegal, M.D., World Health Organization; *Japan*: Shinji Shimizu, Ph.D., Japan Society for the Promotion of Science (Grant 13410072); *Nigeria*: Akanidomo Ibanga, M.Sc., World Health Organization; *Spain*: Juan Carlos Valderrama, M.D., Dirección General de Atención a la Dependencia, Conselleria de Sanidad, Generalitat Valenciana; Comisionado do Plan de Galicia sobre Drogas, Conselleria de Sanidade, Xunta de Galicia; Dirección General de Drogodependencias y Servicios Sociales, Gobierno de Cantabria; *Sri Lanka*: Siri Hettige, Ph.D., World Health Organization; *Sweden*: Karin Helmersson Bergmark, Ph.D., Ministry for Social Affairs and Health, Sweden; *Uganda*: M. Nazarius Tumwesigye, Ph.D., World Health Organization; *United Kingdom*: Martin Plant, Ph.D., and Moira Plant, Ph.D., Alcohol Education and Research Council, European Forum for Responsible Drinking, University of the West of England, Bristol; *USA*: Thomas Greenfield, Ph.D., National Institute on Alcohol Abuse and Alcoholism/National Institutes of Health (Grant P50 AA05595); *Uruguay*: Raquel Magri, M.D., World Health Organization.

References

- Adalbjarnardóttir S, Hafsteinsson LG. Adolescents' perceived parenting styles and their substance use: Concurrent and longitudinal analyses. *Journal of Research on Adolescence* 2001;11(4):401–423.
- Ahlström S, Bloomfield K, Knibbe R, Allamani A, Choquet M, Cipriani F, Gmel G, Jacquat BJ, Kubicka L, Lecomte T, Metso L, Miller P, Plant M, Spak F. Gender differences in the drinking patterns in nine European countries: descriptive findings. *Substance Abuse* 2001;22(1):69–85. [PubMed: 12466670]
- Babor, TF.; Caetano, R.; Casswell, S.; Edwards, G.; Giesbrecht, NA.; Graham, K.; Grube, J.; Gruenewald, P.; Hill, L.; Holder, HD.; Homel, R.; Österberg, E.; Rehm, J.; Room, R.; Rossow, I. *Alcohol: No Ordinary Commodity Research and public policy*. Oxford University Press; New York, NY: 2003.
- Bennett, JB.; Lehman, WEK., editors. *Prevention workplace abuse: Beyond drug testing to wellness*. Washington, DC: American psychological Association; 2003.
- Bruun, K. Kön och klass (Gender and class). In: Bruun, K.; Frånberg, P., editors. *Den svenska supen: En historia om brännvin, Bratt och Byråkrati (Swedish drink. A story on boozing, Bratt and bureaucracy)*. Stockholm: Prisma; 1985. p. 298-317.
- Carson KD, Balkin DB. An employee assistance model of health care management for employees with alcohol-related problems. *Journal of Employment Counseling* 1992;29:146–56.
- Ewing JA. Screening for alcoholism using CAGE. Cut down, Annoyed, Guilty, Eye opener. *Journal of the American Medical Association* 1998;280:1904–1905. [PubMed: 9851461]
- Hauge R, Irgens-Jensen O. Alkoholen i Norden. En sammenlignende undersøkelse av bruk av alkohol, holdninger til alkohol og konsekvenser av alkoholbruk i Finland, Island, Norge og Sverige (Alcohol in the Nordic countries. A comparative study of use, attitudes and consequences in Finland, Iceland, Norway and Sweden). Appendix to Alcohol Policy - *Journal of Nordic Alcohol Research* 1987;4:1–56.
- Holmila M. Young families and alcohol use in Finland and the Soviet Union. *Contemporary Drug Problems* 1987;14:649–672.
- Holmila, M. *Wives, husbands and alcohol A study of informal drinking control within the family*. Vol. 36. Helsinki: Finnish Foundation for Alcohol Studies; 1988.
- Holmila M, Mustonen H, Rannik E. Alcohol use and its control in Finnish and Soviet marriages. *British Journal of Addictions* 1990;85(4):509–520.
- Humphreys, K. *Circles of Recovery Self-Help Organizations for Addictions*. Cambridge: Cambridge University Press; 2004.
- Järvinen M. The Controlled Controllers: Women, Men, and Alcohol. *Contemporary Drug Problems* 1991;18(3):389–406.

- Knibbe RA, Derickx M, Kuntsche S, Grittner U, Bloomfield K. A Comparison of the Alcohol Use Disorder Identification Test (AUDIT) in General Population Surveys in Nine European Countries. *Alcohol and Alcoholism* 2006;41:i19–i25.
- Koski-Jännes A. The Role of Children in the Recovery of Alcoholic Clients: Preliminary Observations. *Contemporary Drug Problems* 1991;18(4):629–643.
- Miller P, Plant M. Family, peer influence and substance use: Findings from a study of UK teenagers. *Journal of Substance Use* 2003;8(1):19–26.
- Mäkelä P, Gmel G, Grittner U, Kuendig H, Kuntsche S, Bloomfield K, Room R. Drinking Patterns and their Gender Difference in Europe. *Alcohol and Alcoholism* 2006;41:i8–i18.
- Obot, I.; Room, R., editors. *Alcohol, Gender and Drinking Problems Perspectives from low and middle income countries*. Geneva, Switzerland: World Health Organization; 2005.
- Polcin DL, Greenfield TK. Factors associated with probation officers use of criminal justice coercion to mandate alcohol treatment. *American Journal of Drug & Alcohol Abuse* 2003;29:647–670. [PubMed: 14510045]
- Polcin DL, Galloway GP, Greenfield TK. Measuring confrontation during recovery from addiction. *Substance Use & Misuse* 2006;41(3):369–392. [PubMed: 16467012]
- Polcin DL, Greenfield TK. Confrontation about potential harm related to substance use: Changes in the correlates of confrontation in sober living houses. *Therapeutic Communities Journal* 2006;27(3): 373–385.
- Raitasalo K. Interpretations of survey questions on one's partner's alcohol consumption. *Contemporary Drug Problems* 2003;30(3):701–723.
- Room R. The U.S. General Populations' Experiences of Responding to Alcohol Problems. *British Journal of Addiction* 1989;84:1291–1304. [PubMed: 2597806]
- Room R, Bondy S, Ferris J. Determinants of suggestions for alcohol treatment. *Addiction* 1996;91(5): 643–655. [PubMed: 8935250]
- Room R, Greenfield TK, Weisner C. “People who might have liked you to drink less”; Changing responses to drinking by U.S. family members and friends, 1979-1990. *Contemporary Drug Problems* 1991;18(4):573–595.
- Room, R.; Jernigan, DH.; Marlatt, BC.; Gureje, O.; Mäkelä, K.; Marshall, M.; Medina-Mora, ME.; Monteiro, M.; Parry, CDH.; Partanen, J.; Riley, L.; Saxena, S. *Alcohol in Developing Societies A public health approach*. Geneva, Switzerland: World Health Organization; 2002.
- Saunders JB, Aasland OG, Amundsen A, Grant M. Alcohol consumption and alcohol related problems among primary health care patients: WHO Collaborative Project on Early Detection of Persons with Harmful Alcohol consumption I. *Addiction* 1993a;88:348–362.
- Saunders JB, Aasland OG, Babor TF, de la Fuente JR, Grant M. Development of the Alcohol Use Disorders Identification Test (AUDIT). WHO Collaborative Project on Early Detection of Persons with Harmful Alcohol consumption II. *Addiction* 1993b;88:791–804. [PubMed: 8329970]
- Selin, KH., editor. *Svenska dryckesvanor och deras konsekvenser i början av det nya milleniet*. University of Stockholm: Forskningsrapport nr 20 SoRAD, Centre for Social Research on Alcohol and Drugs; 2004.
- Vogeltanz-Holm ND, Neve RJM, Greenfield TK, Wilsnack RW, Kubicka L, Wilsnack SC, Fleming JM, Spak F. A cross-cultural analysis of women's drinking and drinking-related problems in five countries: findings from the International Research Group on Gender and Alcohol. *Addiction Research & Theory* 2004;12(1):31–40.
- Wilsnack, RW.; Wilsnack, SC.; Kirstjanson, AF.; Vogeltanz-Holm, ND.; Gmel, G. *Gender and Alcohol Consumption: Patterns from the Multinational GENACIS Project*. Tables 1-4, and 6-10 for Gender and Alcohol Consumption: Patterns from the Multinational GENACIS Project Draft: May. Paper presented to GENACIS at the Pre Symposium (May 27- May 29) of the 31st Annual Meeting of the Kettil Bruun Society for Social and Epidemiological Research on Alcohol; Riverside, California, U.S.A.. May 30 – June 3; 2005.

Table 1

The study countries, the men's and women's sample sizes and mean volumes of drinking and AUDIT-5 scores (omitting 3 drinking variables; “-” indicates AUDIT not available in survey).

Continent	Men				Women			
	Volume l	Mean audit	N Obs	N Obs	Volume l	Mean audit	N Obs	N Obs
African Region								
Nigeria	14.6	1.5	467	12.3	1.2	213		
Uganda	19.9	3.3	393	6.0	1.94	301		
Region of the Americas								
Argentina	7.1	0.7	368	1.4	0.12	441		
Costa Rica	4.9	1.12	285	1.5	0.42	367		
Uruguay	8.4	-	305	2.4	-	376		
The United States	8.1	-	2320	3.4	-	2310		
European Region								
Czech republic	13.4	1.53	1125	4.0	0.59	1031		
Denmark	7.9	0.63	836	3.5	0.33	1028		
Finland	5.9	1.66	843	2.0	0.71	851		
Germany	8.6	-	3510	4.0	-	4177		
Hungary	4.3	-	991	0.8	-	883		
Iceland	4.3	1.26	1014	2.1	0.67	1075		
Spain	8.9	0.53	603	3.8	0.29	427		
Sweden	3.0	0.57	2322	1.5	0.23	2199		
UK	8.1	-	863	3.4	-	850		
South-East Asian Region								
India	15.9	2.85	501	8.1	1.35	86		
Sri Lanka	10.1	0.73	323	0.5	0.03	38		
Western Pacific Region								
Japan	8.4	0.67	1013	2.4	0.31	873		

Table 2

Percentages of respondents who have reported drinking control from partner, children, family member, friend or someone at work or school by gender and country (“-” indicates item not included in survey).
 During the last 12 months, have any of the following persons attempted to influence your drinking so that you would drink less or cut down on your drinking? yes %

Continent	Partner		Child(ren)		Family member		Friend		Someone at work/school	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
African Region										
Nigeria	22.8	12.1	10.0	10.2	17.8	12.7	14.6	12.7	10.1	2.4
Uganda	46.6	23.0	10.6	7.2	41.5	25.8	39.4	23.8	22.2	11.9
Region of the Americas										
Argentina	13.7	2.9	4.8	0.9	11.9	0.9	7.0	0.9	3.8	0
Costa Rica	26.9	8.6	13.6	9.2	26.8	11.2	11.9	5.2	5.8	0.9
Uruguay	5.3	0.8	1.6	1.6	6.2	1.1	2.3	0.8	1.0	0.3
US	5.0	2.6	-	-	7.2	3.2	5.0	1.9	1.0	0.2
European Region										
Czech R.	24.4	4.9	7.3	4.3	14.5	6.4	8.2	4.6	4.7	1.8
Denmark	4.9	1.0	0.9	0.3	3.4	1.0	2.4	0.7	1.0	0.1
Finland	15.0	2.9	2.5	2.2	3.1	1.1	3.6	1.2	1.2	0.1
Germany	9.4	2.2	1.8	0.9	4.3	1.1	3.6	1.1	1.5	0.2
Hungary	16.7	3.5	7.3	1.7	10.4	2.6	6.6	2.2	2.8	2.1
Iceland	11.2	1.7	6.0	3.7	-	-	-	-	-	-
Spain	4.2	0	1.1	0	2.4	0.8	1.2	1.0	1.2	0.3
Sweden	5.9	1.4	-	-	-	-	-	-	0.9	0.1
UK	11.7	6.7	7.0	4.8	6.4	4.5	6.3	4.5	2.8	1.2
South-East Asian Region										
India	38.2	14.3	25.7	14.1	27.5	14.0	-	-	17.0	3.5
Sri Lanka	46.7	10.8	23.4	2.7	29.7	10.5	20.4	5.3	5.9	5.6
Western Pacific Region										
Japan	22.1)	5.9	10.5	3.3	10.9	2.1	4.7	2.0	2.9	1.1

Table 3

Percentages of respondents who reported drinking control from doctor/health worker or any source during the last 12 months by gender and country (“–” indicates item not included in survey).

Continent	Doctor or a health worker		Relative, friend, doctor/health worker	
	Men	Women	Men	Women
African Region				
Nigeria	3.6	1.5	5.5	2.0
Uganda	18.8	9.6	21.9	10.8
Region of the Americas				
Argentina	2.0	0	6.0	0.5
Costa Rica	4.8	1.4	11.2	4.0
Uruguay	2.3	0	4.6	0.8
US	2.5	1.3		
European Region				
Czech Republic	6.3	2.9	-	-
Denmark	0.6	0.3	-	-
Finland	-	-	10.5	3.0
Germany	1.7	0.2	8.8	2.8
Hungary	5.1	1.4	-	-
Netherlands	2.2	0.2	9.5	1.9
Spain	1.3	0	1.2	0.4
Sweden	1.1	0.3	2.6	0.7
UK	4.7	2.1	-	-
South-East Asian Region				
Sri Lanka	5.7	2.7	22.0	2.7
India	19.4	4.7	13.2	3.5
Western Pacific Region				
Japan	10.6	1.3	20.2	3.4

Table 4

Percentages of respondents who have considered seeking help for their own drinking or alcohol-related problems (“–” indicates item not included in survey).

Continent	Percentage Considering help seeking	
	Men	Women
African Region		
Nigeria	10.1	11.9
Uganda	15.6	12.3
Region of the Americas		
Argentina	2.0	0
Costa Rica	4.0	2.2
Uruguay	2.6	0.3
US	7.5	3.8
European Region		
Czech Republic	2.6	1.6
Denmark	2.0	0.5
Finland	-	-
Germany	-	-
Hungary	-	-
Iceland	-	-
Spain	1.0	0.3
Sweden	-	-
UK	2.8	1.8
South-East Asian Region		
India	5.4	2.3
Sri Lanka	5.1	0
Western Pacific Region		
Japan	1.4	0.8

Table 5

Correlations between level of drinking (Volume) and (a) various sources of drinking control and (b) help seeking (“-” indicates item not included in survey).

Area	Partner		Child		Family member		Friend		Someone at work/school		Doctor		Help seeking	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
African Region														
Nigeria	.31a	.27a	.27a	.25a	.29a	.24a	.22a	.17c	.21a	.07	.05	.16c	.10c	.13
Uganda	.27a	.1b	.14c	.18b	.22a	.16b	.25a	.16b	.22a	.16b	.15b	.19b	.02	.11
Region of the Americas														
Argentina	.24a	.07	.08	.09	.23a	.10c	.15b	.04	.11c	.03	.07	-	.04	-
Costa Rica	.30a	.16b	.17c	.15c	.35a	.23a	.28a	.12c	.13c	.12c	.13c	.05	.02	.06
Uruguay	.19b	.04	.10	.18a	.26a	.14b	.15c	.08	.15c	.01	.10	-	.12c	.09
US	.17a	.14a	-	-	.21a	.15a	.17a	.12a	.08a	.08a	.15a	.15a	.11a	.08a
European Region														
Czech R.	.33a	.20a	.22a	.19a	.30a	.24a	.22a	.21a	.19a	.10b	.17a	.16a	.11a	.16a
Denmark	.11b	.10b	.12b	.06	.15a	.10b	.08c	.14a	.02	.04	-.03	.07c	.04	.03
Finland	.26a	.13b	.11b	.08c	.10b	.12a	.11b	.10b	.09b	.04	-	-	-	-
Germany	.25a	.11a	.07a	.09a	.12a	.06b	.10a	.05b	.02	.01	.12a	.03	-	-
Hungary	.23a	.12b	.13b	.03	.19a	.09b	.10b	.09b	.11b	.06	.13b	.03	-	-
Iceland	.15a	.07c	.17a	.02	-	-	-	-	-	-	-	-	.41a	.46a
Spain	.21a	-	.12b	-	.13b	.08	.12b	.08	.14b	.07	.11b	-	.00	.06
Sweden	.17a	.06c	-	-	-	-	-	-	.07b	.0c	.09a	.03	-	-
UK	.22a	.17a	.00	.27c	.19a	.17a	.13b	.07c	.05	.01	.15a	.07	.08	.16
South-East Asian Region														
India	.34a	.18	.35a	.14	.33a	.25c	-	-	.26a	.25c	.34a	.13	.14b	.10
Sri Lanka	.47a	.13	.44a	.17	.27a	.13	.27a	.27	.11	.03	.12c	.21	.09	-
Western Pacific Region														
Japan	.40a	.20a	.30a	.17b	.28a	.17a	.18a	.13a	.16a	.06	.28a	.12b	.01	.05

a $p < 0.001$; b < 0.01 ; c < 0.05

1) Data for Argentina, Uruguay, Spain and Sri Lanka are missing because there have been no women who answered yes to these questions.

Table 6

Correlations between AUDIT-5 Score and (a) various sources of drinking control and (b) help seeking (“-” indicates item not included in survey).

Area	With Audit-5 score		Partner		Child		Family member		Friend		Someone at work/school		Doctor		Help seeking	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
African Region																
Nigeria	.42a	.44a	.30a	.45a	.44 a	.48a	.44a	.39a	.33 a	.16c	.23a	.23b	.26a	.33a	.23a	.23a
Uganda	.27a	.28a	.21a	.27 a	.35 a	.28a	.28 a	.39a	.31 a	.28a	.22a	.29a	.18b	.24a	.22a	.24a
Region of the Americas																
Argentina	.43a	.38a	.19b	.24a	.41a	.33a	.35a	.18a	.32a	.01	.16b	-	.16b	-	.16b	-
Costa Rica	.31a	.18b	.26b	.25a	.47a	.35a	.46a	.42a	.29a	.14c	.27a	.07	.20b	.16 b	.27a	.16 b
European Region																
Czech R.	.42a	.22a	.25a	.29a	.40a	.28a	.35a	.33a	.25a	.16a	.24a	.19a	.18a	.20a	.24a	.20a
Denmark	.22a	.10b	.17a	.09c	.29a	.14a	.23a	.21a	.16a	.12b	.12b	.07c	.19a	.06	.12b	.06
Finland	.28a	.20a	.15a	.16a	.23a	.17a	.26a	.14a	.15a	-	-	-	-	-	-	-
Iceland	.29a	.17a	.23a	.06c	-	-	-	-	-	-	-	-	.04	.1 b	-	.1 b
Spain	.28a	-	.11c	-	.23a	.22a	.24a	.22a	.18a	.16b	.23a	-	.10c	.01	.23a	.01
Sweden	.28a	.19a	-	-	-	-	-	-	.15a	.04	.14a	.04	-	-	.14a	-
South-East Asian Region																
Sri Lanka	.23a	.00	.21a	.03	.10	.06	.24a	.04	.21a	.04	.11c	.03	.13c	-	.11c	-
India	.47a	.22	.37a	.16	.47a	.24c	-	-	.37a	.20	.45a	.13	.28a	.04	.45a	.04
Western Pacific Region																
Japan	.27a	.20a	.18a	.17a	.28a	.19a	.22a	.19a	.17a	.11b	.25a	.09b	.06c	.14a	.25a	.14a

a p<0.001; b<0.01; c<0.05