

# INTRODUCTION

## Dimensions of psychoactive substance use and dependence

The use of alcohol and other psychoactive substances alters both the function and, ultimately, the structure of the brain by the altered stimulation of particular pathways in the central nervous system. Mood, perception and consciousness are affected by the use of psychoactive substances, which can influence the capacity of persons to exert control over their drug use. The result can lead to physical and psychological dependence, coercing the person to continue taking the drug despite adverse consequences. Besides profound impairment and loss of physical health, people with alcohol and drug use disorders may suffer severely from psychological and psychosocial problems, interpersonal problems, loss of employment, difficulty in participating in education, and legal problems.

Given the complexity of substance use disorders and their effects on the health and social aspects of the person, treatment and prevention of alcohol and drug use disorders may involve a range of treatment and prevention modalities which may be delivered in a variety of settings. Treatment modalities may involve pharmacological treatment but may also include other components of health care, such as psychological support and counselling, as well as rehabilitation to respond to the stage of the illness and to the different needs of the person with the substance use disorder. Delivery of adequate care and treatment for persons with alcohol and drug use disorders requires a well functioning treatment and prevention system that has the capacity to respond to the needs of these persons.

## What constitutes resources for the treatment and prevention of substance use disorders?

The effective prevention and treatment of substance use disorders requires the availability of a range of resources at the national or subnational level. Resources therefore comprise financial capital of national authorities to fund treatment and prevention services for substance use disorders, but also include human and institutionalized resources such as the availability of health care staff and nongovernmental organizations (NGOs) assisting in the delivery of care and treatment for the population in need. Within the health care setting, clinical management of substance use disorders may involve a variety of services and treatment approaches; treatment may also be differentiated by the use of different classes of pharmacological drugs used for detoxification or for the treatment of alcohol and drug dependence. Other resources include the knowledge of national authorities about the epidemiological situation in the country regarding substance use disorders, and data on national service delivery data and associated treatment service information. The know-how of health professionals and the use of national standards of care for health professionals also comprise resources, as do guidelines, policy documents and special legislative provisions regulating the context in which treatment is provided.

## Why monitoring of resources is essential

Globally, there is an impression that there is a large treatment gap for substance use disorders – i.e. that only a small proportion of those people in need of treatment, or those who would benefit from prevention measures, are receiving treatment or prevention measures. The ATLAS on Substance Use (ATLAS-SU) attempts both to explore the size of the treatment gap and to examine the underlying reasons for that gap. Any

significant prevention and treatment gap suggests a shortage of resources for the treatment and prevention of substance use disorders. Given the competition for scarce health resources, both low-income and high-income countries can benefit from a more detailed awareness of what resources are being made available for the treatment of substance use disorders, so that this can be compared to other health priorities or other models of resource distribution (as may be used in other countries, for instance). In view of this, the ATLAS-SU project seeks to map those resources at national, regional and global levels to highlight the specific resources available for treatment and prevention of substance use disorders. As such, it represents an essential tool for national authorities, health professionals and policy-makers in helping to assess the priority of needs, and in increasing the quality of care for people with substance use disorders. For the first time, information about the resources available for the treatment and prevention of substance use disorders in all WHO regions has been collected and analysed, making national, regional and global comparisons possible. A structured description of available prevention and treatment resources for substance use disorders is also a prerequisite for a more detailed assessment of treatment systems, and for improving treatment and prevention systems for substance use disorders at national, regional and global levels.

### The objective of the ATLAS-SU project and the structure of the report

The objective of the ATLAS-SU project was to collect, compile, analyse and disseminate basic information from WHO Member States on the following resources and assets required for substance use treatment and prevention:

- *administrative and financial resources* such as the presence of government units, funding and ways of financing treatment and prevention services in countries;
- *health service resources* such as the availability and coverage of different treatment services, the presence of pharmacological treatment, and the number of beds and length of stay for treatment;
- *human resources* such as the involvement of health professionals for the treatment of substance use disorders, and the presence of other institutionalized and non-institutionalized groups providing care for persons with substance use disorders;
- *policy and legislative resources* such as the presence of different policies and legislative provisions for prevention and treatment of substance use disorders;
- *resources for prevention* of substance use disorders, such as availability and coverage of different prevention services, implementation of screening and brief interventions in primary care, and presence of harm reduction programmes;
- *information resources* such as knowledge of epidemiological aspects of substance use in the country, and knowledge of treatment service delivery.

In accordance with the information collected from national authorities and experts in the field, the ATLAS-SU report is divided into six chapters. Chapter 1 introduces the epidemiological aspects and the burden of disease attributable to alcohol and drug use and provides information on the level of need for treatment of substance use disorders. Chapter 2 illustrates health service resources such as financing and availability of treatment services, and the number of beds and length of stay for treatment of substance use disorders. Data on implementation of pharmacological treatment for substance use

disorders are presented in chapter 3. Chapter 4 covers human resource aspects, and provides information about the health workforce for substance use disorders. Policy and legal resources for people with substance use disorders are discussed in chapter 5, before concluding with resources for the prevention of psychoactive substance use in chapter 6. Each chapter begins with an expert introduction before data from the ATLAS-SU survey are presented. Data from the ATLAS-SU survey are presented graphically in bar and pie charts. Salient findings are described, and notes and comments on the data are given.

The raw data on which the ATLAS-SU report was prepared will be available in a searchable online database on the web site of the Management of Substance Abuse programme at WHO ([www.who.int/substance\\_abuse/en](http://www.who.int/substance_abuse/en)). This will enable more detailed analyses to be conducted.

## METHODOLOGY

### Procedures of the ATLAS-SU project and sequence of action

The ATLAS project has involved staff at WHO headquarters and WHO regional and country offices in collecting data and information on national resources for the treatment and prevention of alcohol- and drug-related problems. The ATLAS survey instrument, which is a paper-based survey instrument designed specifically for this purpose, is the project's core component. The ATLAS-SU project was conducted according to different administrative and methodological steps, starting from the development of the questionnaire and ending with the statistical analyses and presentation of data. The sequence of action is briefly outlined below.

- *Stage 1: Questionnaire development.* The ATLAS-SU questionnaire was developed in collaboration with WHO regional offices. Categories of resources for the treatment and prevention of substance use disorders were defined and indicators were developed accordingly. Standardized answers were provided for the respective indicators in order to facilitate data compilation. Response options for close-ended questions were exhaustive and mutually exclusive. Alongside the questions, a glossary was provided to standardize terms and to ensure that the conceptualizations of resources were understood equally by all respondents. The questionnaire was drafted in English, and was translated into four official United Nations languages – Arabic, French, Russian and Spanish.
- *Stage 2: Focal point nomination.* In the respective countries, WHO headquarters together with WHO regional offices requested ministries of health or other responsible ministries to appoint a focal point to complete the ATLAS-SU questionnaire. The focal point was encouraged to contact other experts in the field to obtain information relevant to answering the survey questions. In a few WHO Member States, focal point nominations could not be obtained; in these countries, other prominent technical experts in the field of psychoactive substance use were identified through WHO collaborating centres and professional associations (such as the World Psychiatric Association and the International Society of Addiction Medicine) and were contacted and requested to provide the relevant information. This step was taken to enhance the response rate of the survey.
- *Stage 3: Questionnaire submission.* Close contact with the focal points was maintained during the course of their nomination and through to questionnaire submission. A service desk was set up at WHO headquarters to respond to focal point enquiries, to provide additional guidance, and to assist focal points in filling out the ATLAS-SU survey instrument. Upon expiry of a timeline, focal points were required to submit the questionnaire electronically or by postal mail to WHO headquarters or to the respective WHO regional office.
- *Stage 4: Clarification process.* Once received, the questionnaire and the questionnaire responses were screened for incomplete and inconsistent answers. To ensure high quality data, respondents were contacted again and were asked to respond to the requests for clarification and to correct their responses.

- *Stage 5: Data management.* Upon receipt of final questionnaires, data were entered into a statistical package (SPSS 16). For the ease of statistical analyses, some questions were regrouped. An identifier was applied to the responses of each country to facilitate disaggregation of data by WHO region and by the World Bank list of economies (based on the World Bank list of economies of 2007). Economies are divided according to gross national income per capita. According to the World Bank these groups are low-income countries (having a gross national income of US\$ 935 or less), lower middle-income countries (US\$ 936 to US\$ 3,705), higher middle-income countries (US\$ 3,706 to US\$ 11,455) and high-income countries (US\$ 11,455 or over). Lists of countries by WHO region and by the World Bank list of economies are provided at the end of this report.
- *Stage 6: Statistical analyses of data and presentation of data.* Frequency distributions and measures of central tendency were calculated as appropriate, and data were disaggregated according to WHO regions and different income groups of countries. To illustrate the information obtained, data were exported into Microsoft Office Excel to produce bar and pie charts.
- *Stage 7: Data availability on a searchable database.* Data will be uploaded to a searchable database (i.e. to a global information system) on the WHO web site. Within the global information system indicators of the ATLAS project can be selected and presented according to country and WHO regions.

### Representativeness and limitations of data

The questionnaire was developed in 2007, and sent out to the countries for completion in 2008. Data were obtained from all WHO regions, although not all WHO Member States within the regions responded to the survey questionnaire. Data presented in the ATLAS report reflects information from countries which responded to the survey. In total, 147 out of 193 countries took part in the ATLAS-SU project and submitted a questionnaire, thus covering 76% of all WHO Member States and 88% of the world population. However, for some questions the denominator was below the overall number of questionnaires received. Numbers in the respective categories (i.e. region and income group) are indicated if no more than 15% of countries responded to the survey question.

In the WHO African Region 43 countries responded to the ATLAS-SU questionnaire (93% coverage of countries in the region), in the WHO Region of the Americas 21 countries responded (58% coverage of countries in the region), in the WHO Eastern Mediterranean Region 14 countries responded (67% coverage of countries in the region), in the WHO European Region 44 countries responded (83% coverage of countries in the region), in the WHO South-East Asia Region 10 countries responded (91% coverage of countries in the region), and in the WHO Western Pacific Region 15 countries responded (54% coverage of countries in the region).

Data were collected from countries which nominated a national focal point to respond to the survey. Data reflect expert opinion in the majority of cases. However, respondents to the survey were encouraged to consult with other technical experts in the field, and to support their data with scientific evidence.

