# 

## WHO-AIMS: REPORT ON MENTAL HEALTH SYSTEMS IN LATIN AMERICA AND THE CARIBBEAN





## WHO-AIMS:REPORT ON MENTAL HEALTH SYSTEMS IN LATIN AMERICA AND THE CARIBBEAN

Report on the Assessment of Mental Health Systems in Latin America and the Caribbean using the World Health Organization Assessment Instrument for Mental Health Systems (WHO-AIMS)



## Sustainable Development and Environmental Health Area (SDE)

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# CONTENTS

Acknowledgments	iv
Preface	V
Introduction	1
Methodology	6
Domain 1 - Policy and Legislative Framework	8
Domain 2 - Mental Health Services	21
Domain 3 - Mental Health in Primary Care	
Domain 4 - Human Resources in Mental Health Care	
Domain 5 - Public Education and Links with Other Sectors	59
Domain 6 - Monitoring and Research	62
Conclusions	64
References	

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## **COUNTRIES AND TERRITORIES**

Anguilla (United Kingdom), Antigua and Barbuda, Argentina, Barbados, Belize, Bolivia, Brazil, British Virgin Islands (United Kingdom), Chile, Costa Rica, Cuba, Dominica, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Montserrat (United Kingdom), Nicaragua, Panama, Paraguay, Peru, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago, Turks and Caicos (United Kingdom), and Uruguay.

## PREFACE

Mental and neurological disorders account for almost one-quarter of the total burden of disease in Latin America and the Caribbean. An efficient mental health system is vital to being able to both provide an appropriate response and reduce this burden, which results in morbidity, mortality, and disability, and to close the wide gap in terms of those who are ill and are not receiving any type of treatment. PAHO has clearly expressed its commitment to cooperate with the Member States in restructuring mental health care, and this evaluation exercise is an essential step in that process.

This report is the product of the application of the Assessment Instrument for Mental Health Systems known as WHO-AIMS—a tool and methodology developed by the World Health Organization that has been used by almost all the countries of Latin America and the Caribbean. The Pan American Health Organization actively encouraged and collaborated with 34 countries and territories in its use, as well as in the analysis and dissemination of results.

Information was compiled and studied in detail by every country and then consolidated by subregion. Obtaining the data requested was at times a complex and difficult task; often the information was scattered, was not directly available, or was not well-organized. At present, in addition to the national reports, three subregional reports are available: for Central America and the Dominican Republic, the non-Latin Caribbean, and South America.

Through the respective evaluations, the countries' ministries of health have been able to more clearly identify their strengths, weaknesses, and priorities in order to tackle the improvement of services. With them, we also have, at the regional and subregional level, a more precise overview that will guide PAHO's technical collaboration.

Let me turn to some of the report's important conclusions. First and foremost, in the majority of the countries that were assessed, mental health systems do not satisfactorily respond to the needs of the population. To a certain extent, mental hospitals continue to be the core of mental health care, absorbing a considerable proportion of available resources. Development of the mental health component in primary care is still limited, and workers at that level do not have the response capacity necessary to deal with these problems. However, there are also many positive and innovative experiences in the Region that can serve as examples of what can be done in the field of public health.

I would like to express our gratitude to the teams that carried out this work, in particular the national authorities of the ministries of health, who did not hesitate to look in the mirror and face the study's not always satisfactory findings. This assessment would not have been possible without the support of PAHO/ WHO Representative Offices, as well as the systematic cooperation of the World Health Organization's Department of Mental Health and Substance Abuse. We would also like to acknowledge the many other actors who played an extremely important role in the countries.

An exercise of this type enables us to move forward toward identifying necessary changes. The challenge now is to turn this assessment into a working tool for the planning and implementation of new actions, substantially improving health systems' response. The ultimate goal is the attainment of genuine improvements in the lives of people with mental disorders.

Carissa F. Etienne Director

# **INTRODUCTION**

The Member States of the Pan American Health Organization/World Health Organization (PAHO/WHO) that appear in the tables below have used the assessment instrument for mental health systems (WHO-AIMS) (1), as have Anguilla, the British Virgin Islands, Montserrat, and Turks and Caicos, all British Overseas Territories.

For the purpose of this report, the countries and territories were grouped into three subregions, as follows: Central America, Mexico, and the Latin Caribbean, the non-Latin Caribbean, and South America. The tables also indicate the year each national WHO-AIMS report was published.

Countries	Year of WHO-AIMS
Costa Rica	2008
Cuba	2011
Dominican Republic	2008
El Salvador	2006
Guatemala	2006
Haiti	2011
Honduras	2008
Mexico	2011
Nicaragua	2006
Panama	2006

## Table 1. Central America, Mexico, and the Latin Caribbean countries and year of WHO-AIMS report publication

## Table 2. Non-Latin Caribbean countries and territoriesand year of WHO-AIMSreport publication

Year of WHO-AIMS
2009
2009
2009
2009
2009
2009
2009
2008
2008
2009
2009
2009
2009
2009
2009
2007

Countries	Year of WHO-AIMS
Argentinaª	2010
Bolivia	2008
Brazil	2007
Chile	2006
Ecuador	2008
Paraguay	2006
Peru	2008
Uruguay	2006

## Table 3. South American countries and year ofWHO-AIMS report publication

<sup>a</sup> Data from 10 of the 24 provinces.

Furthermore, for the purpose of this report, "Latin America and the Caribbean (LAC)" refers to these 34 countries and territories. Bahamas is not included, as its report was not complete yet. Colombia and Venezuela are not included either because they have not implemented WHO-AIMS.

It is important to note that, as data collection began prior to publication of each report, some of the changes in certain countries in recent years are not reflected in the present document. However, it was possible to update some of that information, particularly with respect to policies, plans, and laws, taking advantage of the publication of the WHO Mental Health Atlas 2011 (2) and information from countries with which the authors of this document have ongoing relations. In all cases, if not specified in the text, the source of the material is the respective WHO-AIMS.

The subregions are very different from each other in many parameters. Differences even exist within them. For example, the non-Latin Caribbean includes countries and territories of different size, ranging from 90 to 13,000 km2; different population size, from 5000 to 2,5 million inhabitants; different socioeconomic status, from low to high; and different geographical location, on the continent or on islands. The languages spoken vary (e.g., English, Dutch, and local languages, such as Papiamento), as does their political situation: there are independent states and overseas territories.

Similar disparities exist in the other two subregions (e.g., from the population and/or territorial standpoint). However, the authors of this report believed that it was necessary to employ a certain grouping that would facilitate the analysis, taking into account elements common to a certain group of countries or simply because of their geographical proximity.

#### **Sociodemographic Information**

According to the ECLAC Statistical Yearbook for 2008 (3), when WHO-AIMS fieldwork began in 2007, the population of Latin America and the Caribbean totaled slightly more than 579 million people. Table 4 presents some of the most important demographic data.

# Table 4. Sociodemographic data from the 34 countries and territories of Latin Americaand the Caribbean that used WHO-AIMS

		Carriero				
Participating Countries and Territories	Income Bracket: high income (HI), middle high income (MHI), middle low income (MLI), low income (LI)	Population, 2010 (x 1000)	Gross National Income (GNI) per capita international \$ (PPP adjusted) [US\$] (PPP int. \$) 2004	Population below poverty line (%, <\$1 per day)	Adult Literacy Rate (%) 2010	Estimated mortality rate from suicide and self-inflicted injury (per 100,000 population)
Anguilla	н	15				
Antigua and Barbuda	MHI	87	19,390		99.0	1.2
Argentina	MHI	40,412	14,110	0.87	97.8	7.8
Barbados	н	286	18,240			3.5
Belize	MLI	312	5,990			3.7
Bolivia	MLI	9,930	4,170			
Brazil	MHI	194,946	10,190	3.80		5.8
Chile	MHI	17,114	13,450	0.83		11.6
Costa Rica	MHI	4,659	11,040	0.65	96.2	5.8
Cuba	MHI	11,258			99.8	12.2
Dominica	MHI	73	8,430			4.1
Dominican Republic	MHI	29,077	8,010			2.6
Ecuador	MHI	14,465	8,010	5.14	91.9	8.2
El Salvador	MLI	6,193	6,680		84.5	11.4
Grenada	MHI	108	8,320			2.9
Guatemala	MLI	14,389	4,700		75.2	4
Guyana	MLI	754	3,130			27
Haiti	LI	9,993				
Honduras	MLI	7,601	3,840		84.8	
Virgin Islands (UK)	HI	43				
Jamaica	MHI	25			86.6	4.6
Mexico	MHI	2,741	7,550		93.1	
Montserrat	HI	113,423	15,030			4.2
Nicaragua	MLI	5				
Panama	MHI	5,788	2,730		94.1	11.4
Paraguay	MLI	3,517	11,970		93.9	5.9
Peru	MHI	6,455	4,680	5.90		6
Saint Kitts and Nevis	н	9,927	7,860			3.1
Saint Lucia	МНІ	50	15,490			2.1
Saint Vincent and the Grenadines	MHI	104	8,970			3.7
Suriname	MHI	161	9,200		94.7	2.4
Trinidad and Tobago	н	525	6,730		98.8	14.4
Turks and Caicos	н	1,341	23,520			10.7
Uruguay	MHI	3,369	12,440	0.03	98.1	15.9

**Sources**: Pan American Health Organization (PAHO/WHO) (http:/new.paho.org/hq/index.php?option=com\_content&tas k=view&id=2470&Itemid=2003); World Bank (http://data.worldbank.org/indicator)

## **Demographics**

Another report, from ECLAC in 2010 (4), points out that: "By the end of the first decade of the third millennium, life expectancy at birth has climbed to 73.4 years in Latin America and the Caribbean (70.2 for men and 76.7 for women), the average number of children per woman is approaching replacement level (2.18), infant mortality has declined to 22 deaths before the first birthday for every 1,000 live births, and the population living in rural areas represents 20% of the total (United Nations, 2008c). In turn, illiteracy among those over 15 years of age has fallen to 8.3% for men and 9.7% for women."

Additionally, ECLAC in a 2004 document (5) observed that: "The demographic transition under way in Latin America and the Caribbean reveals that the Region's population is gradually but inexorably ageing. This is a generalized process, in which all the countries are advancing towards the "greying" of their societies. Two characteristics of this process make it a matter of urgent concern. First, the population is ageing at a more rapid pace, and will continue to do so in the future, than the rates recorded in the past by today's developed countries. Second, this is taking place in a context of high poverty rates, persistent and acute social inequity, a low level of institutional development, [and] limited social security coverage...."

With regard to mental health, this demographic picture presents a challenge that mental health systems need to cope with: the psychosocial problems of the older adult population.

#### Languages

The countries of Latin America and the Caribbean were colonized by Spain, France, the Netherlands, Portugal, and the United Kingdom. The official languages are, in general, the result of its colonial history, notwithstanding the existence of many other languages that continue to be spoken by indigenous peoples. This diversity of languages and cultures poses challenges to mental health systems that are still not satisfactorily resolved to be able to ensure access to services by population groups—with respect to their acceptability, as put forward in international human rights conventions (6).

#### **Disasters**

The countries of Latin America and the Caribbean frequently experience emergencies and disasters, with the consequent psychosocial impact on the affected population groups, which translate—among other things—into growing demands on health systems (7).

#### **Epidemiological Data on Mental Disorders**

Several countries of the Region have relatively recent community-based epidemiological studies that provide data for formulating responses by the mental health system to the needs of the populations of Latin America and the Caribbean. We recommend consulting the book Epidemiology of mental disorders in Latin America and the Caribbean (in Spanish) (8), published by the Pan American Health Organization in 2009.

In Latin America and the Caribbean, the burden of mental and neurological disorders accounts for 22.2% of the total burden of disease, measured in disability-adjusted life years (DALYs). With regard to all neuropsychiatric disorders, the most common are the unipolar depressive disorders (13.2%) and those produced by excessive use of alcohol (6.9%) (8).

Despite the magnitude of the burden of mental and neurological disorders, the treatment gap is overwhelming; we are referring to the percentage of people with mental disorders that do not receive any treatment (Table 5).

gap percentage			
Disorder	Average prevalence (per 100 adult population) (12 months)	Treatment gap (%)	
Non-affective psychoses	1.0	37.4	
Major depression	4.9	58.9	
Dysthymia	1.7	58.8	
Bipolar disorder	0.8	64.0	
Anxiety disorder	3.4	63.1	
Panic disorder	1.0	52.9	
Obsessive-compulsive disorder	1.4	59.9	
Alcohol dependence and harmful alcohol use	5.7	71.4	

## Table 5. Prevalence of some mental disorders and treatment gap percentage

**Source**: Kohn R, Levav I, Caldas de Almeida JM, Vicente B, Andrade L, Caraveo-Anduaga JJ, Saxena S, Saraceno B: Mental disorders in Latin America and the Caribbean: a public health priority. Rev Panam Salud Publica 2005;18(4/5):229-240.

## **Epidemiological Data on Suicide**

Data published by PAHO/WHO for the years 2000-2004 included crude and age-adjusted rates. In Central America, the respective total rates were 7.3 and 7.5; in the Latin Caribbean, 8.4 and 7.6; and in South America, excluding Brazil, the respective rates were 6.7 and 6.3. The respective rates for Brazil were 5.2 and 5.3. Cuba, Uruguay, and Nicaragua reported the highest rates in Latin America: 16.4 and 13.0; 16.0 and 13.6; and 13.7 and 14.1, respectively. The non-Latin Caribbean had the highest rates of all the subregions. The total crude rate was 14.1, while the age-adjusted rate was 13.4. All the aforementioned rates are per 100,000 population. Rates were higher in men in all countries (9).

## **PAHO/WHO Resolutions on Mental Health**

During the Pan American Health Organization/World Health Organization Directing Council's meetings in 1997, 2001, and 2009 (10, 11, 12), the countries of Latin America and the Caribbean approved three resolutions whose complete adoption would lead to major reforms in mental health systems.

Actions to reform mental health systems are made even clearer and more feasible as a result of the recommendations provided in the Strategy and plan of action on mental health, adopted at the 49th Directing Council meeting, in September 2009 (13). Those guidelines were subsequently made operational in five strategic areas in the document "Framework for the implementation of the regional strategy on mental health," which were discussed by representatives from almost all the countries of the Americas in Panama, in October 2010 (14).

The body of information now available, added to the signed international conventions and to the political will expressed in the Resolution of the 49th Directing Council, provide the countries of Latin America and the Caribbean with the ways and means for the processes of development, reform, and strengthening of their mental health systems so that they can meet the needs identified in the situation assessments presented in this report.

# **METHODOLOGY**

#### **Description of the Instrument**

The World Health Organization Assessment Instrument for Mental Health Systems (WHO-AIMS) (1) was developed so that countries, particularly those that are low- and middle-income, can carry out systematic monitoring and evaluation exercises of their mental health systems. The first one done will serve as a baseline to determine the changes produced as a result of the subsequent implementation of policies, plans, and programs, as well as the implementation of services designed to improve the system or, in their absence, to assess deterioration or the absence of changes. WHO-AIMS can be applied in the entire country, in provinces or states, or in more limited-sized regions.

WHO has defined a mental health system as "all structures and activities whose primary purpose is to promote, maintain, or restore mental health and prevent mental disorders." The areas included in WHO-AIMS are derived from the ten Overall Recommendations to improve mental health care that were part of the World Health Report 2001 (15), namely:

- 1. Provide treatment of mental disorders in primary care.
- 2. Make psychotropic drugs available.
- 3. Give care in the community.
- 4. Educate the public.
- 5. Involve communities, families, and consumers.
- 6. Establish national policies, programs, and legislation.
- 7. Develop human resources.
- 8. Link with other sectors.
- 9. Monitor community mental health.
- 10. Support more research.

For their assessment, WHO-AIMS grouped these ten recommendations into six domains:

- 1. Policy and legislative framework.
- 2. Mental health services.
- 3. Mental health in primary care.
- 4. Human resources.
- 5. Public education and links with other sectors.
- 6. Monitoring and research.

In turn, these six domains were broken down into 28 subsections and—according to the authors of this report—155 indicators.

#### Methodology Used for the Application of WHO-AIMS

WHO-AIMS was carried out following the recommendations in the instrument. The process began with a request by the corresponding Ministry of Health to implement WHO-AIMS in the country, which, in turn, designated a person who would be responsible for data collection. This involved the preparation of questionnaires or other methods necessary for collecting data, contacting the various actors involved in provision of information, and preparing the country report.

To introduce the instrument, national workshops were organized with the main actors in the sector, in collaboration with PAHO/WHO. As a result of these meetings, those in charge of data collection had certain

ease of access to information from various institutions that otherwise might have been difficult to obtain. The Ministry of Health appointees received technical support from local personnel in the PAHO/WHO Representative Offices, the PAHO/WHO Subregional Adviser on Mental Health, and mental health officials from PAHO and WHO Headquarters. Once the data had been collected and entered into Excel, they were sent to the mental health advisers (first from PAHO and later from WHO), who reviewed and commented on them to assure the quality and internal consistency of the information. The feedback was then resent to the focal point, where corrections could be made or unclear issues explained. This process continued until it was assured that the indicators represented reality.

Lastly, the final report was prepared using a model designed by WHO, which then followed the same course for its review. Once the report's data had been validated by the main actors at the country level and approved by the Ministry of Health, the report was officially submitted and published on the PAHO and WHO websites. Workshops were held in many countries to discuss next steps and ensure an appropriate response to the needs and problems identified in the document.

It is important to point out that, in all countries, different governmental agencies, professional organizations, and various civil society groups contributed to the provision of data and to the analysis of results; each country report lists the people and institutions that collaborated in this effort. This mobilization of resources made it possible to compile information that, usually, was not available at the central level. Furthermore, it made it possible to validate the information through a process of sharing it and through the active participation of the parties involved in the analysis.

## **DOMAIN 1 - POLICY AND LEGISLATIVE FRAMEWORK**

#### Introduction

This section of the World Health Organization Assessment Instrument for Mental Health Systems (WHO-AIMS) (1) evaluates the different components of a country's mental health system as part of its national health system—specifically, aspects of mental health legislation, national mental health policy and plans, and basic data on financing of the systems. Human rights protection in the sphere of mental health is then evaluated. The logic and contents of these documents are described in detail in various WHO publications (15, 18).

It is important to point out that in Latin America and the Caribbean, policies and plans are not always clearly differentiated. As a result, although they are considered separately in this report, following the WHO-AIMS structure, in practice many countries have prepared documents that jointly present elements both of their mental health policy and mental health plan.

## **National Mental Health Policy**

The first WHO-AIMS indicator analyzes the existence of a national mental health policy in each country. The collected information reveals that the existing policy is often incomplete or has not been explicitly stated as such. This is the situation in 14 countries or territories in the Region. In some cases, it can be inferred from national health plans or policies that include specific components that deal with mental health.

In general, national mental health policies were based on World Health Organization recommendations. The most common components are: financing, legislation, and human rights; organization of services; human resources and training; promotion, prevention, treatment, and rehabilitation; distribution of essential drugs; advocacy; improvements in quality; information systems; research and evaluation of policies and services; and intersectoral collaboration.

In Central America, Mexico, and the Latin Caribbean, eight countries have a national mental health policy. Only Nicaragua and Haiti do not, though Haiti has begun preparing one. It is important to point out that these eight countries have developed or updated their mental health policies in the last three or four years.

In the non-Latin Caribbean, the results are a little different since, of the 16 countries or territories, only eight have an explicit policy developed in the current millennium: Anguilla, Barbados, Belize, Guyana, Jamaica, Saint Lucia, Trinidad and Tobago, and Turks and Caicos. The rest have no specific policy, although several of them have recently prepared drafts that are under evaluation or consideration by the respective authorities.

In South America, six countries—Argentina, Brazil, Ecuador, Paraguay, Peru and Uruguay—reported having a document that explicitly stated the national mental health policy, which in almost all cases had recently been prepared (after 2002). It should be pointed out that, in some countries, considerable time has passed since the policy was drafted. In Chile, the policy is stated in the National Mental Health Plan. The same holds true in other countries of the subregion. For more details, see Table 1.1.

Another problem related to this component is that the current policies were not always drafted or confirmed by the governments in power. This frequently undermines their authority and the feasibility of fully implementing them. In some cases, mental health is not among the priorities of the authorities involved and, as a result, the policies are not implemented.

Figure 1.1 offers a summary of the situation with respect to the existence of regional and subregional mental health policies. The figure shows that 41.2% of the countries have developed or updated their mental health policies since 2005 (14 countries in total); 17.6% (six countries) have policies from before 2005; and 41.2% (14 countries) lack mental health policies, either because they do not exist or because they are included in other national documents.



Figure 1.1. Percentage of countries with mental health policies, regional and by subregion, by year of the latest version

In this section, WHO-AIMS also presents an additional item related to free access to essential psychotropic drugs. In Central America, Mexico, and the Latin Caribbean, including Haiti, 57% of the total population, on average, has free access to these drugs. In Cuba, El Salvador and Honduras, there is full coverage. In the eight countries evaluated in South America, subregional coverage averaged 52%, ranging from 0% in some provinces of Argentina and 1% in Bolivia and Ecuador, to 100% in Brazil and Chile. This percentage is in contrast with what was reported by countries and territories in the non-Latin Caribbean, where access was estimated at 100%, with the exception of Jamaica (1%).

#### **National Mental Health Plan**

WHO-AIMS findings with regard to the existence and implementation status of a national mental health plan (NMHP) revealed a fairly uniform situation in some subregions and a very dissimilar one in others. While the majority of countries in Central America, Mexico, and the Latin Caribbean have a plan, the opposite is true in the non-Latin Caribbean and only some countries have prepared an NMHP. Notably, all South American countries but one have a national plan, although some date back several decades.

Another difference is that some countries reported having an NMHP in the form of a specific document that defines and guides the country's mental health initiatives, while other countries, even in the absence of a plan, carry out mental health activities (for example, through programs or isolated initiatives) that could be an integral part of an NMHP.

#### Summary of the Information Provided by the 34 Countries

All the countries in Central America, Mexico, and the Latin Caribbean have an NMHP, with the exception of Haiti, which, as pointed out earlier, is currently drafting a mental health policy and plan. These plans were developed within the past decade, mostly in the past three or four years. Only three of the countries in this subregion (Costa Rica, Guatemala, and Haiti) lack an emergency or disaster plan, while the others have drafted one in the past decade.

Six countries or territories in the non-Latin Caribbean have adopted an NMHP in the course of this millennium: Belize, Jamaica, Montserrat, Suriname, Trinidad and Tobago, and Turks and Caicos. Although we are aware of developments subsequent to the collection of the WHO-AIMS information, ten countries did not have an NMHP when this document was being prepared. However, it is worth pointing out that while the majority of countries do not have an NMHP, this does not mean that no progress has been made in the development of mental health services. At the same time, only a minority of countries (six out of 16) had a disaster contingency plan, even though the subregion is frequently hit by disasters. In this case, it is also important to point out that five countries and territories have been working on the issue in recent years, which is not reflected in their respective WHO-AIMS.

All the countries in South America have an NMHP. As in the previous cases, some plans were developed in a participatory manner, while others were prepared by officials from the respective ministries of health. Only one country in the subregion (Ecuador) has an emergency plan.

It should be noted that, as is the case with policies, the existence of an NMHP in any of the subregions does not guarantee its implementation. Plans are often prepared in response to situational pressures at the national level or by international agencies, but then disregarded and not used as a real tool for improving services. For more details, see Table 1.1.

#### **National Policy and Human Rights Protection**

There are disparities among the countries that have been working on the issue of human rights in the mental health area. On one hand, there are countries and territories that consider the issue to be intrinsic to mental health and which have included specific actions to monitor and protect human rights in their policies and plans (for example, training for service staff and inspections at psychiatric institutions); on the other, a sizable number of countries provide virtually no data on activities in this area; if there are any activities, they are isolated or marginal at best.

In Central America, Mexico, and the Latin Caribbean, the situation is mixed. Five countries had some type of audit aimed at protecting the human rights of people with mental disorders and had taken some action to amend hospitalization procedures. On average, 30% of psychiatric hospitals had received an external inspection in the 12 months prior to collection of the data, while in the previous 24 months, 57 of the 83 psychiatric hospitals in these countries had had at least one training session on protection of the human rights of hospitalized patients. In general, there is no regular or systematic mental health training at the subregional level.

In the non-Latin Caribbean, three of the 16 countries evaluated have agencies in charge of the regular inspection of psychiatric services. Four countries reviewed cases of involuntary admissions and discharges,

six reviewed complaints, and four had the authority to impose sanctions. However, no country had received at least one external inspection of its psychiatric hospitals, except for Jamaica (though at only one of its four in-patient centers). Three countries (Belize, Jamaica, and Suriname) had had at least one work session on human rights at their mental hospitals. Belize also held sessions in all its ambulatory services, while Jamaica did so in only half of them.

In South America, the situation varies widely and is perhaps more dynamic than in the other subregions. Practically all the countries have staff monitoring and training initiatives. For example, Brazil has a national commission with the power to inspect psychiatric institutions and even to order their closure in cases of persistent human rights violations. In Paraguay, in contrast, it was the Inter-American Commission on Human Rights of the Organization of American States (OAS) that imposed precautionary measures as a result of violations that occurred in the psychiatric hospital in the nation's capital, resulting in corrective measures that are not yet completed.



#### Figure 1.2. Proportion of hospitals that received an external inspection/audit or training session on protecting the human rights of hospitalized patients in the 12 and 24 months prior to collection of the data, by subregion

Figure 1.2 summarizes what is described above. In South America and Central America, Mexico, and the Latin Caribbean, an audit or external inspection of human rights protection was conducted at 39% and 30% of hospitals, respectively, on average, while in the non-Latin Caribbean, no psychiatric hospital had had one. Furthermore, in Central America, Mexico, and the Latin Caribbean the average percentage of hospitals that have provided training in this area approximately doubles that of South America, while in the non-Latin Caribbean, the figure is 30%. Finally, the total for the Region shows that 23% of hospitals received an external inspection and 45% had had at least one training activity on protecting the human rights of hospitalized patients.

## Legislation

From a regional standpoint, although situations vary markedly, there is certain uniformity in the findings. Actually, only a minority of countries have specific legislation--that is, a law entirely devoted to mental health already in place at the opening of this millennium: two in South America; one in Central America, Mexico, and the Latin Caribbean; and three in the non-Latin Caribbean.

At the time this document was produced, the most recent specific law in the Region was that of Argentina, adopted in 2010, which fits within the framework of the community model of mental health care and is guided by the international and regional conventions on human rights protection to which the country is a signatory.

As for other countries in South America, in 2001 Brazil adopted legislation consistent with the community model and respect for human rights. Uruguay also has a specific law, although it dates back to 1936. The other countries in the subregion have general health laws with mental health components, in which the emphasis on the issue varies.

In Central America, Mexico, and the Latin Caribbean, only the Dominican Republic has a specific law that was drafted in this millennium. Mexico passed a general law in 1994 that mentions mental health issues. Cuba has relevant mental health components in Chapter 2 of its Public Health Act (1993).

It should be noted that the situation in the non-Latin Caribbean is different from that of the rest of the Hemisphere, since only one country, Belize, does not have specific mental health legislation. All the others have specific laws, for the most part passed in the late 1950s, when countries were declaring their independence from the United Kingdom. Some of these laws have since been ratified; however, in only two countries or territories have they been completely replaced with versions approved in this millennium: Anguilla (2006) and Grenada (2005). In the rest of the countries, roughly half have laws dating back to before 1960, and the other half have laws dating from 1960 to the end of the century.

Figure 1.3 illustrates the number of countries with legislation passed in the current century; countries whose laws were passed between 1960 and 2000; those that have had them since before 1960; and those that have no specific mental health legislation.



# Figure 1.3. Number of countries with mental health legislation, by year in which the law was passed

It follows clearly from the summary presented here that, even if the mental health components included in general legislation are considered, there is a deficit in terms of legislation in all the subregions, since such legislation predates the relevant international conventions. The importance of having a legislative framework to improve the mental health system should be underscored. This is pointed out in the WHO World Health Report 2001 (15) and other later documents such as the PAHO Strategy and plan of action on mental health (13) for our Region. In this regard, the WHO-AIMS findings emphasize the need to start taking action. Given the complexity of the process of formulating, adopting, and implementing a law, the results of such action can only be observed over the medium to long term. For more details, see Table 1.1.

	Year of most recent mental health policy	Year of most recent mental health plan	Year of mental health legislation
Anguilla	2005	NA	2006
Antigua and Barbuda	NA	NA	1957
Argentina	2010	2010	2010 **
Barbados	2004	NA	1985
Belize	2009 *	2010 *	NA *
Bolivia	NA	2009	NA
Brazil	2002	2004	2001
Chile	NA	2001	NA
Costa Rica	2007	2010	NA
Cuba	2002	2009	1983
Dominica	NA	NA	1986
Dominican Republic	NA	2010	2006
Ecuador	NA	2010	NA
El Salvador	2008	2005	NA
Grenada	NA	NA	2005 *
Guatemala	2008	2008	NA
Guyana	2008 *	2008 *	1930
Haiti	NA	NA	NA
Honduras	2004	2007	NA
British Virgin Islands	NA	NA	1986 **
Jamaica	2004 *	2009 *	1997
Mexico	2007	2007	1994
Montserrat	NA	2002 **	2006
Nicaragua	NA	2005	NA
Panama	2009	2001	NA
Paraguay	2002	2002	NA
Peru	2006	2006	NA
Saint Kitts and Nevis	NA	NA	1956
Saint Lucia	2007 **	NA	1957
Saint Vincent and the Grenadines	NA	NA	1989 **
Suriname	NA *	NA *	1912 *
Trinidad and Tobago	2000 *	2000	1981 *
Turks and Caicos	2005	2005	1999 *
Uruguay	2005	1996	1936

#### Table 1.1. Year of publication of mental health policies, plans, and legislation, by country

*Sources:* \* World Health Organization. Mental Health Atlas 2011. Geneva: WHO; 2011. Available at: http://www.who.int/mental\_health/publications/mental\_health\_atlas\_2011/en/index.html# \*\* Personal communication from the Ministry of the Health.

## Financing

Although all countries in the Region have specialized mental health services (with or without a psychiatric hospital), it is no simple task to know exactly how much money is allocated to these services. In the majority of the countries evaluated, there is no specific budget line for mental health. Funding data are obtained from estimates based on the available information on the different existing services and estimated expenditures.

When psychiatric hospitals are the sole or main mental health service, it can be simpler to identify resources, although in general, these basically consist of staffing, operating, and maintenance costs. Left out of the calculation are areas under the public services, such as primary health care (PHC) and certain essential resources such as medication, wherever these are subsidized or dispensed free of charge.

In any case, although the information is incomplete, it is clear that the available resources are so limited that it is hard to consider real, large-scale implementation of policies or plans designed to ensure greater coverage of the populations' mental health needs.

In the eight countries evaluated in South America, the mental health budget as a percentage of the total health budget ranged from 0.2% to 7%, with a median of 2.05%. In the six countries of Central America, Mexico, and the Latin Caribbean, it ranged from 0.4% to 2.9%, with a median of 0.9%. Finally, in the non-Latin Caribbean, the range was from 1% to 9% in the 14 countries or territories that furnished the information, with a median of 3.5%.



#### Figure 1.4. Percentage of the total budget allocated to mental health, by subregion

Figure 1.4 shows that in the majority of countries, the expenditure allocated to mental health as a percentage of the total health budget barely exceeds 1%. In South America, only Uruguay (12.5%) has a mental health budget greater than 5%; and in Central America, Mexico, and the Latin Caribbean, no country does. In contrast, although it represents a smaller population, 25% of the countries in the non-Latin Caribbean allocate between 5% and 10% of their health budget specifically to mental health. Finally, only 8% of all the countries in the Region have a mental health budget that is more than 5% of the total health budget, while 7.5% have a budget of under 1%.

This meager allocation to mental health (with some exceptions where the percentage is higher) is also affected by the marked asymmetry in budget distribution. In fact, with the exception of Belize (26%), Chile (33%) and Panama (44%), most of the countries devote over 50% of their mental health budget to psychiatric hospitals.

This trend of channeling resources to centralized and hospital-based services (in many cases based on an asylum model) is contradictory to the resolutions adopted by these same countries at the meetings of PAHO/WHO Directing Council, at which they supported the development of programs for community-based care. It is also in violation of the International Convention on the Rights of Persons with Disabilities (16) and the principles and objectives spelled out in the majority of national mental health policies and plans in Latin America and the Caribbean. It is obvious that a budget that favors asylum-based care is inconsistent with the intention of providing community-based care.

Table 1.2 presents budget data on mental health expenditure in the respective countries and territories, as well as the percentage of funds allocated exclusively to psychiatric hospitals. Of the 27 countries with psychiatric hospitals, 20 allocate more than 50% of their mental health budget just to these institutions; and 14 of these 20 countries allocate more than 80% to them.

#### Table 1.2. Percentage of total health budget allocated to mental health, and percentage of mental health spending allocated to psychiatric hospitals, by country/territory

	by country/territory	
	Percentage of total health budget allocated to mental health budget %	Percentage of mental health spending allocated to psychiatric hospitals %
Anguilla	UNª	NA <sup>b</sup>
Antigua and Barbuda	4	UN
Argentina <sup>c</sup>	2	65
Barbados	7.4	100
Belize	1.8	26
Bolivia	0.2	UN
Brazil	2.4	49
Chile	2.1	33
Costa Rica	2.9	67
Cuba	UN	UN
Dominica	3.2	NA
Dominican Republic	0.4	50
Ecuador	1.2	59
El Salvador	1.1	92
Grenada	UN	UN
Guatemala	1.4	90
Guyana	1.3	61
British Virgin Islands	3.4	NA
Haiti	2	100
Honduras	1.6	88
Jamaica	6	80
Mexico	2	80
Montserrat	1.3	NA
Nicaragua	0.8	91
Panama	2.9	44
Paraguay	1	84
Peru	3	98
Saint Kitts and Nevis	1.1	NA
Saint Lucia	4.1	97
Saint Vincent and the Grenadines	5.6	100
Suriname	8.6	83
Trinidad and Tobago	3.7	94
Turks and Caicos	2	NA
Uruguay	7	72

a UN= Unknown. b NA= Not applicable. c Includes 10 of the 24 provinces studied.



# Figure 1.5. Median percentage of health budget allocated to mental health and to psychiatric hospitals, by subregion

Figure 1.5 shows the subregional and regional funding situation for mental health programs and services, and the percentage of the budget allocated exclusively to psychiatric hospitals.

## **Social Security Coverage of Mental Disorders**

This indicator reveals great diversity within each subregion. A significant percentage of the countries did not provide this information, while others did not indicate the specific coverage provided by their social security plans. Furthermore, some countries, such as Trinidad and Tobago, reported that they do not have social security plans; however, they have other types of benefits that offer coverage for mental disorders.

Another aspect to consider in the analysis of this indicator is the limited coverage provided by social security plans in several countries. In some countries, the existing plan does not cover mental disorders (or covers them only partially). In general, the lack of protection for certain population strata with greater mental health needs is both clear and troubling.

As for the subregional analysis, South America provides the least information for this indicator: 25% of countries do not report on the coverage provided by their social insurance systems, while 37.5% do not offer sufficiently clear data. The social security systems of the remaining 37.5% (Brazil, Ecuador, and Uruguay) do cover all mental health disorders and problems of clinical interest.

The situation in Central America, Mexico, and the Latin Caribbean is comparatively better than in South America, since only the Dominican Republic (10%) does not explicitly provide data for this indicator, while the social security systems of Haiti and Nicaragua (20%) do not provide coverage. Sixty percent (60%) of the countries in this subregion do indeed provide coverage for all mental health disorders and problems of clinical interest. In Mexico, which represents the remaining 10%, only some mental disorders are covered.

The situation in the non-Latin Caribbean varies widely. Some 12.5% of countries do not provide data on this indicator in their national reports (Belize and Dominica), while another 12.5% report their results with little clarity. In Barbados specifically, there is no social security system; however, primary and secondary care for mental disorders is free in the public health sector. In contrast, 25% of countries provide no coverage for mental disorders, either because there is no social security or because the system's benefits package does not provide coverage for mental disorders. Finally, 38% do cover all mental health disorders and problems of clinical interest, while 6% cover only severe disorders and some moderate ones (Jamaica).

## **Capacity to Purchase Antipsychotic Medications**

In contrast with the previous indicator, the countries of South America as well as those of Central America, Mexico, and the Latin Caribbean provided information on the capacity to acquire antipsychotics (measured as the percentage of the minimum wage needed to purchase a daily dose of the least expensive antipsychotics on the market). However, in the non-Latin Caribbean, only 19% of the countries provided this information.

In South America, the subregional average for obtaining a daily dose of antipsychotic medication is equivalent to 8% of the minimum wage, but with significant variations. Ecuador is the country in which the percentage is highest (20%), while in Peru it is lowest (1%). In Central America, Mexico, and the Latin Caribbean, 11% percent of the minimum wage, on average, is required to obtain these drugs daily. It is important to note that the highest percentage (46%), not only at the subregional level, but across the three subregions as a whole, was reported by El Salvador. Finally, in the only countries reporting information from the non-Latin Caribbean, the percentage of the minimum wage needed to acquire a day's worth of antipsychotic medication is: 5% for Jamaica, 1% for Suriname, and 4% for Turks and Caicos.



# Figure 1.6. Social security coverage of mental disorders and capacity to purchase antipsychotics, by subregion

Figure 1.6 illustrates the situation described above. In South America, 37.5% of countries provide coverage for all mental disorders through their social security systems. However, there is no information or very little specific information from a very high percentage (62.5%). Some 60% of the countries in Central America, Mexico, and the Latin Caribbean provide full coverage for mental disorders, while 20% do not cover them or else have not given sufficiently clear information. The situation varies even more in the non-Latin Caribbean, ranging from 37.5% with full coverage to 25% with no coverage, and another 25% that do not present specific data. Finally, 45% of the countries in the three subregions have full coverage for mental disorders through social security systems or plans, while 15% do not, and 32.5% lack specific information in this regard.

# **DOMAIN 2 - MENTAL HEALTH SERVICES**

#### Introduction

WHO-AIMS makes it possible to evaluate the services most commonly found in different countries, under the following major categories: outpatient care, day treatment facilities, specialized units in general hospitals, residential facilities and psychiatric hospitals.

Each of these services was evaluated using a series of common indicators: number of service units and people receiving care per inhabitant; percentage of women and children/adolescents receiving care; diagnoses and frequency of contact; and continuity of care. Information on the existence of measures to protect human rights is also provided.

#### **Organization of Mental Health Services**

An analysis was conducted to determine the existence of an entity at the ministerial level recognized as directing or coordinating the planning, implementation, monitoring, and evaluation of mental health actions. It was observed that, in practice, most of the functions of such government agencies were regulatory in nature.

The majority of countries in the Region have some form of leadership or management at the central level. Names, structures, duties and responsibilities vary with the characteristics of each country, the available resources, and the role, recognition, or importance accorded to mental health in the country.

Marked differences were observed. In some cases, there is simply someone, with or without technical expertise, who functions as reference person. In others, the organizational structure includes a unit, department, or secretariat with a defined number of staff and a role that is not only regulatory and advisory in nature, but managerial and supervisory, with resource management functions.

All the countries in Central America, Mexico, and the Latin Caribbean have some coordinating structure. The same holds true in South America, with the exception of Bolivia and Paraguay. In the non-Latin Caribbean the situation is different, since only five countries and territories have a coordinating entity at the Ministry of Health (British Virgin Islands, Guyana, Jamaica, Saint Lucia, and Turks and Caicos). In much of this sparsely populated subregion, human resources are few, which means that a coordinator at the ministerial level is replaced by a focal point — usually a mental health professional who acts as a point of reference, counselor, and representative for whatever is needed.

In general, the use of different titles shows that each country gives this central figure a different position in the ministry hierarchy. It is important to point out that not all units have enough technical personnel to cover the different areas of responsibility. However, in certain cases, central management is well positioned within the ministries and has growing opportunities to influence decisions on mental health issues.

Almost all countries (with the exception of Bolivia, Ecuador, Mexico and Suriname) have informed that catchment areas or service areas exist as a way to organize mental health services to communities. On the other hand, when informing about psychiatric hospitals organizationally integrated with mental health outpatient facilities, 78% of the hospitals in Central America, Mexico and the Latin Caribbean, 82% of those in the Non-Latin Caribbean, and 61% in South America are integrated.

Finally, it is important to stress that, despite the existence of health policies that promote decentralization, the degree of decentralization in mental health systems is still limited.

#### **Outpatient Care Services**

The 34 countries and territories in the three subregions have outpatient care services, although these differ markedly in terms of how they are organized and how data is generated to construct the different indicators.

#### **Coverage Rate of Outpatient Care Units**

The coverage rate of these services varies widely, especially when subregions are compared with each other, in particular with the non-Latin Caribbean. In many of the countries evaluated, "outpatient care or outpatient services" refers to independent units where mental health personnel work continuously and which are usually open to the public during a good part of the day from Monday to Friday. In the non-Latin Caribbean, these outpatient services are replaced by other primary care services, provided by mental health workers on a weekly or monthly basis.

Taking this difference into account, it can be concluded that for outpatient care units, the coverage rate per 100,000 population is 1.2 in Central America, Mexico, and the Latin Caribbean; 1.6 in South America; and 15.5 in the non-Latin Caribbean.

#### **Median of Users Treated**

A median of 588 people per 100,000 population were treated in outpatient care units in the 10 countries of Central America, Mexico, and the Latin Caribbean, ranging from 145 users per 100,000 population in Mexico to 2,206 in Cuba. In the countries of South America, the rates range from 239 to 2,954, with a subregional median of 1,232. In the non-Latin Caribbean, the median is 936, ranging from 60 in Saint Lucia to 4,560 in Belize.

#### **Percentage of Women Treated**

As Figure 2.1 shows, in Central America, Mexico, and the Latin Caribbean, 51% of the people treated in outpatient care facilities were women. In the non-Latin Caribbean, this percentage was also 51%, and in South America, 53%.

#### Percentage of Children and Adolescents Treated

In Central America, Mexico, and the Latin Caribbean, the subregional average is 21% (ranging from 8% in Honduras to 40% in the Dominican Republic). In South America, the percentage ranges from 12% to 38%, with an average of 23%; however, two of the eight countries did not provide information in this regard. In contrast, in the non-Latin Caribbean, the average is just 7.5%, making it the lowest in the Region (ranging from 0 in Antigua and Barbuda to 20% in the British Virgin Islands) (Figure 2.1).



# Figure 2.1. Percentage of women and children/adolescents treated in outpatient mental health care units, by subregion

As Figure 2.1 shows, 50%–53% of the people treated at psychiatric outpatient care centers in the three subregions are women; in other words, the gender distribution is balanced. In Latin America and the Caribbean, 17% of the people seen at outpatient care units are children and adolescents. This figure reflects, among other things, poor service coverage for this population group.

#### Diagnoses

Country reports on the distribution of diagnoses also differ. While in some countries, care is most often provided to persons with psychotic disorders (for example, in the 11 countries and territories of the non-Latin Caribbean that provided information), in other countries the highest proportion of care goes to users with neurotic or situational disorders, as is the case in Central America, Mexico, and the Latin Caribbean.

#### **Contacts per User**

In Central America, Mexico, and the Latin Caribbean, as well as South America, treated patients have approximately three contacts with these health care units on average. In the first of the subregions, two countries do not have information in this regard (20%), and in the second subregion, one country does not (12.5%). There is little variability in this indicator (+/- 2 contacts) among the different countries.

In contrast, if we consider the countries that only offer these services, the non-Latin Caribbean has a higher average number of contacts per patient (6); however, 37.5% of its countries or territories did not have information in this regard and 18.5% required more precise information for this indicator. The indicator varies from 1 to 12 contacts. If all countries and territories are taken into account, the average number of contacts per user in the subregion is 3.8, which is close to the average in the other two subregions.

Subregion	Units per 100,000 population	Users per 100,000 population	Number of contacts per user
Central America, Mexico, and the Latin Caribbean	1.2	588	3
Non-Latin Caribbean	15.5	936	3.8
South America	1.6	1,232	3

## Table 2.1. Outpatient care units and median of users at these centers per100,000 population; average number of contacts per user

Table 2.1 shows that the number of units present in each subregion is not necessarily reflected in the number of users attending these services.

## **Follow Up in the Community**

In Central America, Mexico, and the Latin Caribbean, on average, 24% of outpatient care services offer follow up at the community level (only one country did not provide data). In turn, 37% of the centers in South America offer such services (only one country did not provide information). Finally, in the non-Latin Caribbean, on average, 42% of outpatient health care centers do community monitoring. It must be taken into account that 37.5% of the countries or territories did not offer information and that 25% do not have centers that carry out this type of activity.

In summary, outpatients care services differ significantly among countries and territories. Some of these facilities are in primary care centers, where mental health care is provided by primary care or mental health professionals; other facilities are specialized services established in the community, where mental health care is provided mainly by specialists. Another difference applies to the characteristics of the mental disorders treated, while in some cases these facilities focus on severe mental illness, others treat persons with mild disorders.

The capacity for follow up in the community, ensuring continuity of care for these patients, is limited in the entire Region.

#### **Day Health Care Centers**

The provision of community-based mental health services requires the existence of day health centers. Despite the importance of and need for these services, they are still rather uncommon in the Region, although in some countries they are being expanded. There are also marked disparities among the three subregions.

The day centers on which information was provided take two forms or have two main functions: curative care and rehabilitation. These centers may be administered by the ministry of health or, as is often the case, local NGOs, which usually play a more significant role in rehabilitation.

## **Rate of Day Care Centers**

In South America, there is a rate of 0.45 day centers per 100,000 population (two countries do not have centers); in Central America, Mexico, and the Latin Caribbean the rate is 0.1 (one country needed more detailed information in this regard and another did not have these services). The situation is different in the non-Latin Caribbean, where just three countries and territories have this type of service, at an average of 0.5 per 100,000 population. It should be noted, however, that in five countries, some of these services are provided by another type of center, as is the case of Antigua and Barbuda.

#### **Rate of Users Served**

Day centers in Central America, Mexico, and the Latin Caribbean have a rate of 5.1 users per 100,000 population. In the non-Latin Caribbean, these services are found in only a minority of countries: Antigua and Barbuda (at the psychiatric hospital), Jamaica, Suriname, and Trinidad and Tobago. Patients are treated at a rate of 7.5 per 100,000 population, although Suriname lacked information for this indicator. Rates also vary in South America, from a low of 0.92 in Paraguay to a high of 61.0 in Brazil (both rates per 100,000 population), with a subregional average of 22.3. At the same time, one country in the subregion (Ecuador) does not have centers of this kind, while Peru lacks specific information in this regard.

As Figure 2.2 shows, at the regional level there are 0.4 mental health day centers or services, and 11.7 users treated per 100,000 population. The majority of users are in South America, partly due to the lack of such centers in the other subregions.



#### Figure 2.2. Rate of day centers and users served per 100,000 population

In short, almost none of the countries have developed this type of care to any extent; this modality can prevent permanent hospitalizations and help reduce the risks involved in institutionalization, particularly at psychiatric hospitals.

These services also provide support and respite to family members, offering the opportunity for their loved one to receive care during the day at an institution that seriously tends to their needs and offers activities to help them develop new skills and capabilities. Family members can then pursue their daily activities, which would otherwise be impossible if they were responsible for providing all-day care to a person with serious mental health issues. These are the services that have most clearly contributed to the de-institutionalization process, enabling families to take care of patients at home.

#### **Psychiatric Services at General Hospitals**

This section refers to psychiatric or mental health services at general hospitals, either large wards, or independent units, or simply a predetermined number of beds set aside for that purpose.

In some countries, in particular in the non-Latin Caribbean, patients with severe mental disorders are admitted to emergency services, general wards, or internal medicine units at general hospitals lacking specific mental health units. This component of decentralized mental health systems is fundamental to any reform process, since it offers a specific and highly skilled alternative to traditional structures such as psychiatric hospitals.

It is important to note that these services are sometimes independent specialized units (psychiatry services). Hospitalization can also be provided in other types of units, such as medical clinics, if appropriate.

There are differences based on the specific characteristics of each country. In the countries that provided information, patients do not generally stay in these units more than 40 days and in some, the average stay is 14 days. Short hospitalization periods are considered positive, since this prevents secondary problems caused by prolonged hospitalization. Furthermore, short stays promote the development of crisis intervention techniques that facilitate quick and satisfactory improvement and the prompt reintegration of patients into their family and work environments.

An essential component in this form of care is the availability of psychotropic medication. In almost all the institutions evaluated, at least one psychotropic medicine from each group of essential drugs is available.

Despite the importance and effectiveness of mental health units in general hospitals, many countries in the Region still lack this type of services. Sometimes, few psychiatric beds are available at general hospitals, in comparison with psychiatric hospitals. Indeed, 10 of the 34 countries evaluated do not offer these services.

In Central America, Mexico, and the Latin Caribbean, two countries do not have these services, for a total of 93 units (0.1 units per 100,000 population) and 2.5 beds per 100,000 population (Figure 2.3). Fifty patients are treated per 100,000 population. On average, 54% of the people treated were women and 9% were children or adolescents. Two countries did not have information in this regard.

In South America, seven of the eight countries provided information (Figure 2.3). There are 282 units in the subregion, for an average of 0.3 per 100,000 population. Rates range from 0.3 to 17 beds per 100,000 population, with an average of 4.6, which indicates the disparities between countries. The patient treatment rate is 83.31 per 100,000 population, although two countries did not provide sufficient information in this regard. On average, 49% of the treated patients were women (two countries do not have this information); only four countries have information on the percentage of children or adolescents treated (5% on average).

In the non-Latin Caribbean, this form of care is not widespread, nor is it uniform. Only eight countries have this type of service (Figure 2.3). The number of beds per 100,000 population ranges from 0.2 (Trinidad and Tobago) to 56 (Dominica), with an average of 13.8 for the subregion. There are 0.7 units of this type per 100,000 population, based only on the countries and territories that have these services. Among all 16 countries and territories studied, there is an average of 0.4 units and 6.9 beds per 100,000 population. Generally, in countries where there is a psychiatric hospital, mental health services in general hospitals are practically nonexistent or at least very limited. Patients are seen at a rate of 119 per 100,000 population in the countries where these services are provided, and 82.46 in the subregion as a whole. Finally, in the countries that have this type of unit, women accounted for an average of 42% of treated patients, while 4% of total admissions corresponded to children or adolescents.

Figure 2.3 presents a summary of the data described above, clearly demonstrating the limited number of hospitalization services. The difference between the other two subregions and the non-Latin Caribbean is seen in the sizable number of beds in the general hospital in one of the countries in that subregion (Dominica).



#### Figure 2.3. Number of psychiatric units in general hospitals, number of available beds and of patients treated, per 100,000 population

## **Community Residential Facilities**

Community homes and residences are housing options for people who have serious mental disorders and are socially vulnerable to the point that they require continuous assistance because they have no family, are rejected, or live in financially precarious circumstances.

Residences of this kind are a very appropriate alternative to psychiatric hospitals. They are therefore often created and used when de-institutionalization processes are implemented. They enable discharged patients to be housed in community care units when rejoining the family is not a feasible option. One example is the "Back Home" ("Vuelta a Casa") program in Brazil (17). These accommodations are few and far between in the Region.

Four countries in Central America, Mexico, and the Latin Caribbean offer this option. At the subregional level, there are 0.1 of these residences, 0.5 beds, and 0.6 patients served per 100,000 population. The average stay is 221 days.

Only four countries in South America reported on the availability of this type of care. Brazil and Chile said that residential services were growing. However, the total in the subregion remains low: 619 residences, or 0.3 per 100,000 population. There are two beds and 4.7 people treated per 100,000 population. The average stay (considering the very limited information available) is 178 days.

In the non-Latin Caribbean, only three countries (Barbados, Jamaica, and Trinidad and Tobago) have this type of service, with a subregional availability of 0.3 residences per 100,000 population. In addition, 2.6 beds are available and 2.5 people are served, both per 100,000 population, with an average stay of 312 days.

The private sector in Central America and several NGOs in South America play a prominent role in this type of service. In Chile, for example, of the 85 homes and 18 residences, 65% are administered by NGOs and 22% by family members.

Figure 2.4 clearly shows that this is a type of assistance uncommon in the Region, given that the coverage rate does not exceed 1 in any of the subregions.



#### Figure 2.4. Number of community residences, beds and users per 100,000 population, by subregion and at the regional level

## **Psychiatric or Mental Hospitals**

It is evident that psychiatric hospitals are more the product of a country's tradition and history, local conditions, policies based on health care ideologies, and the presence or absence of alternative resources than the result of rational planning based on a comprehensive care model.

These institutions serve as residences or spaces where people admitted with a mental disorder very often and for a variety of reasons end up living permanently. In these cases, after the crisis has passed, the institution no longer bothers to offer them individualized care based on their needs and rights. The lack of adequate services — such as community residences, psychiatric services at general hospitals and community mental health centers — is what largely fuels this continuing situation.

Differences are found among the countries evaluated when comparing the indicators used to analyze psychiatric hospitals. However, a common element in all countries is the availability of psychoactive drugs.

#### **Hospital and Bed Rate**

There are 14,248 hospital beds in Central America, Mexico, and the Latin Caribbean, equivalent to 12 per 100,000 population. It is important to emphasize that there are major differences between countries; for example, in Cuba the rate is 56.7, while in the Dominican Republic it is 1.8. The number of beds in the subregion fell by 17% in the five years prior to the report. The hospital rate is 0.1 per 100,000 population. On average, 44% of the people treated were women and 4% were children and adolescents.

In South America, there was considerable variation in the reported available bed rates at these institutions, ranging from 3.9 in Peru to a high of 34.9 per 100,000 population in Uruguay. The subregional average is 16.4. It is important to point out that there was a reduction in the number of beds in five countries, ranging from 2% (Argentina) to 31% (Brazil), with an average reduction of 6% in the subregion. Like in Central
America, in South America there are 0.1 hospitals per 100,000 population. Women accounted for 46% of the patients treated, and 8% of total admissions were children and adolescents.

In the non-Latin Caribbean, there are very marked differences among countries and territories. Some do not have psychiatric hospitals--for example, Anguilla, British Virgin Islands, Dominica, Montserrat, Saint Kitts and Nevis, and Turks and Caicos. As an alternative, more beds are offered at general hospitals (Anguilla, Dominica, and Saint Kitts and Nevis). Others, such as Montserrat and Turks and Caicos, have developed outpatient services. Overall, 10 countries and territories have psychiatric hospitals with a total of 3,336 beds. The average rate is 84.6 beds per 100,000 population, ranging from 16.6 in Belize to 200 in Barbados. It should be noted that Belize closed its psychiatric hospital in November 2008, after the WHO-AIMS assessment. On average, the number of beds has fallen by 10% in the past five years, although there were no changes in five countries and territories. Finally, the psychiatric hospital rate is 0.48 per 100,000 population. The previously calculated averages include only the countries and territories that have information in this regard or have such centers. In the 16 countries of the subregion as a whole, there is an average of 52.8 beds and 0.32 hospitals per 100,000 population. Finally, in the countries with psychiatric hospitals, 33% of the people treated were women and 2% were children and adolescents.

## **Patient Treatment Rate**

The patient treatment rate per 100,000 population is 70.7 for South America and 68 for Central America, Mexico, and the Latin Caribbean, though the figure varies widely among the countries. In contrast, the non-Latin Caribbean has a rate of 171.4 among the countries that reported having these centers, or a rate of 75 if the countries and territories in the subregion that do not have psychiatric hospitals are also included.

## **Diagnosis of Patients at Psychiatric Hospitals**

With regard to the diagnosis of patients treated in the year prior to the report, the situation in the countries and territories evaluated varied. In South America, patients diagnosed with schizophrenia accounted for the highest percentage of hospitalized people in all countries (38%); in the non-Latin Caribbean, these patients also represented the highest percentage, except in Suriname. In Central America, Mexico and the Latin Caribbean, these disorders ranked second (27%), after affective disorders (29%).

# Average Length of Stay

For the Region as a whole, this indicator ranges from 16 to 279 days, with high variability among and within the subregions. The average length of stay for South America is 92 days; for Central America, Mexico, and the Latin Caribbean it is 48.5 days; and for the non-Latin Caribbean it is 122 days. However, it is important to note that two South American countries (25%), one country in Central America, Mexico, and the Latin Caribbean (10%) and 30% of the countries or territories of the non-Latin Caribbean that have psychiatric hospitals did not have accurate information in this regard.

According to the information available, there is an important percentage of patients in each of the subregions that stay in hospitals less than a year: in Central America, Mexico, and the Latin Caribbean, 45%; in the non-Latin Caribbean, 18%; while in South America, 52% of the patients have been hospitalized for less than a year

As to people hospitalized for more than 10 years, the range also varies considerably, from 4% to 68% (on average 46.4%) of the population in these institutions.

In South America, 30% of long-term patients, on average, have been hospitalized for more than 10 years, Ecuador being the country with the highest rate (64% of the total, occupying 53% of the beds). In Central America, Mexico, and the Latin Caribbean, 36% of patients have been hospitalized for more than 10 years, although accurate information is lacking from two countries; in Haiti in particular, 38% of the people in psychiatric hospitals had been there for more than 10 years. In the non-Latin Caribbean, 53% of patients are long-term residents with more than 10 years spent in hospital (information available only from 50% of the countries that have psychiatric hospitals).

Regarding length of stay in mental hospitals, the situation can be summarized by saying that existing mental hospitals in the Region have two main functions:

- Residential function, for long term care patients staying more than 10 years (30% of patients in South America, 35% in Central America, Mexico and the Latin Caribbean, and 53% in the non-Latin Caribbean);
- Acute care function, for patients staying less than a year (52% in South America, 45% in Central America, Mexico and the Latin Caribbean, and 18% in the non-Latin Caribbean).

The first function, residential, can be the responsibility of residential facilities, which could offer appropriate housing to those who need it. The second function, acute care, should be responsibility of psychiatric units in general hospitals, where people receive acute care as needed.

Table 2.2 summarizes the current situation in the Region. The countries of the non-Latin Caribbean stand out among those that have psychiatric hospitals, with high rates of beds and users per 100,000 population.

Subregion	Beds per 100,000 population	Users per 100,000 population	Average length of stay (in days)	Percentage of stays of more than one year	Decline in number of beds at psychiatric hospitals
Central America, Mexico, and the Latin Caribbean	12	68	48.6	36%	17%
Non-Latin Caribbean	84.6	171.4	122	46.4%	10%
South America	16.4	70.7	92	30%	6%
Total	37.8	103.4	87.5	37.4%	11%

# Table 2.2. Selected aspects of care at psychiatric hospitals in the three subregions ofLatin America and the Caribbean and at the regional level

## **Forensic Units**

The information provided by the evaluated countries concerning this indicator is quite limited. However, the services offered in this area are also limited and the number of beds at institutions differs markedly from country to country. The limited supply is very likely an expression of the low priority given to this type of service, even though the prison population is at high psychiatric risk.

In Central America, Mexico, and the Latin Caribbean, four countries have forensic psychiatry units. All are located in psychiatric hospitals, except in Mexico, where 99% of these units are located in prisons. There is an average of 0.5 beds per 100,000 population, and 8% of people have been resident for more than 10 years.

The situation is radically different in the non-Latin Caribbean. Only three of the 16 countries and territories (Barbados, Jamaica, and Trinidad and Tobago) have these units, which for the most part are located in psychiatric hospitals, except in the case of Jamaica. There is an average of three beds per 100,000 population, and only Trinidad and Tobago reported on the proportion of people resident for more than 10 years (18%).

In South America, only Bolivia lacks such units. There is an average of 1.6 beds per 100,000 population in the rest of the countries. These services are located both in psychiatric hospitals and in prisons. Only three countries have data on the length of stay (Chile, Paraguay, and Peru), with an average of 14% of patients who have been resident for more than 10 years.

Table 2.3 presents the little available data on the number of forensic beds at the regional level, per 100,000 population.

# Table 2.3. Number of beds at forensic institutions in the subregions,per 100,000 population

Subregion	Forensic beds per 100,000 inhabitants
Central America, Mexico, and the Latin Caribbean	0.5
Non-Latin Caribbean	3
South America	1.6

## **Human Rights Issues**

Although part of the information on human rights was already discussed in the previous section, it is important to add data that specifically relates to involuntary admissions to psychiatric hospitals in the Region. In principle, the data collected by the countries on this issue are revealing, both in terms of the information provided and the gaps in the data. The lack of information is troubling, since it makes it impossible to monitor the technical conditions and humaneness of the care provided.

Based on the data obtained, it can be concluded that records that would allow for thorough monitoring of the situation are not available. For example, in Central America, some South American countries, and the non-Latin Caribbean, data is only partially recorded, and data on involuntary hospitalizations are not included. Another piece of missing data that is normally collected by countries is the percentage of patients who are kept in restraints or isolation, where such practices exist.

In the countries and territories of the non-Latin Caribbean that have a psychiatric hospital, over 20% of the patients had been physically restrained or isolated in the past year in one country; between 11% and 20% in five countries; between 2% and 5% in one country; and less than 2% in three countries. Only one country lacked information in this regard. At the same time, eight of the 10 countries with a psychiatric hospital reported on involuntary admissions, with a subregional average of 57% of all admissions.

In Central America, Mexico, and the Latin Caribbean, just three countries provided data on the proportion of involuntary admissions to psychiatric hospitals: El Salvador (35%), Mexico (67%), and Panama (an estimated 83%). Eight of the 10 countries in the subregion contributed information on restrained patients. In two of them, over 20% of the patients had been restrained or isolated in the past year; in one, between 11% and 20%; in three, between 6% and 10%; in one, between 2% and 5%; and in one, less than 2%.

The situation in South America is similar to that of the other two subregions, since just two of the eight countries reported on involuntary admissions to mental hospitals: Argentina (20%) and Chile (5%). Half of the countries did not furnish information on resident patients who had been isolated or restrained. In two of the four remaining countries, between 2% and 5% of patients had been restrained in the previous year; in one country, between 6% and 10%; and in the fourth country, between 11% and 20% of patients residing in its psychiatric hospitals had been restrained or isolated.

In brief, Table 2.4 presents data by country according to the number of available service units in each evaluated category.

	Psychiatric hospitals	Outpatient care units	Day centers	Psychiatry units in general hospitals	Community residences
Anguilla	0	3	0	1	0
Antigua and Bar- buda	1	9	1	0	0
Barbados	1	14	0	1	2
Argentina	29	557	65	58	93
Belize	1	8	0	1	0
Bolivia	9	39	12	1	0
Brazil	228	1,086	811	105	418
Chile	5	113	65	50	103
Costa Rica	2	38	2	26	35
Cuba	23	421	47	31	0
British Virgin Islands	0	4	0	1	0
Dominica	0	13	0	1	0
Dominican Republic	1	56	1	9	1
Ecuador	5	31	0	20	0
El Salvador	2	49	А	0	0
Grenada	1	5	0	1	0
Guatemala	3	40	1	2	11
Guyana	1	2	0	1	0
Haiti	2	67	0	0	0
Honduras	2	31	1	0	0
Jamaica	1	139	9	2	25
Mexico	46	544	3	13	8
Montserrat	0	5	0	1	0
Nicaragua	1	34	5	3	0
Panama	1	103	3	8	0
Paraguay	3	26	1	2	5
Peru	3	729	0	21	N/D
Saint Kitts and Nevis	0	7	0	1	0
Saint Lucia	1	9	0	3	0
Saint Vincent and the Grenadines	1	5	0	1	0
Suriname	1	5	1	0	0
Trinidad and Tobago	1	31	3	2	8
Turks and Caicos	0	11	0	0	0
Uruguay	2	35	31	25	N/D
Regional total	377	4,269	1,062	391	709

#### Table 2.4. Number of service units in each category, by country

For easier reference, Table 2.5 presents the same data calculated per 100,000 population.

		y, per 100,000 p			
	Psychiatric hospitals	Outpatient care units	Day centers	Psychiatry units in general hospitals	Community residences
Anguilla	0	22.1	0	226.7	0
Antigua and Barbuda	128	10.5	1.2	0	0
Argentina	0.36	6.9	0.8	0.72	1.15
Barbados	200	5.2	0	3	11.2
Belize	16.6	2.7	0	1.3	0
Bolivia	0.1	0.39	0.1	0.01	0
Brazil	0.12	0.58	0.4	0.06	0.23
Chile	0.03	0.7	0.5	0.3	0.6
Costa Rica	0.04	0.86	0.04	0.6	0.8
Cuba	0.2	3.7	0.4	0.27	0
British Virgin Islands	0	14.5	0	7.3	0
Dominica	0	18.3	0	56.1	0
Dominican Republic	0.01	0.65	0.01	0.1	0.01
Ecuador	0.03	0.23	0	0.1	0
El Salvador	0.03	0.9	А	0	0
Grenada	74.5	4.7	0	18.6	0
Guatemala	0.02	0.3	0.0	0.01	0.07
Guyana	32	0.3	0	0.5	0
Haiti	0.67	22.3	0	0	0
Honduras	0.03	0.4	0.01	0	0
Jamaica	31.8	5.2	0.3	3	16.5
Mexico	0.04	0.5	0.0	0.01	0.007
Montserrat	0	104.2	0	0	0
Nicaragua	0.02	0.6	0.08	0.05	0
Panama	0.03	3.2	0.09	0.3	0
Paraguay	0.05	0.5	0.02	0.04	0.1
Peru	0.01	2.7	0	0.07	N/D
Saint Kitts and Nevis	0	15.9	0	27.6	0
Saint Lucia	71.9	5.4	0	1.8	0
Saint Vincent and the Grenadines	159.6	5.0	0	190	0
Suriname	62.5	1.0	0.2	0	0
Trinidad and Tobago	67.2	2.3	0.2	2.6	14.7
Turks and Caicos	0	33.1	0	0	0
Uruguay	0.1	1	0.9	0.7	S/D

 Table 2.5. Number of service units in each category, per country, per 100,000 population

For purposes of comparison among the subregions, Figure 2.5 offers a summary of the total distribution of mental health services by subregion, although the data are not easily comparable.



Figure 2.5. Distribution of mental health services, by subregion

Table 2.6 refers to the rates of patients seen by each type of service in the Region. It shows that while psychiatric hospitals absorb the highest percentage of the budget in most countries, these are not the services that see the greatest number of people with mental health problems.

Subregion	Outpatient health care centers	Day centers	Psychiatric units in general hospitals	Community residences	Psychiatric hospitals
South America	1,319	22.3	83.3	4.7	70.72
Central America, Mexico, and the Latin Caribbean	1,229	5.1	50	0.6	68
Non-Latin Caribbean	1,359	7.5	119	2.5	171.4



#### Figure 2.6. Percentage of beds for psychiatric patients in psychiatric hospitals, psychiatry units in general hospitals, and community residences, by subregion

Figure 2.6 shows clearly that in the three subregions, psychiatric hospitals still provide the greatest number of beds for people with mental health problems, with significantly higher percentages than are found in psychiatric units at general hospitals or in community residences.

# DOMAIN 3 - MENTAL HEALTH IN PRIMARY CARE

## **Training in Mental Health Care for Primary Care Staff**

This section focuses on the preparation that primary care staff (PHC) receives in mental health-related subjects. In particular, it analyzes the percentage of the total course load devoted to mental health in undergraduate university teaching programs for students of medicine, nursing, and other health sectors.

It also examines the percentage of health workers in primary care services who received at least two days of initial or refresher training in mental health during the year evaluated. With some exceptions, the results are unsatisfactory since they are far from being commensurate with the demand for care for mental health and psychosocial problems in primary care services.

In Central America, Mexico and the Latin Caribbean, nursing schools devote between 2% (Cuba) and 12% (Panama) of the course load to initial training in mental health, with a median of 5%. At medical schools, less time was spent, ranging from 4% (Guatemala) to 7% (El Salvador), with a median of 3%. The situation is no more favorable with regard to the proportion of professionals of medicine, nursing, and other specialties who received training in mental health in the 12 months prior to the WHO-AIMS. With regard to the first group of professionals, physicians, the range goes from 2% (Guatemala) to 49% (Cuba), with a median of 5% (one country did not provide information). With regard to nursing, three countries did not report and in the rest of the countries the range goes from 0% (Dominican Republic and Nicaragua) to 49% (Cuba), with a median of 4%. For the third group, professionals from other health sectors, four countries did not report on this aspect.

The countries of South America reported equally low proportions in undergraduate university training: in medicine, the median percentage of time spent on mental health is 3%, with a range of 2% (Bolivia, Chile, Paraguay, Uruguay) to 10% (Peru). An almost equal percentage of time was spent in under graduate nursing programs, where the range goes from 2% (Bolivia) to 12% (Uruguay), with a median of 4.5%. With regard to other undergraduate programs, five countries did not provide information. In-service training was barely better: for professionals of medicine, from 0% (Uruguay) to 22% (Argentina), and a median of 6%; for nursing, from 0% (Paraguay) to 32% (Argentina), with a median of 6%; and for other professionals, from 0% (Bolivia, Paraguay, and Uruguay) to 45% (Argentina), with a median of 10%.

In the non-Latin Caribbean, only seven countries and territories reported on the number of hours in undergraduate medical programs devoted to mental health. It should be remembered that because the majority of countries and territories do not have medical schools, students must receive their training away from home. The percentages go from 0% (Belize and Guyana) to 6% (Suriname), with a median of 3%. Regarding undergraduate nursing programs , 13 countries and territories provided information, with a range of time spent going from 1% to 6%, and a median of 4%. Less information was available on training of other health professionals; only three countries reported on this aspect, with percentages ranging from 4% (Guyana) to 37% (Jamaica). With regard to in-service training, the data were as follows: training for medical professionals was not offered in 13 countries; in the others, it ranged from 8% (Jamaica) to 43% (Guyana). For nursing professionals, half of the countries organized training, with percentages from 3% to 86% (two did not provide data). For other professionals, only two countries reported: Guyana with 3%, and Jamaica with 20%.

#### Table 3.1. Initial and refresher training in mental health for PHC staff. Percentage of time in curriculum devoted to mental health and percentage of PHC staff that has received at least two days of training or refresher training in mental health

	Initial training			Refresher training		
Country/ Territory	Physicians (%)	Nurses (%)	Others (%)	Physicians (%)	Nurses (%)	Others (%)
Anguilla	N/A	3	N/A	0	15	0
Antigua and Barbuda	N/A	3	N/A	0	0	0
Argentina	4	3.5	1	22	32	45
Barbados	1	6	N/A	0	46	NA
Belize	N/A	4	N/A	0	6	N/A
Bolivia	2	2	2	6	5	0
Brazil	3	7	N/A	5	10	10
Chile	2	5	3	23	N/A	19
Costa Rica	3	9	N/A	3	N/A	N/A
Cuba	6	2	10	49	28	90
Dominica	3	4	N/A	11	0	39
Dominican Republic	3	4	N/A	12	0	39
Ecuador	5	2	N/A	13	17	26
El Salvador	7	4	6	16	13	15
Grenada	N/A	4	N/A	0	0	0
Guatemala	4	3	N/A	2	4	N/A
Guyana	0	2	4	43	57	3
British Virgin Islands	1	5	N/A	0	0	N/A
Haiti	3	6	N/A	0	N/A	0
Honduras	5	7	4	4	2	N/A
Jamaica	3	1	37	8	50	20
Mexico	4	3	5	11	5	7
Montserrat	N/A	6	N/A	0	86	0
Nicaragua	2	7	N/A	4	0	0
Panama	2	12	8	7	N/A	N/A
Paraguay	2	4	N/A	0.03	0	0
Peru	10	6	N/A	N/A	N/A	N/A
Saint Kitts and Nevis	N/A	3	N/A	0	39	0
Saint Lucia	N/A	N/A	11	0	0	0
Saint Vincent and the Grenadines	1	3	N/A	0	0	0
Suriname	6	4	0	0	0	0
Trinidad and Tobago	3	3.3	N/A	0.3	0	0
Turks and Caicos	N/A	N/A	N/A	0	0	0
Uruguay	2	12	N/A	0	0	0

## **Integration of the Mental Health Component into PHC**

Integration of mental health into primary health care services is usually limited. This situation considerably restricts their capacity to fulfill the functions and level of problem-solving capacity conferred upon them by a community mental health model.

As the WHO-AIMS results demonstrate, the infrequent existence of assessment and treatment protocols, added to the limited interaction of PHC professionals with professionals specialized in mental health and with practitioners in the parallel health care system (e.g., traditional health systems), are some of the elements that contribute to this limited integration.

In most of the countries of Central America, Mexico and the Latin Caribbean the presence of assessment and treatment protocols in PHC centers (physician or non-physician based) is almost nonexistent. Furthermore, the interaction of PHC with practitioners in alternative community-based health care systems is limited or nonexistent in all countries. Referrals are rarely made to mental health professionals.

Cuba presents a particular situation, where Comprehensive Family Health Care teams interact daily with mental health, social work, and other professionals. All family-doctor offices have assessment and treatment protocols available for key mental health conditions and practical guidelines are being developed. The doctors' offices, on average, make at least one referral to a mental health professional. In turn, since the Natural and Traditional Medicine Program operates in 100% of PHC facilities, they all interact with an alternative/complementary/ traditional health worker.

With regard to the countries of South America, all but one (Uruguay) have protocols for the treatment of mental or psychosocial health problems. Likewise, it was reported that their availability in PHC clinics varies from almost absent to available in most or all clinics and that their use is not known by all staff members. Referrals to mental health services are limited, even where the mechanisms are in place. The range of PHC services that refer to specialized services goes from zero to 70–85%. It was also reported that interaction between PHC services and mental health professionals or practitioners in parallel systems is absent or limited.

In the non-Latin Caribbean, 12 countries and territories do not have protocols. In Belize and Trinidad and Tobago, they exist in some units (21%–50%), while in Jamaica and Turks and Caicos availability is greater (50%–80% and 81%–100%, respectively). Referrals between PHC and mental health professionals are variable; they depend on the presence of a medical professional. In four countries and territories, Anguilla, Antigua and Barbuda, Montserrat, and Saint Kitts and Nevis, referrals are not made; in five, Grenada, Guyana, Jamaica, Suriname, and Trinidad and Tobago, they barely reach a maximum of 20%; in three, British Virgin Islands, Saint Lucia, and Saint Vincent and the Grenadines, referrals are made in 21% to 50% of clinics. Only in Belize does the proportion rise (51%–80%). Furthermore, the 13 countries and territories reported that there is no interaction with other health professionals or practitioners.

#### Figure 3.1. Availability of assessment and treatment protocols for key mental health conditions in physician-based primary health care (PHC) clinics, by subregion



As can be seen in Figure 3.1, in South America, the majority of countries reported having at least a few PHC clinics that have protocols for key mental health conditions; in 25% of the countries, protocols are present in the majority, all or almost all clinics.

In Central America, Mexico and the Latin Caribbean, a significant proportion of countries (30%) do not have protocols in any of their physician-based PHC clinics, 40% say they have few clinics with protocols, and the remaining 30% report having these protocols in some, the majority, or all clinics.

In turn, in the non-Latin Caribbean, 75% of physician-based PHC clinics do not have assessment and treatment protocols.





In the non-Latin Caribbean, there is considerable variability among the countries with regard to this indicator: 25% have few physicians in primary care interacting with mental health professionals at least once a month (1%–20%); another 25% have some physicians (21%–50%); and 18.5% have none. Just 6.25% of countries in the subregion have the majority of their PHC physicians (51%–80%) interacting with mental health professionals; in the same proportion of countries (6.25%), all or almost all physicians interact with mental health professionals (Figure 3.2).



# Figure 3.3. Interaction between primary care physicians and mental health professionals at least monthly in the last year, in South America

In 62.5% of the countries of South America either the information provided with regard to the frequency with which PHC physicians interacted with mental health professionals during the last year was not provided or is non-specific. Of those countries that submitted data, 12.5% said that none of its PHC physicians had interacted with mental health colleagues; another 12.5% reported that few had done so (1%–20%); and the same percentage (12.5%) reported that some of its physicians (21%–50%) established contact with mental health professionals. Finally, no country reported that the majority (51%–80%) or all or almost all (81%–100%) PHC physicians had interacted with mental health professionals in the previous year (Figure 3.3).

The situation is somewhat similar for Central America, Mexico, and the Latin Caribbean, where an overwhelming 80% of countries require more clarity (non-specific data) on the frequency of the interaction between PHC and mental health. However, in 10% of countries there is interaction between the majority of PHC physicians and those in mental health (51%–80%); and in another 10%, all or almost all PHC physicians have at least one contact per month with mental health professionals (Figure 3.4).

Figure 3.4. Interaction between primary care physicians and mental health professionals at least monthly in the last year, in Central America, Mexico, and the Latin Caribbean



## **Prescription of Psychotropic Medicines in PHC**

Access to psychotropic medicines is a necessary condition for primary health care to be able to fulfill the function of appropriately caring for people with mental disorders. The information collected by WHO-AIMS shows that these medicines are available, although in many cases only partially. Access to these medicines was measured using several parameters.

The first of these refers to prescription of psychotropic medicines by nurses, since there are PHC clinics in which only nursing personnel work. For example, that ability exists in El Salvador, Belize, and Jamaica, where only specialized nursing personnel is authorized to prescribe psychotropic medicines. With regard to PHC physicians, all of them are empowered to prescribe this type of medicine, although in some countries they do so with certain restrictions (e.g., in Brazil with regard to new antipsychotics, presumably because of their high cost).

The second piece of important information that sheds light on the capacity of PHC to fulfill its mental health role refers to availability of psychotropic medicines.

In the countries of Central America, Mexico, and the Latin Caribbean the situation differs. In Costa Rica and Cuba, all or almost all PHC clinics (81%–100%) have at least one psychotropic medicine of each therapeutic category. In Mexico, between 21% and 50% of physician-based PHC services have these medicines available, and between 1% and 20% of non-physician-based PHC clinics have them. In the other countries of the subregion, there is no or limited availability of psychotropic medicines, even in physician-based PHC clinics.

In the countries of South America, psychotropic medicines are not available in all PHC clinics. Countries reported that the range goes from minimum availability to satisfactory availability, but does not reach 100%.

Concerning the non-Latin Caribbean, all the countries and territories, except for Saint Lucia and Antigua and Barbuda, have psychotropic medicines in physician-based PHC clinics. In non-physician-based PHC clinics, they are only available in five countries and territories (Guyana, Jamaica, Suriname, Trinidad and Tobago, and Turks and Caicos).

# DOMAIN 4 - HUMAN RESOURCES IN MENTAL HEALTH CARE

# Introduction

Human resources are a core component for the operation of mental health programs and services. However, the available data show that there is a shortage of human resources along with additional problems that exacerbate the situation, such as their unequal distribution within countries.

There is striking variability among the subregions. In the countries of Central America, Mexico and the Latin Caribbean the range of mental health professionals per 100,000 population is 6 to 79, and the subregional median is 10.7. In South America, the range is from 4 to 173, and the subregional median is 26.6; only Peru does not have specific data for this indicator. In the countries and territories of the non-Latin Caribbean, human resources range from 9.6 to 182, with a median of 51.7. It is important to mention that there are seven countries or territories in this subregion that have a population under 100,000 inhabitants.

#### Figure 4.1. Professionals working in mental health facilities per 100,000 population, by subregion (median)



Figure 4.1 shows that there is considerable variation in the number of professionals working in mental health facilities by subregion, with Central America, Mexico and the Latin Caribbean having the lowest rate in the Region. It is important to underline that, although the rate in the non-Latin Caribbean is the highest, this often involves a small number of professionals on islands with low populations, which creates a relatively high rate, distorting the subregional averages.

# Analysis of the Presence of Professionals in the Three Subregions

#### **Psychiatrists**

Disaggregating mental health workers according to the different professions, we find that the rate of psychiatrists varies very significantly among the countries and territories, as well as among the three subregions. The median of psychiatrists per 100,000 population is 1.5 in Central America, Mexico, and the Latin Caribbean, with a range of 0.3 to 10; in the non-Latin Caribbean the median is 1.9, with a range of 0.5 to 20; and in South America it is 2.9, with a range of 1.1 to 19 (Table 4.1).

# Table 4.1. Psychiatrists per 100,000 population,<br/>by subregion (median)SubregionMedianCentral America, Mexico and the Latin Caribbean1.5Non-Latin Caribbean1.9South America2.9

Although apparently the difference in the number of psychiatrists in the different subregions is not that striking, the indicator per 100,000 population in South America is almost twice that of Central America, Mexico and the Latin Caribbean.

#### **Psychiatrists in the Public and Private Sectors**

Another issue to take into account is that in many countries a significant proportion of mental health human resources (particularly psychiatrists and psychologists) works in both the public and private sectors (Figure 4.2).

In Central America, Mexico and the Latin Caribbean, 37% of psychiatrists work exclusively in the private sector and 18% exclusively in the public; in South America, 51% and 31%, respectively; and in the non-Latin Caribbean, 12% and 18%. The percentage that works in both sectors in each subregion is: non-Latin Caribbean, 69%; Central America, Mexico and the Latin Caribbean, 45%; and South America, 27%.

#### Figure 4.2. Percentage distribution among the different sectors where psychiatrists work, by subregion



As can be seen in Figure 4.2, in the first two subregions, South America and Central America, Mexico, and the Latin Caribbean, a large part of psychiatrists work in both sectors, although this situation is much more pronounced in the non-Latin Caribbean. Another fact to point out is that in South America, the majority works exclusively in the private sector (particularly notable in Argentina).

This entire situation, as described, surely contributes to the formation or consolidation of the existing gap among those who need mental health treatment and those who actually receive it.

#### **Geographical Distribution of Psychiatrists**

Another factor that contributes to limiting access to treatment is the unequal geographical distribution of human resources. In the majority of the countries analyzed, psychiatrists are concentrated in the capitals or large cities, with a limited presence in the interior of the country.

In Central America, Mexico and the Latin Caribbean, the ratio of psychiatrists who work in or near the largest city to those who work in the rest of the country is approximately 4.3; in the non-Latin Caribbean, 1.6; and in South America, 1.7. However, it is important to point out that the majority of countries and territories did not provide specific data on this aspect. It remains evident that in the three subregions resources are concentrated predominantly in urban areas and the largest cities.

#### **Other Mental Health Professionals**

With regard to the presence of psychologists, in Central America, Mexico and the Latin Caribbean the rates range from 1.4 to 7 per 100,000 population, with an average of 2.5; in South America, from 0.5 to 70, with an average 18 (Argentina's rate is far above the regional average); and in the non-Latin Caribbean, from 0 to 18, with an average rate of 2.5 (Table 4.2).

With regard to nurses, the rates per 100,000 population in Central America, Mexico and the Latin Caribbean has an average of 5.1 (range: 0.4 to 30); in South America, the subregional average rate is 8 (range: 0.3 to 13). With regard to the non-Latin Caribbean, the countries and territories that do not have psychiatrists or psychologists do have, on the other hand, nurses, which are the most frequent in the subregion, with an average rate of 22 and a range that varies from 0 to 140. This last figure refers to Montserrat, an island with a population of fewer than 5,000, which has seven nurses working in mental health (although none is specialized).

Other professions, such as social work and occupational therapy, show relatively low rates, although the findings always show disparity among the three subregions. The average rate for the non-Latin Caribbean is 22.5 (range: 0 to 49); for Central America, Mexico and the Latin Caribbean, the rate is 5 (range: 0.4 to 29); and for South America, it is 18 (range: 1 to 74), all per 100,000 population. It is worth noting that three of the eight countries in this subregion lack information on this item (Table 4.2).

With regard to social work in particular, Central America, Mexico and the Latin Caribbean has an average rate of 1 worker per 100,000 population, while in the non-Latin Caribbean and South America, the rates are 1.5 and 1.6 respectively; the differences among the subregions were not as marked as for other professionals, except some specific examples in certain territories and countries.

The situation with occupational therapy is similar to the previous one, where the rates per 100,000 population did not reveal such marked differences as for other professions. The average rate for both the non-Latin Caribbean and Central America, Mexico and the Latin Caribbean is 0.7, while for South America it is 1.

Subregion	Nurses	Psychologists	Social workers	Occupational therapists	Other
Central America, Mexico and the Latin Caribbean	2.3	2	0.7	0.2	2.3
Non-Latin Caribbean	14.3	0.3	1.1	0.1	20.8
South America	1.6	10.2	1.1	0.2	3.8
Total Average	6	4.2	1	0.2	9

# Table 4.2. Professionals in different areas of mental health (except psychiatrists) in the threesubregions, per 100,000 population (median)

As seen in Table 4.2, with the exception of the non-Latin Caribbean, the number of nurses is relatively low in the three subregions, especially if compared, for example, with the number of psychologists in South America, where the difference is quite significant. This situation leads to the need to adapt the roles of existing professionals to the needs of the services and of the users seeking them, for the purpose of establishing person-centered services.

# **Distribution of Professionals according to Type of Facility**

Another element to take into account, of absolute importance from the perspective of the decentralization of available human resources, is staff distribution, not only from a geographical standpoint, but also in accordance with the type of mental health service where they work.

The analysis of the different categories of professionals working in mental health (psychiatrists, other medical doctors, psychologists, nurses, social workers and occupational therapists) and their distribution in the various facilities differs across the three subregions. In this regard, an element to take into account is the more or less significant development of community services.

#### **Psychiatrists**

The situation with regard to psychiatrists (Figure 4.3) is as follows: the non-Latin Caribbean has 46 psychiatrists (43.4%) in outpatient facilities, 13 (12.3%) in psychiatric units in general hospitals, and 47 (44.3%) in psychiatric hospitals. Central America, Mexico and the Latin Caribbean reports 1,356 (51.7%), 396 (15%), and 870 (33%) psychiatrists distributed in the same order. South America has 3,145 (44.7%), 805 (11.4%), and 3,082 (43.8%), respectively.

Expressed as an average rate of psychiatrists per bed, in the non-Latin Caribbean the rate is 0.13 in psychiatric units in general hospitals and 0.01 in psychiatric hospitals; in Central America, Mexico and the Latin Caribbean, 0.22 and 0.06, respectively; and in South America, 0.18 in the former and 0.07 in psychiatric hospitals.



#### Figure 4.3. Percentage distribution of psychiatrists among the three facility types, by subregion and regional average

As can be seen in Figure 4.3, there are some differences among the subregions. While in South America and the non-Latin Caribbean psychiatrists are distributed almost equally between outpatient health clinics and psychiatric hospitals, in Central America, Mexico and the Latin Caribbean, they are for the most part concentrated in outpatient facilities.

#### **Nurses**

With regard to nurses in mental health, in the three subregions they are primarily concentrated in psychiatric hospitals. The rate of nurses per bed in the non-Latin Caribbean is 0.28 in psychiatric units in general hospitals and 0.14 in psychiatric hospitals; in Central America, Mexico, and the Latin Caribbean these rates are 0.42 and 0.33, respectively; and in South America they are 0.3 and 0.1. It is worth noting that there is a greater variation between Central America, Mexico and the Latin Caribbean, and South America compared to the non-Latin Caribbean.

The distribution of nurses among outpatient facilities, psychiatric units in general hospitals, and psychiatric hospitals, respectively, is as follows: non-Latin Caribbean, 525 (45.3%), 50 (4.3%), and 583 (50.3%); Central America, Mexico, and the Latin Caribbean, 1,359 (17.3%), 938 (11.9%), and 5,556 (70.7%); and South America, 1,941 (38.5%), 302 (6%), and 2,798 (55.5%) (Figure 4.4).



#### Figure 4.4. Percentage distribution of nurses among the three facility types, by subregion and regional average

Although in the three subregions the majority of nurses work in psychiatric hospitals, it is significant that in Central America, Mexico and the Caribbean the percentage is much higher than in the other two subregions.

#### **Psychologists, Social Workers, Occupational Therapists**

With regard to psychologists, social workers, and occupational therapists, grouped together in this section (Figure 4.5), the non-Latin Caribbean has 58 (38.2%) in outpatient facilities, 35 (23%) in psychiatric units in general hospitals, and 59 (38.8%) in psychiatric hospitals; Central America, Mexico, and the Latin Caribbean reports 2,438 (58.9%), 224 (5.5%), and 1,471 (35.6%), respectively; and South America has 6,874 (62.2%), 895 (8.1%), and 3,280 (35.6%).

It is evident that, while in the non-Latin Caribbean these professionals are distributed among outpatient services and psychiatric hospitals, in Central America, Mexico, and the Latin Caribbean and in South America they are primarily concentrated in outpatient clinics. On comparing the availability of these professionals in psychiatric units in general hospitals and in psychiatric hospitals, the non-Latin Caribbean has 0.05 professionals per bed in the former and 0.12 in psychiatric hospitals; Central America, Mexico, and the Latin Caribbean has 0.19 and 0.09; and South America has 0.3 and 0.06, respectively.



# Figure 4.5. Percentage distribution of psychologists, social workers, and occupational therapists among the three facility types, by subregion and regional average

As mentioned above, both in South America and in Central America, Mexico and the Latin Caribbean, most of these professionals are concentrated in outpatient facilities and there is a notably low presence of them in psychiatric inpatient units in general hospitals. It is noteworthy that in the case of the non-Latin Caribbean, six countries or territories do not have psychiatric hospitals and eight do not have psychiatric units in general hospitals (see Chapter 2). In South America, 25% of countries did not give details for these indicators, as well as 10% of the countries of Central America, Mexico and the Latin Caribbean.

In general, in the non-Latin Caribbean, the majority of mental health professionals are concentrated in psychiatric hospitals, although psychiatrists are more equitably distributed among these and outpatient facilities, in part because many countries and territories have a single psychiatrist, who takes care of both the outpatient and inpatient population (Figure 4.6).



#### Figure 4.6. Distribution of mental health professionals among the different facility types in the non-Latin Caribbean

In Central America, Mexico, and the Latin Caribbean, the majority of professionals also work in psychiatric hospitals, although the largest number of psychiatrists is concentrated in outpatient facilities. The limited number of professionals in psychiatric units in general hospitals is also noteworthy (Figure 4.7).



#### Figure 4.7. Distribution of mental health professionals among the different facility types in Central America, Mexico and the Latin Caribbean

# Figure 4.8. Distribution of mental health professionals among the different facility types in South America



In Figure 4.8, it can be seen that South America has a different distribution of mental health professionals when compared to the other two subregions, where there is a greater concentration of professionals in outpatient facilities. As in Central America, Mexico and the Latin Caribbean, the low number of professionals in psychiatric units in general hospitals is significant.

Figure 4.9 shows that most mental health professionals are still located in psychiatric hospitals. At the subregional level, an exception is starting to appear in South America, where the percentage is higher in outpatient health clinics, although only slightly different from psychiatric hospitals.



# Figure 4.9. Percentage distribution of all mental health professionals among the three different facility types, by subregion and regional average

# At Least Two Days of Refresher Training

An important strategy for refreshing practical and theoretical knowledge consists of providing postgraduate training (continuing and in-service) for all mental health professionals and technical personnel. WHO-AIMS considers a minimum of two days training in the areas specified below.

#### **Training on Psychotropic Medicines**

The percentage reported in this training area is varied and, in addition, the information provided by some countries is incomplete. In Central America, Mexico and the Latin Caribbean, the average is 37% for psychiatrists, 24% for nurses, and 32% for other medical doctors. In the case of psychiatrists and other medical doctors, 30% of countries does not have this information, while for nurses, 40% did not know the proportion (Table 4.3).

In the eight countries of South America, the percentage of psychiatrists receiving training ranged from 1% to 44%, with an average of 24% for the subregion; for nurses, from 0% to 47%, with an average of 18%; and in the combined group of psychologists, social workers and occupational therapists, the percentages ranged from 0% to 82%, with an average of 21%. Two countries did not submit information on this aspect and in one country none of these professionals received any training (Table 4.3).

In the non-Latin Caribbean, one-quarter of psychiatrists received training, but only a few in the other groups of professionals (Table 4.3).

#### Table 4.3. Percentage of mental health professionals and technical staff who received at least two days of refresher training on the use of psychotropic medicines, by subregion and at the regional level

Subregion	Psychiatrists %	Other medical doctors %	Nurses %	Other %
Central America Mexico and the Latin Caribbean	37	32	24	18
Non-Latin Caribbean	26	1	8	3
South America	24	27	18	21
Total	29	20	16.7	14

#### **Training on Psychosocial Interventions**

For this category, the percentages are different in comparison to those for the previous item (Table 4.4). In some cases, the percentages were higher, while in others —specifically with regard to psychiatrists— they were lower. The lack of accurate information continued to be a problem in the evaluation.

In Central America, Mexico and the Caribbean, 33% of psychiatrists and 24% of nurses received training on psychosocial interventions in the last year; in the other two subregions the figure was even lower: 20% of psychiatrists and 13% of nurses in South America; and 22% and 19%, respectively, in the non-Latin Caribbean.

# Table 4.4. Percentage of mental health professionals who received at least two days of refresher training on psychosocial interventions, by subregion and at the regional level

Subregion	Psychiatrists %	Other medical doctors %	Nurses %	Social workers, occupational therapists, psychologists %	Other %	
Central America, Mexico and the Latin Caribbean	33	32	24	26	34	
Non-Latin Caribbean	22	13	19	14	9	
South America	20	13	13	18	17	
Total	25	19.3	18.7	19.3	20	

## **Training in Child Mental Health**

The findings for this item were comparable to the previous one, with slightly lower percentages (Table 4.5). In Central America, Mexico and the Caribbean and in South America only 19% and 15% of psychiatrists, respectively, had such training, and in the non-Latin Caribbean, 24%. The figures for nurses are even lower: in Central America, Mexico and the Latin Caribbean and in the non-Latin Caribbean 15% of nurses received training in child mental health; and in South America, 16%.

Subregion	Psychiatrists %	Other medical doctors %	Nurses %	Social workers, occupational therapists, psychologists %	Other %
Central America, Mexico and the Latin Caribbean	19	40	15	17	6
Non-Latin Caribbean	24	5	15	8	3
South America	15	17	16	13	6
Total	19.3	20.7	15.3	12.7	5

#### Table 4.5. Percentage of mental health professionals who received at least two days of refresher training on child mental health, by subregion and at the regional level

As a conclusion, we can say that, although the three areas of training are considered a priority and very important to the development of mental health professionals, implementation levels at the regional level are low. In general, there is a prevalence of training aimed at psychiatrists.

## **Users and Family Associations**

The role of civil society, the communities in general, and users and family associations in particular, is crucial in the sphere of mental health, with a wide variety of possibilities that range from participation in discussions and decisions on policies, plans, and legislation and the evaluation of service quality, up to service provision itself.

Unfortunately, participation of these actors in the Region is still very limited and at times nonexistent. Without a doubt, this is an area that requires greater effort and support to develop, which could involve some type of investment on the part of governments, although the costs of these initiatives are not necessarily high. The understanding of mental health professionals is also fundamental to promoting, motivating, and empowering these groups of actors.

In Central America, Mexico and the Latin Caribbean, four countries reported having users associations and six having family associations, although they expressed the need for financial support to carry out their work. In South America, although half the countries said they have users associations and six have family associations, the government financially supports these organizations in only two of them (Brazil and Chile), while in a third, Argentina, some received some governmental support, although details were not provided. A likewise deficient situation was also reported for the non-Latin Caribbean, where the movement is incipient, since only one country reported having a users association and two countries a family association. It is important to note, however, that some countries or territories in this subregion have NGOs and other institutions that provide some type of support for the mentally ill.

In terms of number of members, the non-Latin Caribbean has 15 people in users associations and 39 in family associations; Central America, Mexico and the Latin Caribbean, 5,603 and 4,459; and South America, 12,946 and 10,356, respectively. Their involvement in policy making or service provision initiatives is unfortunately still too small in the Region.

# **DOMAIN 5 - PUBLIC EDUCATION AND LINKS WITH OTHER SECTORS**

## **Public Education and Awareness Campaigns on Mental Health**

Almost all the 34 countries and territories of the Region, to a greater or lesser extent, carry out education and awareness actions on mental health with the active involvement of different sectors.

In Central America, Mexico and the Latin Caribbean, the majority of the countries have coordinating bodies for public education and awareness campaigns on mental health (70%). Usually, other actors get involved, such as governmental bodies, international agencies, and nongovernmental organizations, including professional associations and private foundations. Actions are targeted to different population groups: the general population, children and adolescents, disaster victims, and other vulnerable groups. Furthermore, campaigns have also targeted professional groups, including health care providers, teachers, social services staff, and others.

The eight countries of South America that participated in WHO-AIMS reported that they carry out education and awareness campaigns, but only Brazil, Paraguay and Peru have a coordinating body (37.5%). Campaigns primarily target the general public, women, children and adolescents, professional groups, and, in two countries, trauma survivors. Substance use and violent behavior are the main subjects addressed.

In the non-Latin Caribbean, seven countries reported holding public education and awareness campaigns; a number of countries reported the existence of coordinating bodies (43.8%). In some countries and territories, nongovernmental organizations get involved, as well as professional associations and foundations. The majority of the campaigns target the general population, in particular children and adolescents.

Table 5.1 presents a summary of mental health public education activities in the subregions.

Subregion	Coordinating body	Education campaigns	Target population
Non-Latin Caribbean	43.8%	All countries carried out some type of campaign	General population, children and adolescents
Central America, Mexico and the Latin Caribbean	70%	All countries carried out some type of campaign	General population, women, children and adolescents, disaster victims, other vulnerable groups, and professional groups
South America	37.5%	Almost all countries carried out some type of campaign	General population, women, children and adolescents, professional groups, trauma survivors

#### Table 5.1. Public education on mental health, by subregion

## Legislative and Financial Provisions for People with Mental Disorders

According to the information provided by the 34 countries or territories, the existence of provisions that facilitate access to employment and housing and that ensure non-discrimination at work for persons with mental disabilities, as required by international conventions, is extremely rare. In many countries they exist on paper, without necessarily being translated into practice, and, in addition, they have different scopes (Table 5.2).

In Central America, Mexico and the Latin Caribbean, the majority of countries have provisions that require employers to hire a percentage of employees that are disabled, with the exception of Haiti, Honduras, and Guatemala. Furthermore, legislative provisions against discrimination at work exist in six countries, but are not implemented. There are no provisions related to the availability of housing and state-subsidized housing schemes, except in Mexico, where some of these options do exist, although the degree of implementation is uncertain.

The situation in the countries of the non-Latin Caribbean is not favorable either. None of the countries has legislative provisions for employment, except Turks and Caicos, although they are not applied. Only two of the countries and territories have provisions against discrimination at work: Montserrat, but they are not implemented, and Turks and Caicos, where a provision exists and is implemented. With regard to housing, only Trinidad and Tobago and Turks and Caicos have legislative provisions for people with severe mental disorder, but they are only applied in the former.

The situation is no more favorable in the eight countries of South America that participated in WHO-AIMS. Only four have provisions for employment and for protection from discrimination at work, and three have provisions on access to housing. One country (Peru), has unimplemented legislative provisions for employment and housing; in another country (Chile), these provisions are only financial.

# Table 5.2. Percentage of countries with legislative provisions for employment, housing,and against discrimination, by subregion

Subregion	Employment	Against discrimination	Housing
Non-Latin Caribbean	6.3%	12.5%	12.5%
Central America, Mexico and the Latin Caribbean	70%	60%	20%
South America	50%	50%	12.5%

## **Links with Other Sectors**

On this item, in general, at the regional level links with many sectors with which mental health could coordinate actions to facilitate achieving its objectives are limited, except with other health sector agencies and, to a lesser extent, with the education sector. This deficiency in linkages with other sectors (such as justice, employment, housing, social protection, and others) limits implementation of mental health promotion and prevention actions.

In the countries of Central America, Mexico and the Latin Caribbean, WHO-AIMS found that connections are more extensive within the health sector, as mentioned previously. In seven countries, mental health articulates with primary health care and substance abuse agencies; and in six countries, with HIV/AIDS, reproductive health, and child and adolescent health agencies. In five countries, there are links with sectors such as education, social protection, justice, and others.

Concerning the education sector, only 6% of schools have a mental health professional assigned (within a broad range, going from 0.7% to 16%); it is also noteworthy that promotion and prevention programs are limited. Key sectors such as police and justice are neglected with regard to education on mental health for their members, with the exception of Cuba, where between 51% and 80% participated in mental health education activities in the five years prior to WHO-AIMS. Sixty percent of the countries of the subregion reported that no police officers had participated in this type of activity or that the proportion was under 20%. Furthermore, in 70% of the countries, no judges have participated in trainings or no more than 20% have.

With regard to the countries of the non-Latin Caribbean, the findings were not very different. Mental health programming agencies in all the countries and territories do collaborate with other institutional actors inside and outside the health sector, but not uniformly. They do so most frequently with primary health care (within the health sector), followed by the social protection and justice sectors (13 countries). Only half the countries collaborate with other programs or sectors, such as HIV/AIDS, child and adolescent health, or education. With regard to this last sector, only 15.5% of schools have mental health professionals assigned. However, there is greater coverage for promotion and prevention programs: more of half the countries and territories have them. As occurs in other subregions, little attention has been given to the training of police officers (only in seven countries and territories) or judges (only in four).

The report on the eight countries of South America was not very different. Links in this subregion are more frequent within the health sector; followed, although to a lesser extent, by the education sector; and in third place, by the police and justice sectors. The subregional average of the percentage of schools that have mental health professionals is 18%, although two countries do not have information in this regard. Furthermore, only 20% of police officers participated in mental health education activities, while only one country surpasses this proportion with regard to judges (21%–50%). In 25% of the countries, neither police officers nor judges participate in this type of activity.

## Links with the Prison System

Another particularly important subject evaluated in this section is the link with the prison system, taking into account that the prisoner population can have a high risk of suffering from mental disorders.

In general, the extent of coverage is varied and limited, not meeting the mental health needs of this population group. In Central America, Mexico and the Latin Caribbean, 50% of countries report that just 1%–20% of prisons have this service, with variability among the other 50%, ranging from no prisons to all prisons having this type of service.

With regard to the countries of the non-Latin Caribbean, 87.5% of countries and territories reported that they offer specialized services in all prisons, while the remaining 12.5% reports offering mental health services in 1%–20% of prisons.

Finally, in South America, 50% of countries report that only 1%–20% of prisons have specialized mental health services; 25% have coverage for these services in 51%–100% of the prisons; and finally, another 25% (two countries, Argentina and Ecuador) did not have precise data on this aspect.

# DOMAIN 6 - MONITORING AND RESEARCH

## **Information Systems**

This key component of the mental health system, whose objective is to provide data for rational decisionmaking, is paradoxically deficient. Information systems in many of the 34 countries and territories still do not have all the instruments and elements necessary for analysis.

WHO-AIMS revealed that only partial information is collected in the majority of the 34 countries and territories. In many cases, data are only kept on the number of beds in mental institutions and not on involuntary inpatient admissions. The lack of data on involuntary admissions or restrictive measures may hinder improvement in human rights. Other times, the number of users is known but not the number of user contacts with the respective service.

Despite the deficit in information systems, it is important to point out that certain information does flow from peripheral levels to central levels, particularly information sent from mental hospitals to the central level, which is, usually, the rule in almost all the countries. Less information comes from general hospitals and information from outpatient services is varied. It should be noted that although information flows from these three types of services, not all the data requested by WHO-AIMS are accessible (e.g., with regard to users who are physically restrained). However, it is possible to distinguish some differences among the subregions in regard to the circulation of information among the different facilities and the central level.

In Central America, Mexico, and the Latin Caribbean, 72 of the 83 existing public mental hospitals report on diagnoses, length of stay, admissions, and number of beds, but not on parameters that would make it possible to evaluate possible violations of the human rights of persons who are admitted; e.g., users who are physically restrained or secluded (only two hospitals provide this information) or involuntary admissions (no hospital provides this). Even more insufficient are the data provided by facilities located in general hospitals. With regard to the proportion of outpatient services that collect information, 79% collect information on users treated, 83% on number of contacts, and 72.7% on diagnoses.

In the non-Latin Caribbean, the situation is comparable with regard to the proportion of each type of facility that reports on its activities. Almost 37% of outpatient services, 42% of inpatient services in general hospitals and 58% of mental hospitals provide information regularly. As in Central America, diagnoses are commonly reported, but only a few countries report on the number of involuntary admissions, and only three countries report on the number of inpatient admissions and those who are physically restrained or secluded. With regard to outpatient services, 55% reported on number of users treated, 43% on number of contacts, and 60% on diagnoses.

In South America, the average percentage of psychiatric hospitals that provide information to the government on number of beds, admissions, diagnoses, and length of stay is 64%. With regard to general hospitals, 51% regularly provide information to their own ministerial authorities. Furthermore, 65% of outpatient services provide information on number of users, contacts, and diagnoses made. Regarding outpatient services, 68% have data on number of users treated, 69% on number of contacts, and 68% on diagnoses of users treated.

It is noteworthy that the majority of countries still use the mental hospital financing system that allocates funding according to number of available beds. Hospitals are then obliged to regularly provide determined data to be able to also regularly receive the corresponding funding.

Table 6.1. Percentage of existence	of information systems	, by type of facility and
	by subregion	

Cubration	Type of Facility				
Subregion	Mental hospitals %	General hospitals %	Outpatient services %		
Non-Latin Caribbean	58	42	37		
Central America, Mexico and the Latin Caribbean	77	34.5	83.3		
South America	64	51	65		
Total	66	42.5	61.8		

Table 6.1 presents the percentages or proportion of mental health services facilities that collect and provide data within the official information systems in the countries (grouped by subregion).

## Research

In general, this area of action is limited in all the subregions.

In South America, in particular Brazil, Chile, Peru, and Argentina, mental health research is being actively conducted on varied subjects (in the case of Argentina, the exact number of publications is unknown in the ten participating provinces and even less so in those excluded by the national report). Local and international journals regularly mention these studies. Many research studies have produced information that provides support to program and service development. Brazil, Chile, and Peru benefit from explicit or indirect policies that promote research.

In the non-Latin Caribbean, only three countries (Belize, Guyana, and Saint Kitts and Nevis) provided clear information on this area. According to the data provided, in the five years prior to the study, 11 of the 95 articles reported on PubMed involved mental health (11.6%).

In Central America, Mexico, and the Latin Caribbean, approximately 13% of all publications on health involve publications on mental health. One country lacked information in this regard (Honduras).

Finally, it is important to point out that in many of the countries in the three subregions, the limited research activity seen is frequently promoted by the private pharmaceutical industry. In addition, there are studies published in media outlets with very little dissemination, narrow scope, and very limited impact.

# CONCLUSIONS

Each WHO-AIMS country or territory assessment concludes with observations and recommendations aimed at improving the state of its respective mental health systems. Throughout this Report on Mental Health Systems in Latin America and the Caribbean observations have also been made relative to each WHO-AIMS component, which are revisited below, in closing. It should be noted that although the studies were carried out for the most part before the Strategy and plan of action on mental health (12) was adopted by the PAHO Member States, this report provides a necessary baseline to establish a starting point and evaluate progress.

WHO-AIMS was designed to measure, at least in part, the degree of implementation of the 10 general recommendations in the WHO World Health Report 2001, Mental Health: New Understanding, New Hope (15). In general, we can affirm that the level of development of the six major areas investigated in the respective domains demonstrates major advances, but at the same time there are evident shortcomings and needs that have still not been addressed in the existing systems. Differences among countries, and even among regions within a single country, are significant.

In an effort to summarize the regional situation, the following bears emphasizing:

- Although the majority of the countries and territories have mental health policies and plans, around a third still does not have this tool. Likewise, one third of the countries and territories do not have specific laws on mental health and another third has very old laws, which have still not incorporated important international treaties and conventions on the protection of the human rights of people with mental health problems.
- With respect to the financial situation, 73% of countries assign from 1% to 5% of the health budget to mental health. Furthermore, of the 27 countries with mental hospitals, 20 allocate more than 50% of the mental health budget solely to these institutions; and 14 of those 20 assign over 80%.
- The status of the organization of mental health services is not uniform in the Region. Some countries have been able to implement, totally or partially, positive and innovative solutions and have valid and viable options available for meeting the various needs of people with mental health problems and their family members. On the other hand, unfortunately, many countries still have a highly centralized system, where the response is concentrated in mental or psychiatric hospitals, with limited or no development of health services at the primary or secondary level.
- The role of primary care in the mental health area is quite limited. PHC personnel (physicians, nurses, et al.) receive limited training and/or education (undergraduate and graduate) on mental health subjects. As a consequence, response capacity is limited and, in general, and with certain exceptions, there are no consolidated, systematic, and viable referral and counter-referral mechanisms.
- From the standpoint of existing human resources, the disparity among countries is great. A common phenomenon observed is that, where the mental hospital is at the base of the system, most of the available resources are also found concentrated there, leaving little availability for the development of services in the community. In some cases, the degree of training and responsibility granted to nurses has been able to replace—in a highly positive way—the initial lack of physicians.

- In general, although intersectoral collaborations do exist, in the majority of countries such relationships are sporadic and respond to specific needs or demands. Furthermore, although in some countries and territories civil society (in particular, users and families associations) is organized and appears as a valid interlocutor when policies and plans are discussed or services evaluated, in others, these associations are practically nonexistent or still very weak.
- Finally, one of the elements brought to light by the WHO-AIMS exercise itself is the lack of information on matters of mental health. In many cases, data are nonexistent or difficult to obtain. Furthermore, with the exception of a few countries, mental health research is also very limited.

The disparity among countries and the fact that there are advanced models of mental health systems in richer or poorer countries, with greater or fewer resources, makes it possible for us to speculate that it is a matter of time, and that although there is still a long way to go, the groundwork and the potential exist to continue making progress.

Finally, the findings of WHO-AIMS require a response. Part of this response can be found in the recommendations to improve the mental health systems of all the Region's countries, adopted by the Member States in the 49th Directing Council of PAHO/WHO (September-October 2009), which respond precisely to the results of the information collected by WHO-AIMS. These recommendations were operationally reformulated in the document Framework for the Implementation of the Regional Strategy on Mental Health (14).

We firmly believe that we now have scientific and technical instruments and the political will and social involvement necessary for achieving the changes desired in mental health programs and services. The current situation in the mental health community as a result of all these opportunities marks the start in the countries and territories of a new stage in carrying out their work. The baseline drafted via the WHO-AIMS will make it possible to continue that process more precisely.

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The Assessment Instrument for Mental Health Systems known as WHO-AIMS—is a tool and methodology developed by the World Health Organization that has been used by almost all the countries of Latin America and the Caribbean. The Pan American Health Organization actively encouraged and collaborated with 34 countries and territories on its use, as well as in the analysis and dissemination of results.

This report is a summary of findings, a comparison among countries, their achievements as well as challenges still to solve in their common effort to ensure appropriate care to the mental health needs of their population.





