# ORIGINAL PAPER

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# Restructuring mental health: a South American survey

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■ **Abstract** Background: There is little information available on the changes in mental health services in South American countries following the social and political upheavals of recent decades. Methods: A postal survey was conducted of all South American countries (health ministries, national psychiatric associations and key informants) to assess the development of mental health programs and the organization of alternative psychiatric care centers such as the psychiatric units in general hospitals (PUGH). Results: Most of the mental health programs were implemented during the 1980s and 1990s, and aimed at incorporating psychiatric care into primary health care, as well as relocating provision from large hospitals to decentralized services. Most of the countries surveyed have less than 0.5 psychiatric beds per 1000 inhabitants. This change reflects a tendency to reduce the total number of psychiatric beds and increase the number of PUGH. Over the last 10 years this increase was significant in some countries (50–75%), but was not reflected in the availability of adequate human and material resources. Conclusions: A transition from a system based on large mental hospitals to alternative service provision is on the way in South American countries. Intensive efforts have to be made to collect and disseminate information, as well as to monitor the development and outcome of the mental health programs in these countries.

#### Introduction

The South American continent has a population of more than 284,000,000 inhabitants, about 51% of which has

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no satisfactory access to basic necessities such as food, shelter, education, health services, and employment (OPS 1994). In most of these countries, the national social and economic structures are unstable (Herrera et al.

Although there are remarkable differences between the countries, the political development of South American countries after the second world war has been similar, with most of them having gone through phases of populism (1940s-1950s) and military dictatorship (1960s-1970s) followed, currently, by re-democratization. Up to the 1970s, mental health care in South America was provided only by large hospitals located far from urban centers. There were very few professionals relative to the number of patients, and the hospital accommodation was poor (León 1972). At the beginning of the 1980s, several changes occurred, including civil rights movements, the introduction of new ideas from other developing countries, and the development of community psychiatry and alternative assistance projects - the latter leading to the setting up of psychiatric units in general hospitals (PUGH).

There is little information on the changes that have occurred in South American mental health programs following re-democratization, mainly because the reports conducted by international organizations tend to propose only general conclusions and guidelines (OPS 1991, 1994, 1996). Independent studies have also considered only general aspects of psychiatric care, and do not provide regional data (Delgado and Trelles 1939; León 1972; Perales et al. 1995). Our hypothesis is that the pattern of mental health services in the South American continent has changed in the context of social and political upheavals of recent decades.

The objective of this study was to assess the development of South American mental health programs and gather information on the existence and organization of alternative psychiatric care centers such as the PUGH.

### Methods

A postal survey was conducted of all South American countries. The three sources of information used were public health ministries (n=10), national psychiatric associations (n=10) and seven key informants [a professional who was an expert in mental health programs with a substantial academic output (publications) was considered a key informant].

The postal survey was carried out in two phases. The first phase consisted of a questionnaire with 15 items covering the mental health programs, including the year they were implemented, estimated cost, systems of evaluation, human resources available, the number of psychiatrists, the total number of general and psychiatric hospitals, the total number of psychiatric beds in psychiatric and general hospitals, and the changes in the number of psychiatric beds over the last 10 years.

The second phase consisted of a questionnaire with 13 items directly related to PUGH, including the number of general hospitals with psychiatric units, characteristics of the care offered by these units, the adequacy of the buildings and human resources, and the characteristics of the patients treated in the wards.

Both questionnaires used a closed response question format in order to improve response rate and for easier coding and analysis. Conflicting information and doubts were resolved via e-mail or fax.

#### Results

The questionnaires were filled in by nine public health ministries. Argentina was an exception, as it was difficult to collect data from there because of the decentralized system adopted in that country. Only three psychiatric societies and three key informants responded to the questionnaire. Most of the latter drew attention to the lack of reliable data available, and filled in the questionnaire incompletely. In view of that, only the health ministries' figures are considered here.

Most of the South American mental health programs were implemented during the 1980s and 1990s: Ecuador (1981), Bolivia (1985), Uruguay (1987), Brazil and Peru (1991), Paraguay and Venezuela (1992), Chile (1993) and Colombia (1998). The programs in nine countries, apart from Argentina, operate at a national level. In five countries surveyed (Bolivia, Chile, Colombia, Uruguay, and Venezuela) a mental health policy was reported in an official document. In most countries no estimate of the costs is available and, in two cases, the estimates are only partially specified. Bolivia, Brazil, Ecuador, and Uruguay have no system to assess the results obtained or to evaluate the quality of their mental health programs.

A common factor in these programs was the endeavour to shift from large mental hospitals to a system with a range of decentralized services. In most countries, psychiatric care was incorporated into primary health care. Bolivia is the only country in which this integration did not occur. However, no data were collected on the provision of community care services.

There are 6766 psychiatrists on the South American continent, but they are unequally distributed, with most of them being found in large cities and capitals (Table 1).

There has been a tendency towards reducing the total number of psychiatric beds with an increase in psy-

**Table 1** Population, number of psychiatrists and rate per 10,000 inhabitants in South American countries

Countries	Population <sup>a</sup>	Number of psychiatrists <sup>b</sup>	Psychiatrists/ 10,000 inhabitants
Bolivia	8 074 000	75	0.09
Brazil	161 384 000	3000	0.19
Chile	14 237 000	600	0.42
Colombia	35 101 000	900	0.26
Ecuador	11 822 000	115	0.10
Paraguay	4 893 000	65	0.13
Peru	23 854 000	411	0.17
Uruguay	3 186 000	600	1.88
Venezuela	21 483 000	1000	0.47
Total	284 034 000	6766	0.24

a Source: OPS 1994

<sup>b</sup> Source: Ministries of Health

chiatric beds in general hospitals (Table 2). Both Brazil and Peru showed the greatest increase in the number of psychiatric beds in general hospitals over the last 10 years (75% and 59%, respectively).

Although most of the countries have adopted PUGH as an alternative service (Table 3), most of these services function in precarious conditions. The human resources at the PUGH in four countries (Colombia, Ecuador, Paraguay, and Venezuela) are partially adequate for the needs. In Chile and Peru they are inadequate. In Brazil there is a substantial number of general hospitals, though not of psychiatric units.

The most common reasons for hospitalization at the PUGH are mainly schizophrenia and other non-organic delirious disorders, followed by affective disorders, or-

**Table 2** Psychiatric beds in South American countries and rate per 1000 inhabitants (– indicates data not available)

Countries	Total number of psychiatric beds	Variation over the last decade (%)	% of psychiatric beds in general hospital	Number of psychiatric beds/1000 inhabitants
Bolivia	780	5	2.6	0.01
Brazil	61 800	-30	2.9	0.4
Chile	2 182	-35	13.8	0.1
Colombia	4 100	-8	48.8	0.1
Ecuador	_	0	_	_
Paraguay	368	-40	2.2	0.07
Peru	-	-32	_	_
Uruguay	1 867	-40	11.2	0.6
Venezuela	4 100	-10	26.8	0.05

**Table 3** Number of general hospitals and percentage of general hospitals with a psychiatric unit in South American countries

Countries	General hospitals	Psychiatric units (%)
Brazil	6169	84 (1.3 %)
Chile	183	26 (14 %)
Colombia	250	20 (8 %)
Ecuador	175	18 (10 %)
Paraguay	30	1 (3 %)
Uruguay	21	14 (66 %)

ganic mental disorders, alcohol dependence and suicide attempts. The medication provided is partially adequate in five countries (Brazil, Colombia, Ecuador, Uruguay, and Venezuela), inadequate in Chile, and adequate in Paraguay and Peru. In several cases, new medications that have appeared during the last 10 years are not available.

#### **Discussion**

Scarce information is available on mental health services in South America. This is the first independent study on psychiatric care in South American countries that has successfully collected data on mental health programs and on the psychiatric units in general hospitals that are an alternative to the classic psychiatric hospital.

The data were obtained through a postal survey in the form of a questionnaire. The disadvantages of this approach included the difficulty in differentiating between the public and private sectors. Few national psychiatric associations and key informants answered the questionnaire. They referred to the lack of information available on national mental health resources. The same problem occurred in studies by León (1972) and Perales et al. (1995). Data presented here were supplied by the health ministries. Nevertheless, it was still possible to gain an approximate, but realistic, panoramic view of the psychiatric care system in South American countries.

Important changes have occurred in the pattern of mental health services following the emergence of many South American countries from repressive governmental regimes. There is no evidence that any of these used psychiatric establishments to detain political dissidents. Although social movements were mainly interested in political and economic aspects, and not specifically in the use and efficacy of psychiatric treatments, their influence on mental health policy has been significant. An important change noted was the incorporation of mental health into general health programs.

The poor budgets in the area of mental health and the fact that approximately half of the countries had no system to assess their mental health programs reflect government priorities that do not include mental health (Giel and Harding 1976). Perales et al. (1995) showed that government policy in most of the South American countries focused on infecto-contagious diseases, infant-maternal care and nutritional problems and did not prioritize mental health.

There are currently 75,197 psychiatric beds in South America, whereas more than two decades ago there were 90,160 beds in the same countries (León 1972). Most of the countries surveyed have a ratio of psychiatric beds/1000 inhabitants below that recommended by the WHO for European countries (0.5/1000; Freeman et al. 1985)

León (1972) underscored the fact that none of the

South American countries had the capacity to attain the WHO (1967) recommendation of five psychiatrists for every 100,000 inhabitants. These figures have not changed very much over the last three decades; there are currently 0.09–1.88 psychiatrists/100,000 inhabitants and most of them are in big cities or capitals.

There has been a tendency to reduce the total number of psychiatric beds and increase the number of psychiatric units in general hospitals, thus raising the number of beds in the latter. This increase was significant in some countries (50–75%), but was not reflected in the availability of adequate human resources or in the medication available for the psychiatric units. The concentration of the mental health care system around psychiatric hospitals and the lack of finances have restrained the increase in the number of psychiatric units in Brazilian general hospitals (Botega 1992).

#### Conclusion

The transition from a system based on the large psychiatric hospital to a range of alternative structures has accompanied several economic, social and political changes in South American countries. Although the health authorities working in the area of mental health in these countries are aware of the importance of bringing about changes in psychiatric care, intensive efforts have to be made to collect and disseminate information, as well as to monitor the development and outcome of the mental health programs.

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