



**Karolinska
Institutet**

Division of Social Medicine

Department of Public Health Sciences

ALCOHOL CONSUMPTION AND ALCOHOL-RELATED HARM AMONG YOUNG PEOPLE: STUDIES OF THE RECENT EXPERIENCE IN SWEDEN

AKADEMISK AVHANDLING

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ABSTRACT

Background: The starting point for this thesis was the unexpected development in recent trends in youth drinking and harm in Sweden which seemed to question some basic assumptions of the total consumption model. For example, rapidly falling youth consumption and rising non-drinking rates were seen despite higher availability and increasing population drinking. Furthermore, although drinking declined among young people, there were some indications that alcohol-related harm increased, at least in terms of alcohol-related hospitalisations.

Objective: The overall aim of the thesis is to examine changes in alcohol consumption and harm among young people in Sweden with a focus on experiences during the last decades. In particular, the thesis has focus on the following main topics; (I) the association between consumption of illegal alcohol and alcohol-related harm (hospitalisations) among young people, (II) the association between population drinking, adolescents' binge drinking and harm (violence), (III) the degree of collectivity of drinking among youth and (IV) determinants of non-drinking among young people in Sweden in a European comparative perspective.

Method: The thesis is based on four articles. Articles I and II use aggregate time series analysis (ARIMA-modeling) to assess the association between consumption of illegal alcohol and alcohol-related hospitalizations (article I) and the association between binge drinking and violence among youth as well as the association between binge drinking and population drinking (article II). In the third article the respondents are divided into seven drinking groups based on their relative ranking on consumption to examine whether the decline in consumption was mirrored in all drinking groups during the period 2000-2012. In article IV logistic regression models were used to examine the association between non-drinking and demographic and social factors among six European countries.

Results: No significant effect was found between consumption of smuggled alcohol and alcohol-related hospitalizations when the model was adjusted for average consumption (article I). This indicates that the amount of alcohol matters more for the risk of harm than where the alcohol comes from. In article II there was evidence for an association between binge drinking and violence among young people during a confined study period (1971-2000) but most of these estimates became non-significant during the full study period (1971-2009). Similar results were found for the association between per capita consumption and binge drinking among young people. In article III support for collectivity of drinking behavior among Swedish youth during the period 2000-2012 was found since the decline in consumption was mirrored in all seven drinking groups examined. Furthermore, there was a marked relation between overall consumption on the one hand and mean consumption and heavy episodic drinking on the other in each of the seven drinking groups. In article IV no clear pattern of national differences could be found with respect to which factors were associated with non-drinking among youth. However, having non-drinking friends was an important factor in all countries.

Discussion and conclusion: A main conclusion of the thesis is that the total consumption model is in general a useful perspective for understanding aggregate level changes in youth drinking and harm in Sweden. Per capita consumption among young people was related to alcohol-related hospitalizations and there was strong evidence for collectivity in changes in drinking among Swedish youth during the recent decade. However, all results did not support the notion of collectivity; for instance, the aggregate link between alcohol and violence seems to have become weaker, suggesting that the assumptions of the model do not apply universally.