

# Common evidence base and monitoring

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## Introduction

Existing evidence shows that having a national alcohol policy by itself has a low impact on the alcohol burden. According to [Karlsson & Österberg \(2007\)](#), who analysed the impact of seven policy measures on alcohol consumption, only 2.5% of the overall impact can be attributed to the existence of national programmes or action plans compared to a 40% contribution from tax policies or 30% from restrictions on alcohol sales. One likely factor is that national programmes do not recommend evidence-based measures that may affect state or private economic interests ([Gordon & Anderson, 2011](#)).

Monitoring and evaluation of the implementation and effectiveness of alcohol policy programmes and action plans seem to be crucial to strengthen their impact ([WHO Regional Office for Europe, 2011a](#)). However, implementation and evaluation reports (if they exist at all) rarely feed into the development of consecutive plans or programmes. Usually a new programme, like its precedents, is the result of a compromise between economic and health interests.

## Monitoring approaches and their limitations

### *Statistics*

Statistics for health, economic and other harm seem to be the most reliable as they have usually been in use for decades, are provided by well-established government agencies and are relatively well standardized, thanks to numerous international agencies. In addition, some agencies, including the EC and WHO, retrieve, clean and additionally standardize collected statistics. No matter their technical accuracy, however, statistical sources are human products and as such are heavily culture-specific or biased.

Sales statistics, which usually serve as the source for estimation of recorded consumption, often suffer from underestimation of real consumption owing to the existence of other sources of supply. These may be licit (such as duty-free quotas allowed for individual consumption, home production allowed to certain limits in many European countries or non-beverage alcohol bought for individual consumption) or illicit (including smuggling, illegal production, conversion of contaminated ethanol to drinkable fluid for sale as a regular drink, as well as reimported and untaxed alcohol from the legal alcohol industry). In the EU plus Norway, Switzerland and the EU candidate countries, the unrecorded share can vary from a few per cent to more than 35% of overall consumption.

Morbidity statistics can be affected by the level of development of alcohol treatment, as the more specialized the treatment, the greater the chance of being diagnosed as suffering from an alcohol-related disorder. On the other hand, in most countries, alcohol-related diagnoses are stigmatizing. Physicians may, therefore, be reluctant to put causes such as alcoholic liver cirrhosis or acute withdrawal on a death certificate. Time series can be, and in fact are, heavily affected by subsequent changes in the International Classification of Diseases (ICD); for example, the transition from ICD 9 to ICD 10 in Poland was followed by a significant drop in first hospital

admissions due to alcoholic psychoses as physicians found a new convenient symbol (F10) without any specification for those who had previously been diagnosed as psychotics.

## *Surveys*

Surveys, in particular broad data collection efforts by international agencies, may also be affected by the varying competence of the government officials who are supposed to respond. Sometimes information may not be reported in order to hide failures in alcohol policy, or some achievements over-emphasized so as to stress the success of a given policy or certain individuals or the reporting agency.

Neither do population surveys constitute an entirely reliable monitoring tool. The major issue is the shrinking response rate in Europe, which often drops below 50% and thus reduces the potential for generalizing findings. There is some evidence that those who do not respond to alcohol surveys are more likely to be either abstainers or heavy drinkers. Moreover, in many cultures, questions about alcohol may be perceived as stigmatizing, and under-reporting is a common problem. On the other hand, school surveys may be biased by both under- and over-reporting, as some youngsters tend to exaggerate their experiences associated with adulthood, including sexual ones as well as drinking and drug-taking.

Large health surveys which include only a few questions on alcohol also have serious disadvantages. As alcohol questions are considered sensitive, large surveys tend to offer these questions for self-administration which is very likely to produce errors, inconsistent responses or no response at all. Moreover, due to the prevailing public health paradigm, interest in such surveys may be reduced to frequent or heavy drinkers, which leads to the experience of light drinkers or abstainers being ignored.

## **European resources for monitoring**

Common indicators and standardized data collection are essential for monitoring and evaluating national policies against a background of trends and developments in other countries and for sharing experiences in alcohol policy. European databases and surveys provide reference points for developing data collection and indicators at national level.

WHO's Global Information System on Alcohol and Health (GISAH) is the primary point of reference for tools for monitoring the health situation and trends in alcohol consumption, alcohol-related harm and policy responses (WHO, 2012). The regional sub-sections, such as the European Information System on Alcohol and Health (EISAH) maintained by the WHO Regional Office for Europe (WHO Regional Office for Europe, 2011b), provide region-specific information and enable comparisons at regional level. Alcohol-related data are organized in six main categories: levels of consumption; patterns of consumption; harms and consequences; economic aspects; alcohol control policies; and prevention, research and treatment. For example, the category alcohol-related harms and consequences includes statistics on alcohol-related morbidity and disease mortality as well as age-standardized death rates and DALYs for a range of health conditions, road traffic accidents and violence. The EISAH (which is still under development) will include tools for comparative risk assessment.

The data in the WHO alcohol and health information systems are updated through surveys addressed to Member States. Sources of complementary information include the burden of disease project as well as national studies and surveys. Alcohol consumption figures are based on official data on recorded adult per capita consumption supplied by Member States, complemented by data from economic operators and from the United Nation's Food and

Agriculture Organization. As well as being used to update the online databases, the data collected are presented in status reports, such as the *European status report on alcohol and health* (WHO Regional Office for Europe, 2010) which includes country profiles comprising concise information on core indicators.

In recent years there has been increased collaboration between the EC and WHO in the development of data collection and health information systems, notably since 2007 in monitoring the trends in alcohol consumption, alcohol-related harm and alcohol-related policies across the EU. To complement the regular WHO surveys on alcohol and health, additional surveys and questions have been sent to EU member states. The data gathered are presented online in the European Union Information System on Alcohol and Health (EUSAH), maintained by WHO, which enables queries to be focused specifically on EU member states (European Commission, 2011).

To foster the collection of comparable data on health and health-related behaviour, diseases and health systems, the EC has developed the European Community Health Indicators (ECHI), which at the moment comprise 40 core indicators that are reasonably comparable and for which there is EU-wide agreement regarding definitions and data collection (European Commission, 2012a). Total alcohol consumption is included as a key determinant of health, measured by the consumption of pure alcohol per person aged 15 years and older. The information is provided by WHO.

The EC collects data on individual alcohol consumption through the European Health Interview Survey (EHIS), managed by Eurostat (EHIS, 2011). Starting from 2014, the EHIS will be conducted every five years in all EU member states. The survey includes a limited number of questions on the frequency and volume of alcohol consumption but does not measure health outcomes or other adverse consequences.

At the moment, EU-wide survey data on the drinking patterns of adults are only available in Eurobarometer surveys. The Eurobarometer is basically a public opinion survey tool. The surveys are carried out in all member states as face-to-face interviews, typically with representative samples of 600–1500 respondents aged 15 years and older (European Commission, 2012b). Alcohol-related data were gathered through Eurobarometer surveys on an ad hoc basis in 2006 and 2009.<sup>1</sup>

Alcohol consumption by teenagers is regularly monitored across Europe through two surveys. The Health Behaviour in School-Aged Children (HBSC) is a WHO collaborative cross-national study carried out at four-year intervals in practically all EU member states. The HBSC respondents are aged 11, 13 and 15 years (HBSC, 2002).<sup>2</sup> ESPAD is a collaborative initiative of international research teams, supported by the Council of Europe, the EC and the Swedish government. The ESPAD study is carried out every four years with the participation of almost all EU member states. The ESPAD respondents are schoolchildren aged 15–16 years (Hibell et al., 2009).<sup>3</sup> The HBSC and the ESPAD surveys are both carried out in a standardized fashion in order to produce comparable data for monitoring trends over time and enabling cross-country comparisons. Both surveys cover lifetime alcohol use, frequency of current use and drinking to

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<sup>1</sup> Examples are: *Attitudes towards alcohol*, Special Eurobarometer 272b/2007; and *EU citizens' attitudes towards alcohol*, Special Eurobarometer 331/2010. Questions relating to alcohol have also been included in surveys focused on other topics, for example: *Road safety*, Flash Eurobarometer 301/2010; and *Youth attitudes on drugs*, Flash Eurobarometer 330/2011 (European Commission, 2012b).

<sup>2</sup> The results of the 2009/2010 survey round are not yet available.

<sup>3</sup> The results of the 2011 survey round are not yet available.

drunkenness, using slightly different questions. The ESPAD survey also yields information on the volume of alcohol consumption as well as on risk perceptions and any harm experienced.

Along with national population surveys, the ESPAD survey is the main information source for reports from the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) in which alcohol consumption is examined along with illicit drugs, typically in a polydrug use context, and the data are used in annual reports on the state of the drugs problem in Europe or in reports focused on specific issues. An example is the selected issue report on *Drug use and related problems among very young people (under 15 years old)* (EMCDDA, 2007).

The variations in survey methods and a lack of comparable data on alcohol consumption patterns, which hamper cross-country comparisons and the forming of an overall view of alcohol consumption in the EU, were addressed in the EU-funded project on Standardizing Measurement of Alcohol Related Troubles (SMART) (SMART, 2012). The project collated and assessed the survey instruments for drinking habits used at national level in EU member states and developed a questionnaire which was pilot-tested in 10 member states with a total of 2000 respondents. The questionnaire proved to work well in the context of different drinking cultures, taking no more than 15–20 minutes in a face-to-face interview (Moskalewicz & Sierosławski, 2010). The final result is a standardized comparative survey methodology comprising the survey instrument and guidelines for application and for calculating annual alcohol consumption, unrecorded consumption, prevalence of episodic heavy drinking, prevalence of alcohol dependence, and alcohol-related harm for drinkers and for third parties. The survey instrument is currently available in 11 languages.

To facilitate the monitoring and assessment of progress towards the aims of the EU strategy to support member states in reducing alcohol-related harm (European Commission, 2006), the EC set up a Committee on Alcohol Data Collection, Indicators and Definitions, with the remit to identify common indicators for use at national and EU level based on existing sources of comparable data (European Commission, 2012c). The Committee identified three key indicators which they recommend for monitoring alcohol consumption and related harm:

- *volume of consumption* measured by total (recorded and unrecorded) yearly consumption of pure alcohol per capita (at age 15 years or older);
- *pattern of consumption* measured by harmful drinking defined as an intake of 60 g of pure alcohol or more on one occasion, monthly or more often, during the previous 12 months;
- *alcohol-attributable health harm* measured by alcohol-attributable years of life lost, with chronic and acute conditions as sub-indicators.

The source of information for the volume of alcohol consumption is the WHO alcohol information system. The source of information for harmful alcohol consumption (self-reported) will be the EHIS. Calculations relating to alcohol-attributable years of life lost can be done based on mortality statistics collected by Eurostat.

Four indicators for monitoring trends in alcohol use among young people were selected from among the ESPAD survey items:

- *off-premise accessibility of alcohol*, measured by frequency of buying alcohol within the previous 30 days;
- *on-premise accessibility of alcohol*, measured by frequency of drinking on-premise within the previous 30 days;

- *binge-drinking*, defined as having five or more drinks on one or more occasions within the previous 30 days;<sup>4</sup>
- *prevalence of alcohol consumption by adolescents*, measured by the percentage of adolescents who report having drunk within the previous 12 months.

Three indicators were identified for monitoring trends in alcohol-related harm among adults, based on hospital discharge data and mortality data collected by Eurostat:

- *prevalence of alcohol-attributable chronic physical disorders*, measured by hospital discharge rates for alcoholic liver cirrhosis (ICD-10 code K70) and pancreatitis (ICD-10 codes K85–87) as proxy for alcohol-attributable disease;
- *prevalence of alcohol-attributable chronic mental disorders*, measured by hospital discharge rates;
- *alcohol-attributable death rates*.

## Conclusions for policy and practice

Recent years have witnessed a substantial increase in the collection of data on alcohol consumption and alcohol-related harm across Europe and in work to strengthen the common knowledge base, including through initiatives by the EU, WHO and the OECD. This indicates wide recognition of the risks associated with alcohol use for individuals and society, and for health, welfare and economic development. The data collected at international level may overlap due to the use of the same original data sources. On the other hand, the same data may be provided in a slightly different form in response to subsequent requests. Further coordination at the international level would be needed to seek synergy so as to reduce the workload for national information providers and to increase comparability. Agreement would be crucial on common definitions of key indicators and on the manner of their presentation, including alcohol consumption data and vital statistics relating to health outcomes as well as economic and social harm and their costs.

Recent decades have also witnessed a proliferation of alcohol surveys in almost all EU countries as well as at EU level. The findings from these surveys are, for the most part, not comparable due to lack of standardized methodology. The two school surveys (HBSC and ESPAD) are an exception as they are carried out in all participating countries using the same methodology. The challenge is, however, that there is overlap in the targeted age groups and in the behaviour surveyed, including drinking by adolescents. Coordination would be needed to increase comparability, to reduce costs and to avoid situations where countries have to choose which survey they can afford to participate in.

Perpetuating the *status quo* in this field, that is, spending resources on hundreds of national alcohol surveys which offer limited scope for international comparisons, is neither cost-effective nor helpful for monitoring progress towards common aims such as those of the EU strategy to support member states in reducing alcohol-related harm. A move towards the use of common instruments, such as the questionnaire developed in the SMART project, would be crucial for methodological advance and would, over time, reduce the costs of monitoring at both national and international level. An EU-wide or European drinking survey to gather comparable baseline

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<sup>4</sup> In the ESPAD survey instrument, a drink is defined as: approximately a glass/bottle/can of beer (25–33 cl), a glass/bottle/can of cider (25–33 cl), a bottle of alcopops (27 cl), a glass of wine (10–12.5 cl) or a glass of spirits (4 cl).

information would be a necessary first step to encourage Member States to adopt common methodology.

The advantages of improved comparability are not limited to facilitating the monitoring of European strategies or action plans or to strengthening the methodological basis of national monitoring systems. The existence of comparable data and common indicators enables a discussion to take place of the merits and potential of the varying national alcohol policy approaches, helps avoid objectives which are not easily measurable, and may contribute to convergence across member states in public health policies to reduce alcohol-related harm.

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