POLICY

Effects of Changes in Availability of Alcohol: Unexpected Results Can Stimulate Theory Development and Research

Anders Romelsjö
Department of Public Health Sciences, Karolinska Institutet, Norrbacka plan 2, Karolinska University Hospital, 17176 Stockholm, Sweden
Corresponding author: E-mail: anders.romelsjo@ki.se

This is an interesting and important report (Gustafsson, 2010) from the Nordic Tax Study, of a quasi-experimental situation created by changes in alcohol availability, initiated by Robin Room and others and conducted mainly by researchers from the Nordic countries. The starting point was the great increase in alcohol availability in southern Sweden.

Denmark, which is close to southern Sweden by bridge from Copenhagen and a short-distance by ferry, reduced its spirits tax by 45% on 1 October 2003, while on 1 January 2004 Sweden markedly increased quotas for travellers from the EU (which includes Denmark) to almost unlimited amounts. The Nordic Tax Study has impressively resulted in about 25 scientific reports so far. This paper from Nina-Katri Gustafsson is one of four papers in her PhD thesis ‘Bridging the world. Alcohol policy in transition and diverging alcohol patterns in Sweden’ (Gustafsson, unpublished thesis, May 2010). The aims were to study whether in southern Sweden self-reported alcohol-related social problems changed in the same direction as self-reported alcohol consumption, using as a control a carefully selected area in northern Sweden where there had been no significant changes in availability, and to compare the effects among various population groups.

Contrary to expectations, the reported alcohol consumption and alcohol-related problems increased (somewhat) in northern Sweden and decreased (sometimes statistically significantly) in southern Sweden during the short study period 2003–2006. It should be noted that the changes in consumption and alcohol-related problems were broadly in the same direction, giving credibility to the validity of the reports. However, population subgroups changed in different directions and did not move in concert. According to the author, these findings fail to confirm the ‘early’ version of Skog’s theory of the collectivity of drinking cultures (Skog, 1985) which was the theoretical background of the study.

However, the collectivity theory concerns alcohol consumption, and should preferably be studied by analysis of valid consumption data. The author also acknowledges this: ‘A more plausible explanation may be that problems are a less precise measure than is amount of alcohol consumption’, in her generally well-balanced discussion of the findings, where she provides possible explanations of the findings, ‘saturation of consumption’ among others. Thus, one can really question whether the author has been able to test the (‘early’) version of Skog’s hypothesis discussed in this paper (Skog, 1985). In a later paper, Skog (2001) responds to a criticism from Gmel and Rehm (2000) by allowing for the possibility of differences in trends for different socio-demographic groups, when a general change in per capita alcohol consumption occurs (Gmel and Rehm, 2000; Skog, 2001). The different changes in different social groups (Gustafsson, 2010) are more in agreement with this later, more flexible theory presentation by Skog, which the author however does not directly discuss. Other authors have also reported different consumption trends for various socio-demographic groups. From Sweden and the Nordic countries, there are reports by Romelsjö (1989) and from Room (2002), Cartwright et al. (1978), Midanik and Clark (1994), and Caetano and Clark (1998) have also reported similarly from other countries. Several authors have also reported that the rates of alcohol-related mortality and hospitalization can change in substantially different ways for different socio-economic groups during a change in alcohol consumption, implying a social class-related change in the consumption of generally very heavy consumers (Herttua et al., 2008; Midanik and Clark, 1995; Norström and Romelsjö, 1999; Romelsjö and Diderichsen, 1989; Romelsjö and Lundberg, 1996). A prominent finding in much research in social epidemiology is the often large socio-economic difference in health behaviours and health-related problems, a research theme which should perhaps have been more influential in the alcohol field (World Health Organization, 2008).

A main result in Gustafsson (2010) is that alcohol consumption and self-reported alcohol-related problems decrease in spite of an increased availability in southern Sweden. This is not the first time a divergence in availability and consumption is reported. Most well known are the decline in French per capita consumption which was seen over several decades, and the more rapid decline in alcohol use in many other Mediterranean countries, in spite of essentially unchanged availability. Those changes have mainly been attributed to general societal changes (Gual and Colon, 1997; Simpura, 1998). On the other hand, there were great changes in alcohol use and problems in former countries in Soviet Union in spite of rather limited changes in availability (Leon et al., 2007), probably related to the great societal changes.

Other studies have provided data, suggesting strongly that the amount of treatment can have an independent impact on problems rates (Holder and Parker, 1992; Leifman and Romelsjö, 1997; Smart et al., 1993). Besides these considerations, relationships between the availability and problems depend on the type of problem under study. The rates of hospitalizations with an alcohol-related diagnosis increased by about 18% from 2003 to 2006 in southern Sweden, while the increase was 5% in northern Sweden (Swedish National Board statistics database, 2010). Furthermore, it is well known in Sweden from several
methodological studies that there is an overrepresentation of heavy consumers among non-participants in surveys—i.e. the information source for data on alcohol use is another factor of importance.

Unexpected results or observations can stimulate new hypotheses, more elaborate research questions, new study designs, and the development of new and better theory. The seemingly unforeseen results of Gustafsson’s research could stimulate hypothesis-driven empirical studies to establish an elaborated theory of (changes in) alcohol consumption in the general population. Such studies and such a theory must acknowledge and include the validity of the measurements of alcohol use and problems specifying their type, various socio-demographic factors, information about treatment and other factors, and use both aggregate and individual data.

REFERENCES


