



# Atlas

MENTAL HEALTH  
RESOURCES  
IN THE WORLD  
2001



World Health Organization  
Geneva



# Atlas

**M E N T A L   H E A L T H**  
**R E S O U R C E S**  
**I N   T H E   W O R L D**  
**2 0 0 1**



Mental Health Determinants and Populations  
Department of Mental Health and Substance Dependence  
World Health Organization

Geneva

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Atlas is a project of WHO Headquarters, Geneva, supervised and co-ordinated by Dr Shekhar Saxena. Technical support is provided by Dr Pallab K. Maulik (overall project management) and Ms Kathryn O'Connell (data analyses). Dr Derek Yach and Dr Benedetto Saraceno provide the vision and guidance to this project.

Key collaborators from WHO Regional Offices include: Dr Custodia Mandlhate, African Regional Office; Dr Caldas de Almeida and Dr Claudio Miranda, Regional Office for the Americas; Dr Ahmad Mohit and Dr Khalid Said, Eastern Mediterranean Regional Office; Dr Wolfgang Rutz, European Regional Office; Dr Vijay Chandra, South-East Asia Regional Office; and Dr Helen Herrman and Dr Gauden Galea, Western Pacific Regional Office. They have contributed in planning the project, obtaining and validating the information from Member States and reviewing the results.

WHO Representatives and Liaison Officers in WHO Country Offices were responsible for collecting and validating information received from governments.

Ministry of Health officials in Member States provided the information and responded to the many requests for clarifications arising from the data.

A number of experts in countries assisted the ministries in locating and providing the information. They also provided relevant literature and reports to support the data.

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Ms Clare Tierque and Ms Rosemary Westermeyer have provided administrative support.

The contribution of each of these team members and partners, along with the input of many other unnamed people, has been vital to the success of this project.

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◆ As the world becomes increasingly aware of the massive burden associated with mental disorders and takes steps to expand and improve mental health care, the need for accurate and up-to-date information is crucial. Information is required in two distinct areas: the disease burden and the available resources.

Many decades of work have resulted in substantial information on the extent and burden of mental diseases. This includes information on how to obtain reliable and valid diagnoses; studies on the incidence, prevalence and course of disorders; national and international classification systems; and estimates of associated disability. However, very little is known about the resources available to respond to this burden. What resources exist within countries for mental health care? How do the resources compare to the needs? Where are the significant gaps? What are the differences across regions and income groups of countries? While these questions are asked frequently, there have been no clear answers. What is known about mental health resources pertains only to a few developed countries. There is almost no information from the vast majority of countries. Because studies have used different units of measurement, the information that is available is not comparable across countries.

The World Health Organization launched Project Atlas in 2000 to address this gap. The objectives of this project include collection, compilation and dissemination of relevant information on mental health resources in countries. The project is designed to obtain real information from each country rather than to extrapolate based on what is known from a few countries. Within one year of its conception, we are pleased to present the first product of this project. This

volume contains the initial set of data collected by the Atlas project. It provides global and regional analyses on mental health resources data collected from 185 countries, covering 99.3% of the world population. This information has been gathered primarily from governmental sources within each country, making this one of the most comprehensive and authoritative compilations of mental health resources ever attempted.

Atlas data confirm what many mental health professionals have known for a long time— that mental health services are grossly inadequate compared to the need for mental health care in most countries. The value of Atlas however is to replace impressions and opinions with facts and figures. Atlas data not only give a clear picture of the existing resources and crucial needs in countries around the world, but also provides a baseline for monitoring changes over time. By following uniform definitions and units it allows for comparisons across countries and regions.

How can the Atlas data be used? Atlas data should drive the global and national mental health programmes. At the global level, the data will help make the world more aware of exactly how deficient mental health resources are and provide an impetus to international efforts to enhance these resources. At the national level, the analyses identify areas that need urgent attention by health planners and policy-makers within countries. Atlas also sets realistic targets by allowing comparison across countries. WHO hopes that the stark realities depicted by Atlas will motivate all those who value mental health to act now for improving mental health resources. The picture is clear and the goal is entirely within reach.

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◆ Mental disorders account for a substantial proportion of disease disability and burden, yet current resources for mental health are not adequate. The burden associated with mental disorders is projected to increase over the coming years. The quality and quantity of mental health resources need to improve to meet the current and future needs. Accurate information on existing resources is essential to bring about this improvement.

It is indeed a paradox that though substantial information is available on the incidence, prevalence, course, diagnosis, classification, disability and burden of mental disorders, hardly any information is available on the resources that exist to respond to this burden. The information that does exist cannot be compared across countries because reports use varying definitions and units of measurement. This imbalance between “disease information” and “resources information” is a major impediment to planning mental health services. Lack of information on resources also hampers efforts made by non-governmental organizations, professional associations and consumer groups to demand improvement of mental health care services and to highlight specific needs.

In order to fill this crucial gap, the World Health Organization launched Project Atlas in 2000. Atlas aims to collect, compile and disseminate relevant information on mental health resources in the world.

In the first phase of this work, relevant information has been obtained from the Member States of WHO and is being presented in this volume “Atlas: Mental Health Resources in the World”. The information was collected in a stepwise method. In the first step, consultations were held with Regional Offices to identify areas where there was a need to collect information. A questionnaire was then drafted along with a glossary of terms. This draft questionnaire and the glossary were reviewed by selected experts. The questionnaire was piloted in one developed country and one developing country, and necessary changes made. The English questionnaire and glossary were then translated into four languages – Arabic, French, Russian and Spanish.

In the second step, the questionnaire and glossary were sent to the focal point for mental health in the Ministry of Health of all Member States through the Regional Offices and WHO Country offices. The focal points were requested to complete the questionnaire based on all possible sources of information. They were requested to follow the glossary definitions closely to maintain uniformity and comparability. The Atlas Project team responded to all questions and requests for clarification. Regular reminders were sent to those who did not return the completed questionnaire on time. Countries providing incomplete information or information that appeared internally inconsistent were requested to provide clarification. Supporting documents (e.g. copy of policy or legislation document) were requested to accompany completed questionnaires.

In the third step, all the available information was entered into an electronic database using suitable codes. Analysis of the data was then conducted using SPSS version 9.0. Values for continuous variables were grouped into categories based on distribution. Frequency distributions and measures of central tendency (mean, medians and standard deviations) were calculated as appropriate. Countries have been categorised by WHO Regions and by World Bank income groups based on GNP per capita (World Bank, 2000). Population figures were taken from The World Health Report 2000, (WHO, 2000).

This publication gives analyses of data for 185 countries. The data is organized by 16 broad themes. These themes are presented in the following pages. Each theme occupies two pages. The right page gives a graphic display of the available data. The accompanying left page gives the related text. Graphic displays include maps of the world that give the relevant country data coded by colour. Bar and pie charts are given to illustrate frequencies, medians and means as appropriate. Regional maps show aggregate figures by WHO Regions. Definitions for the terms used while collecting the information are provided for each theme. Selected findings from analysis of data around that theme are described. No attempt has been made to describe all the possible results arising out of data analyses presented; only the salient findings are mentioned. Limitations to be kept in mind when interpreting the data and their analyses are described. Some implications of the findings for further development of mental health resources are given.

The annex to this publication contains summary tables of country specific data for selected variables. A separate table gives data from Associate Members and Areas of WHO; these data are not included in the aggregate analyses.

While all attempts have been made to obtain the required information from all countries, some countries have not been able to give information on certain themes. The extent of missing data on each theme is indicated by giving the number of countries whose data are included (N) with the individual charts against the total number of 191. The most common reason for the missing data is that such data simply do not exist within the countries. It is hoped that these information gaps will be filled in the near future. While all possible measures have been taken to compile, code and interpret the information given by countries using uniform definitions and criteria, it is possible that some errors may have occurred. WHO requests the mental health focal points within the Ministries of Health of Member States to point out any errors, for correction in subsequent publications.

#### References:

1. World Bank (2000). <http://www.worldbank.org>  
Accessed in December 2000. World Bank Group. Washington D.C.
2. World Health Organization (2000). The World Health Report 2000: Health Systems. Improving Performance. WHO. Geneva.

◆ The Atlas data show that the aggregate resources for mental health in the world are grossly inadequate compared to the burden associated with these disorders. In addition, there are large disparities across regions and income groups of countries, with low income, developing countries having extremely meagre resources.

In the area of mental health policies, programmes and legislation, 40% of countries have no policy, 30% have no programme and 25% have no legislation. While policies and programmes are particularly lacking in African and Western Pacific Regions of WHO, legislation is relatively deficient in the Eastern Mediterranean Region. The majority of policies, programmes and legislation are relatively recent, most having been developed after 1990. Almost 37% of countries have no community care facilities for mental health. In South-East Asia, Eastern Mediterranean, and African Regions, there are no facilities for community care in mental health in about half of the countries.

A large majority of countries have a therapeutic drug policy or an essential list of drugs, but the availability of psychotropic drugs in primary care is not consistent. About 20% of countries do not even have the three most commonly prescribed drugs to treat disorders like depression, schizophrenia and epilepsy. Where these drugs are available, high prices are often a barrier to care. Though low income countries have lower median prices, the difference in prices between low and high income countries is only 2 to 5 times while the difference in their income level is more than ten times, making these drugs relatively less affordable in low income countries.

Twenty-eight percent of countries report not having a specified budget for mental health. Where budgets do exist, they represent only a small proportion of the total health budget. Thirty-six percent countries, of those providing information, reported spending less than 1% of the total health budget on mental health. Budgets are particularly low in the African and South-East Asia Regions. Lower income countries also have a proportionately lower mental health budget. This puts mental health in these countries at even a greater disadvantage. Common methods of financing mental health care are tax-based funding, social insurance and out-of-pocket payments. Out-of-pocket payments put excessive and unplanned burden on families, especially in low income countries, and are particularly common in the African, South East Asia and Eastern Mediterranean Regions. Private insurance plays a very minor role, if any, in mental health care financing in all Regions.

Though 87% of countries have identified mental health as an activity in primary care level, treatment facilities for severe disorders are available in only 59% of countries. Regular training of primary care personnel takes place only in 59% of countries.

The median number of psychiatric beds available in the world per 10 000 population is 1.6, with 65% of these beds in mental hospitals. More than 40% of countries, covering about 65% of the world's population, have access to less than one psychiatric bed per 10 000 population. Beds are particularly deficient in the African and South-East Asia Regions.

The availability of specialized personnel is also poor. There is only one psychiatrist and one psychiatric nurse per 100 000 population in 53% and 46% of countries respectively. This deficiency is particularly evident in the Regions of Africa, South-East Asia, Western Pacific and Eastern Mediterranean. Though countries in the European Region and the Region of the Americas have more personnel, the distribution of resources across all the countries in the regions is not uniform. The availability of psychologists and social workers working in mental health is also poor with median numbers 0.4 and 0.3 per 100 000 population respectively for these professionals among all countries.

Mental health programmes for special populations are also scarce. Programmes for children and elderly are present in only 60% and 48% of countries respectively, though they form a substantial proportion of the total population. Non-governmental organizations in mental health are reported to be active by 88% of the countries.

Mental health monitoring systems are important tools in assessing the overall mental health situation of a country. However, mental health reporting is not done by 27% of countries and data collection or epidemiological studies are absent in 44% of countries. Again low income countries lag behind in this respect.

Overall, the picture that emerges for mental health resources in the world is highly unsatisfactory. The availability of most resources is poor and their distribution is highly uneven. A substantial improvement in mental health resources is needed urgently to respond to the existing and increasing burden of mental disorders.

