BRIEF REPORT

# Is psychiatric reform a strategy for reducing the mental health budget? The case of Brazil

# É a reforma psiquiátrica uma estratégia para reduzir o orçamento da saúde mental? O caso do Brasil

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## Abstract

Objective: To investigate trends in the provision of mental health services and financing in Brazil. Method: Data from DATASUS (the Brazilian Unified Health Computerized System) with free access in the web were collected regarding the number of beds, the development of new community centers, the number of mental health professionals, and costs involved from 1995 to 2005. Results: In ten years, the number of psychiatric beds decreased 41% (5.4 to 3.2 per 10,000 inhabitants) while community services have increased nine-fold (0.004 to 0.037 per 10,000 inhabitants). Psychologists and social workers have accounted for three and two-fold, respectively, as much hirings as psychiatrists. Psychiatric admissions accounted for 95.5% of the budget in 1995 and 49% in 2005, and the expenses with community services and medication have increased 15% each. As a whole, the expenses in mental health decreased by 26.7% (2.66 to 1.95 US\$ per capita). Conclusion: There has been a clear switch from hospital to community psychiatric care in Brazil, where the system can now provide a diversity of treatments and free access to psychotropics. However, the coverage of community services is precarious, and the reform was not accompanied by an increased public investment in mental health. The psychiatric reform is not a strategy for reducing costs; it necessarily implies increasing investments if countries decide to have a better care of those more disadvantaged.

Descriptors: Mental health; Health policy; Health care reform; Deinstitutionalization; Health care costs

# Resumo

Objetivo: Investigar o desenvolvimento da infra-estrutura de serviço de saúde mental e do seu financiamento no Brasil. Método: Os dados sobre número de leitos, centros comunitários de saúde mental, profissionais de saúde mental e custos, no período de 1995 a 2005, foram coletados no sítio de internet de livre acesso do DATASUS. Resultados: Em 10 anos, houve uma redução de 41% no número de leitos psiquiátricos (5,4 a 3,2 por 10.000 habitantes), enquanto os serviços comunitários aumentaram nove vezes (0,004 to 0,037 por 10.000). Psicólogos e assistentes sociais foram contratados três e duas vezes mais do que psiquiatras, respectivamente. As internações psiquiátricas representavam 95,5% do total de gastos com saúde mental em 1995, passando para 49% em 2005. Por outro lado, as despesas com serviços comunitários e medicação aumentaram 15% cada. Em relação ao total de gastos, as despesas com saúde mental diminuíram 26,7% (2,66 a 1,95 US\$ per capita). Conclusão: Existe um claro movimento de transformação do modelo dos cuidados psiquiátricos no Brasil, passando do hospital psiquiátrico para os serviços comunitários. O sistema tem disponibilizado um maior número de modalidades de tratamento, incluindo o acesso gratuito aos psicotrópicos. A cobertura dos serviços comunitários, entretanto, ainda é precária e a reforma da assistência psiquiátrica não foi acompanhada pelo aumento do investimento público em saúde mental. A reforma psiquiátrica não é uma estratégia de redução de custos; ela necessariamente implica no aumento de investimentos se os países decidirem melhorar os cuidados em saúde para aqueles em desvantagens.

Descritores: Saúde mental; Política de saúde; Reforma dos serviços de saúde; Desinstitucionalização; Custos de cuidados de saúde

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#### Introduction

Scientific evidence has favored integral intensive care (pharmacological treatment + social rehabilitation + psychotherapy) as a powerful therapeutic strategy for treatment of patients with severe mental disorders. This knowledge has long fostered the promotion of community mental health care instead of hospital treatments based on segregation, which was enabled by the new generations of psychopharmacological drugs. Given such baseline, historical experiences of deinstitucionalization of mental patients were carried out as national mental health policies in developed countries. In the US, in the sixties, there was the Community Mental Health movement, while in the eighties, starting in Italy but spreading to other European countries, there was the so-called Psychiatric Reform.<sup>2</sup>

Following guidelines set up by the Caracas Declaration<sup>3</sup> in the last decades psychiatric care in Brazil has moved from a hospital-oriented system to primary health care, promoting alternative community-centered treatment models. After the passing of Act 10.216, on April 6, 20014 many edicts from the Ministry of Health, promoted several alternative programmes to hospital-based care: creation of therapeutic home services, development of Community Mental Health Services (CAPS - Psychosocial Care Centers), wide access to medication, and the "return home" program. The latter gives financial support for families of chronic long-stay patients for returning them home or transferring them to community therapeutic units. These changes have been considered by the World Health Organization (WHO) as a model of recent policy changes in mental health.6

The aim of this study is to investigate trends in the financing and provision of mental health services in Brazil, using data collected from public databanks of the federal health information system. We intended to test the hypothesis that, although having more funds redirected for community care, the Brazilian Psychiatric Reform as a whole has represented a cost-containment public policy, grossly reducing the mental health budget.

# Method

## 1. Background

The Brazilian health care system was organized after the Constitution of 1988 was passed, which declared health to be a civil right and the provision of health services a duty of the State. Since the passing of the Unified Health System (SUS) Act in 1990, there has been a steady, continuing effort towards a universal health coverage and care.7 The SUS system is organized regionally, having a decentralized network of health services, formed by a complex set of public, private, and philanthropic providers, under coordinated management at each level of government and with strong community participation. SUS health care is the exclusive responsibility of the government, but private institutions are allowed to play a complementary role in the system, financed, and regulated by the SUS.

The system's financing is mostly federal; it spends an amount equivalent to the previous year's budget adjusted for gross national product (about US\$ 15 billion in 2005).8 State and municipal governments are obligated by law to spend 12% and 15% of their respective budgets in health.9 The National Health Fund transfers resources by direct payment for services provided to the SUS (ambulatory care and hospitalization) and a per capita fixed amount for public health programs, such as epidemiological surveillance, disease control and primary health care (the Family Health Programme).

Today, 75% of the Brazilian population is covered by the SUS system, mostly working-class and poor segments of society who have a lower or no purchasing power at all.<sup>10</sup> The public system faces serious problems due to insufficient financing and to ineffective cost control leading to long waiting lists and overall low-quality care. For this reason, Brazilian upper and middle classes support a complementary medical care system that operates via health insurance, providing health care in privately-owned clinics and hospitals. This system provides health coverage to a limited segment of population, about 19%, mostly young individuals, who present lower risks, and have higher purchasing power. But even for them, health care needs that require more expensive, complex services are typically covered by the SUS.11

The Brazilian mental health care system is nowadays fully integrated to the public system, following the principles and guidelines of the catchments area universal coverage, freeaccess network of services. The CAPS (Psychosocial Care Center) network now covers almost all regions of the country. Residually, and mostly in urban areas, a private medical practice is maintained mainly for psychotherapy and psychiatric treatment in doctors' consultation offices, paid on an out-ofthe-pocket basis.

#### 2. Data sources

For the present study a matrix has been set up in which the main source of information was the DATASUS. DATASUS is a free-access official information network and data bank operated by the SUS.8 It has all data about services utilization and structure. It is used for supporting decisionmaking for the financing, planning, and management of health care services and for monitoring health statistics. The data available in the DATASUS give detailed, relatively updated information about hospitals (beds and admissionevents), location and capability of mental health community services (specifically for the Psychosocial Care Centers -CAPS), and direct costs of the National Health Fund. It was possible to gather reliable data on infrastructure and financing, although information about the number of mental health professionals was available for July 2005. Descriptive analysis has been accomplished for all available DATASUS data from 1995 to 2005.

# Results

# 1. Infrastructure

The rate of psychiatric beds was 5.4/10,000 in 1995 and 3.2/10,000 in 2005, a reduction of 41%. This rate includes alternative beds such as those in general hospitals, day-hospitals and community services. In the same period, alternative beds have increased from 1% to 6% of the total of psychiatric beds, and the number of CAPS increased nine-fold from 0.004 to 0.037 per 10,000. The number of psychiatrists is near 0.3 per 10,000 and there are many psychologists (nearly 1/10,000), and social workers (0.7/10,000) working in the country, and a lack of psychiatric nurses. All these resources are unequally distributed across the different regions of the country, the South and Southeast regions being better-off. 12

# 2. Use of service

In 2005, there were 313,052 psychiatric admissions in

Brazil, i.e. 17 admissions per 10,000 inhabitants, 2.5% of the total hospital admissions in the country. This percentage was 3.64% in 1998 (a reduction of 30%). In 1998, the percentage of admissions in psychiatric hospitals was 97%, and decreased to 93% in 2005. The higher percentage of hospitalizations are for patients diagnosed with disorders from the schizophrenia spectrum (45%), followed by alcohol abuse and/or dependence (25%) and affective disorders (12%).

### 3. Cost

In 2005, federal resources to SUS were around US\$ 15 billion (US\$ 82.7 per capita), of which US\$ 358 millions (1.95 per capita) were directed for mental health care. The expenses on mental health were US\$ 2.66 per capita in 1995 and US\$ 1.95 per capita in 2005, a decrease of 26.7%. The percentage of mental health expenditure in relation to health expenses was reduced from 5.8% to 2.3%.

As observed in Figure 1, there has been a constant decline in the financing of psychiatric hospital admissions, and an increase of financing of community services (CAPS), medications and other mental health expenses. Most of the expenses in mental health are still for psychiatric hospital admissions, but for the last 10 years, the budget has suffered a substantial reduction (from 95.5% to 49.3%) in the financing percentage. These resources were allocated to community services (from 0.8% to 15%), medications (from 0.1% to 15.5%), and other types of mental health care (from 3.6% to 20.2%). Second generation antipsychotic drugs (clozapine, risperidone, olanzapine, quetiapine, and ziprasidone) were responsible for 75% of the expenses with medications. The other mental health care expenses included care for children and adolescents, patients with alcohol and tobacco disorders, individual, group and cognitive-behavior therapy, psychological testing and liaison psychiatry.

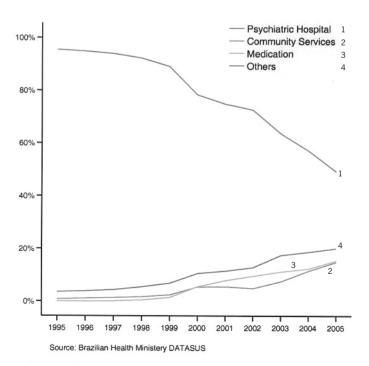


Figure 1: The budget for Mental Health as a proportion of the total health budget. Brazil 1995 to 2005

#### Discussion

We found that, in Brazil, there has been a substantial decrease of psychiatric beds, whereas community services are on the rise, psychologists and social workers are more represented in community teams and the availability of essential and modern therapeutic drugs for patients has increased. The overall population rates of psychiatric beds (3.2/10,000) may be considered adequate, above the median of the same indicator for the world (1.7) and for the Americas (2.6).13 However, resources are still unequally distributed in geographic terms, and there is an insufficient number of health professionals, mainly psychiatrists and nurses, and specially in regions most in need of health care coverage.

Due to some limitations of the DATASUS database (e.g. multiplicity of sources, reliability of registries, event registers, data taken for managerial but not for scientific purposes) it was not possible to collect accurate information regarding patient units, emergency rooms, and the number of psychiatric beds in general hospitals and therapeutic residences. However, these drawbacks should not affect findings concerning total costs invested in mental health. because all expenses were included in the comparison.

In Brazil, the pace of deinstitutionalization was not accompanied by the corresponding availability of a community care network. Research in countries that have undergone psychiatric reform processes has shown that the reduction of admissions will occur only when an easy access to community services is guaranteed. 14-16

Overall, there has been a shortage in the financing of the psychiatric reform in Brazil, because the de-hospitalization process has indeed implied a decrease of investments in mental health. The international experience demonstrates that the switch to a psychiatric community care system may actually increase costs, 17-18 which should be subsidized by cuts in hospital investments. This is particularly needed in the transitory phase in which costs may be doubled because of the coexistence of both systems.16 Such a move will benefit longstay patients and those who need critical care or emergency short-term psychiatric admissions, meaning that hospital care costs will be contained only if patients do receive community outpatient treatments and intensive care management services. 19-20 In addiction, the changes in the demographic structure of the Brazilian population<sup>21</sup> combined with an existing treatment gap in mental health care<sup>22-24</sup> may get even wider if the funding does not increase, and mental health services are not expanded in all Brazilian regions.

# Conclusion

It seems that the recent reform policies carried out in Brazil achieved results compatible with their declared objective, which is the re-orientation of the assistance from hospital to community. It is expected that policy stakeholders from Brazil and other low- and middle-income countries take into account that lowering the burden of psychiatric morbidity is crucial for the development of these countries. Thus, the psychiatric reform is not a strategy for reducing costs; it must imply increasing investments if these countries decide to take a better care of the most underprivileged ones.

Psychiatric reform policies are not a cost-containment program but rather a political strategy towards equity and social justice.

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#### References

- Hyman S, Chisholm D, Kessler R, Patel V, Whiteford H. Mental Disorders. In: Jamison D, Breman J, Measham A, Alleyne G, Claeson M, Evans D, Jha P, Mills A, Musgrove P, editors. Disease control priorities in developing countries. 2nd edition. New York, NY: World Bank/Oxford University Press; 2006. p. 605-25.
- Burti L. Italian psychiatric reform 20 plus years after. Acta Psychiatr 2. Scand Suppl. 2001;(410):41-6.
- PAHO. Declaração de Caracas. Conferência regional para a reestruturação da atenção psiquiátrica na América Latina no contexto da Atenção Primária de Saúde. Caracas; 1990. [cited on Dec 15, 2006] Available at: htpp://www.paho.org/Spanish/DD/PIN/ principles of Brazilia.pdf
- Brasil. Lei 10.216, de 6 de Abril de 2001. Diário Oficial da República Federativa do Brasil, Brasília (DF). 2001 9 abr. Seção 1:3.
- Ministério da Saúde. Legislação em Saúde Mental: 1990-2004. 5a ed. Brasília: Editora MS; 2004.
- WHO. Case examples of mental health policy, plans and programmes. Geneva: WHO; 2004. p. 80-1. [cited 2006 Dec 15] Available from: http://www.who.int/mental health/policy/en/ policy plans revision.pdf
- Paim JS. Atenção a saúde no Brasil. In: Guimarães R, Angulo-Tuesta A, organizadores. Saúde no Brasil. Contribuições para a agenda de prioridades de pesquisa. Brasília: Ministério da Saúde; 2004. p. 15-44.
- DATASUS. Informações em Saúde. [cite don May 28, 2006] Available at : http://www.datasus.gov.br/tabnet/tabnet.htm.
- Brasil. Emenda constitucional n. 29, de 13 de setembro de 2000. Diário Oficial da República Federativa do Brasil, Brasília (DF). 2000 14 set.
- Botega NJ. Psychiatric units in Brazilian general hospitals: a growing philanthropic field. Int J Soc Psychiatry. 2002;48(2):97-102.
- 11. Elias PE, Cohn A. Health reform in Brazil: lessons to consider. Am J Public Health. 2003;93(1):44-8.
- Andreoli SB. Serviços de Saúde Mental no Brasil. In: Mello MF, Mello AAF, Kohn R, organizadores. Epidemiologia da saúde mental no Brasil. Porto Alegre: Artmed; 2006. p. 85-100.
- WHO. Mental Health Atlas: 2005. Revised edition. Vol. I. Geneve: World Health Organization, 2005. [cited 2006 Dec 15] Available from: http://www.searo.who.int/EN/Section7/Section39/ Section2180/publication.asp?bkid=508
- Melo AP, Guimaraes MD. Factors associated with psychiatric treatment dropout in a mental health reference center, Belo Horizonte. Rev Bras Psiquiatr. 2005;27(2):113-8.
- 15. Menezes PR, Mann AH. The social adjustment of patients with schizophrenia: implications to the mental health policy in Brazil. Rev Saude Publica. 1993;27(5):340-9.
- 16. Okin RL. Testing the limits of deinstitutionalization. Psychiatr Serv. 1995;46(6):569-74.
- 17. Knapp M, Beecham J, Anderson J, Dayson D, Leff J, Margolius O, O'Driscoll C, Wills W. The TAPS project. 3: Predicting the community costs of closing psychiatric hospitals. Br J Psychiatry. 1990;157:661-70.
- 18. Rothbard AB, Schinnar AP, Hadley TP, Foley KA, Kuno E. Cost comparison of state hospital and community-based care for seriously mentally ill adults. Am J Psychiatry. 1998;155(4):523-9.
- Jerrell JM, Wieduwilt KM, Macey DV. Use and costs of publicsector behavioral health services for African-American and white women. Psychiatr Serv. 2002;53(2):195-200.
- Rothbard AB, Kuno E, Schinnar AP, Hadley TR, Turk R. Service utilization and cost of community care for discharged state hospital patients: a 3-year follow-up study. Am J Psychiatry. 1999;156(6):920-7.

- 21. Veras RP, Ramos LR, Kalache A. [Growth of the elderly population in Brazil: transformations and consequences in society]. Rev Saude Publica. 1987;21(3):225-33.
- Andrade L, Walters EE, Gentil V, Laurenti R. Prevalence of ICD-10 mental disorders in a catchment area in the city of Sao Paulo, Brazil. Soc Psychiatry Psychiatr Epidemiol. 2002;37(7):316-25.
- Kohn R, Levav I, 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):229-40.
- Leitao RJ, Ferraz MB, Chaves AC, Mari JJ. Cost of schizophrenia: direct costs and use of resources in the State of Sao Paulo. Rev Saude Publica. 2006;40(2):304-9.