Mental Health Policy in Brazil: federal expenditure evolution between 2001 and 2009

ABSTRACT

OBJECTIVE: To analyze the evolution of estimates of federal spending in Brazil’s Mental Health Program since the promulgation of the national mental health law.

METHODS: The total federal outlay of the Mental Health Program and its components of hospital and extra-hospital expenses were estimated based on 21 expenses categories from 2001 to 2009. The expenses amount was updated to values in reais of 2009 by means of the use of the Índice de Preços ao Consumidor Amplo (Broad Consumer Price Index). The per capita/year value of the federal expenditure on mental health was calculated.

RESULTS: The outlay on mental health rose 51.3% in the period. The breakdown of the expenditures revealed a significant increase in the extra-hospital value (404.2%) and a decrease in the hospital one (-39.5%). The per capita expenditures had a lower, but still significant, growth (36.2%). The historical series of the disaggregated per capita expenditures showed that in 2006, for the first time, the extra-hospital expenditure was higher than the hospital one. The extra-hospital per capita value increased by 354.0%; the per capita hospital value decreased by 45.5%.

CONCLUSIONS: There was a significant increase in federal outlay on mental health between 2001 and 2009 and an expressive investment in extra-hospital actions. From 2006 onwards, resources allocation was shifted towards community services. The funding component played a crucial role as the inducer of the change of the mental health care model. The challenge for the coming years is maintaining and increasing the resources for mental health in a context of underfunding of the National Health System.


INTRODUCTION

In 2001, the federal law 10,216 was promulgated in Brazil. It defines hospitalization as the last resource in the treatment of mental disorders and ensured people’s right to be treated preferably in community-based services. Like most of the countries of Western Europe, which have vigorously reduced the number of beds in psychiatric hospitals since the beginning of the 1980s, Brazil has implemented a new model of care for people with mental disorders based on territorialized community-based services. In just over a decade, and more decisively after law 10,216, thousands of psychiatric beds (approximately 18,500
between 2001 and 2009\textsuperscript{a}) were reduced and hundreds of community services were implemented, even though with unequal distribution across the regions of Brazil.\textsuperscript{b} The federal funding of the National Mental Health Policy is a key component to the implementation of this new model of care.

The theme of the public funding of programs and actions in mental health is urgent to the field of health in the world. Mental disorders account for at least 12\% of the global burden of disease, and this figure should reach 15\% in 2020.\textsuperscript{c} In spite of this, more than 1 billion people live in countries that spend less than 1\% of the health budget in mental health.\textsuperscript{d} McDaid et al\textsuperscript{e} have noted that funding is one of the factors responsible for the treatment gap, which makes many people with mental disorders not to be treated. Having financial allocation for the mental health policies is not enough to reduce this treatment gap. Among many factors, it is crucial to know how and where the resources are spent.

Knapp et al\textsuperscript{f} argue that both inaction costs and action costs may be high in the mental health field. Evaluations of the cost of inaction and cost-effectiveness of actions in mental health are fundamental. This type of assessment relates the cost of a health intervention to the result achieved by it, which can be measured, for example, in terms of improvement in health or in quality of life. In the mental health field, when effectiveness is mentioned, it means, generally speaking, and despite some inconsistencies, a specific measure of wellbeing related to mental health. Longitudinal studies in Europe\textsuperscript{g}\textsuperscript{3,4} with people that left psychiatric hospitals and were included in community-based services agree that community-based care has a better cost-effectiveness relation than hospital care for the majority of people, in spite of the fact that the absolute cost of hospital care and of community care are similar. The evidences are strong, mainly in high income countries, but also in low and middle income ones, that a range of interventions in primary care performed in the community is effective both in maintaining people with mental disorders in the society and in social reinsertion. These interventions have an optimal cost-effectiveness relation if compared to non-action.\textsuperscript{4}

If, on the one hand, the change of the model of care towards community-based actions is translated in the performance of actions that have a better cost-effectiveness relation, on the other hand, there is always the risk of underfunding mental health actions in this process of change. Thornicroft et al\textsuperscript{7} argue that this change may imply loss of funding to other public health fields in case the resources of the mental health policies are not protected, precisely in a moment of transition in which a higher injection of resources is necessary.

Jacob et al\textsuperscript{8} have noted that one of the guarantees of allocation and continuous flow of resources to the mental health policies is the presence of a specific budget for mental health within the general health budget. Of the researched countries (low and middle income countries), 31\% informed not having a specific budget for mental health policies, despite the fact that some of them invest consistently in actions and policies for the area. This is the case of Brazil.

The aim of this study was to analyze the evolution of federal spending in the Programa de Saúde Mental (PSM – Mental Health Program) of the Ministry of Health since the promulgation of the national law.

**METHODS**

Analyses of the total expenditures and of the disaggregated expenditures (hospital expenditures and extra-hospital expenditures) on PSM were performed, as well as of the total expenditures of the Ministry of Health on Ações e Serviços Públicos de Saúde (ASPS – Public Health Actions and Services), between 2001, the year in which the national law was promulgated, and 2009.

Expenditure was considered the value executed by the Ministry of Health in the period 2001 – 2009.

The total expenditure on PSM was estimated by the sum of 21 expenditures categories,\textsuperscript{8} formed by the items financed by the federal sphere of Sistema Único de Saúde (SUS – National Health System) in the mental health field. These categories group expenditures on payments of (outpatient and hospital) procedures, medicines, financial incentives, agreements, events and

\begin{itemize}
  \item \textsuperscript{a} Saúde Mental em Dados. Brasília, DF: Ministério da Saúde; 2011;(8).
  \item \textsuperscript{b} World Health Organization, Ministério da Saúde. Who aims report on mental health system in Brazil, Brasília; 2007.
  \item \textsuperscript{e} McDaid D, Knapp M, Curran C. Policy Brief Mental Health III – Funding mental health in European observatory on health systems and policies. Copenhagen: World Health Organization; 2005.
  \item \textsuperscript{g} Extra-hospital expenditures: 1.1 Exceptional drugs; 1.2 Essential drugs; 1.3 Psychodiagnosis; 1.4 Consultation in Psychiatry; 1.5 Group Therapies; 1.6 Individual Therapies; 1.7 Hospital-day; 1.8 Therapeutic Workshops; 1.9 Residential Services; 1.10 Psychosocial Community Centers (CAPS); 1.11 Monitoring Mental Disability or Autism 1.12 Financial incentive to the implementation of CAPS; 1.13 Financial incentive to the implementation of residential services; 1.14 Incentive to Social Inclusion; 1.15 Return Home Program; 1.16 Incentive to the Qualification of CAPS; 1.17 Research and Others. Hospital expenditures: 2.1 Psychiatric Hospitals Procedures; 2.2 Alcohol and Drugs Hospitalization Procedures; 2.3 Treatment in General Hospital; 2.4 Alcohol and Drugs Reference Services.
\end{itemize}
research, and on Programa de Volta para Casa (Return Home Program).

The expenditures of 12 categories (1.1, 1.3, 1.5, 1.6, 1.7, 1.8, 1.9, 1.11, 2.1, 2.2, 2.3, 2.4.) were integrally calculated through the information about expenditures on outpatient and hospital procedures provided by the DATASUS system (Sistema de Informações Hospitalares – SIH/SUS (Hospital Information System) – and Sistema de Informações Ambulatoriais – SIA/SUS (Outpatient Information System).

The expenditures of three categories (1.2, 1.4 and 1.10) were calculated by different procedures throughout the years, due to modifications in the DATASUS system or in the form of transfer of funds. Defrayal resources of Centros de Atenção Psicossocial (CAPS – Psychosocial Community Centers) ceased to be transferred to the municipalities and States by the collection of procedures (paid by Fundo de Ações Estratégicas e Compensação – FAEC (Strategic Actions and Compensation Fund) at the end of November 2008, according to Directive GM 2867/08. Due to this, the expenditure on the category “1.10 Psychosocial Community Centers” was calculated, for December 2008 and 2009, based on ministerial directives that transfer resources to the Annual Financial Ceiling of Medium and High Complexity Outpatient and Hospital Assistance of the States, Federal District and Municipalities. In the previous years, the expenditure on this category was obtained through the collection of procedures registered in DATASUS.

With the publication of the unified table, in force from 2008 onwards, one of the researched procedures (“07012306- Consultation in Psychiatry”) started to be registered under the general item “03.01.01.007-2 Medical Consultation in Specialized Care”. Thus, the expenditure on the category “1.4 Consultation in Psychiatry” was estimated in 2008 and 2009 based on the crossing of the procedure “03.01.01.007-2 Medical Consultation in Specialized Care” and the number of the Brazilian Code of Occupations for psychiatrist. In the other years, the expenditure on this category was obtained through direct consultation about the procedure “07012306- Consultation in Psychiatry” in the DATASUS.

The expenditure on “1.2 Essential Medicines” was estimated for 2008 and 2009. The expenditure on essential medicines in mental health was obtained by consulting the DATASUS for the other years. From 2008 onwards, with the publication of Directive GM 3237/07, the information about expenditure per specific groups of medicines was lost. For 2008 and 2009, the expenditure on essential mental health medicines was estimated based on the percentage that it represented of the expenditure on essential medicines in 2007 (7.2%).

The other six expenditures categories (1.12 Financial incentive to the implementation of residential services; 1.14 Incentive to Social Inclusion; 1.16 Incentive to the Qualification of CAPS; 1.17 Research and Others), except for “1.15 Return Home Program”, obtained for all the years through the action 10.303.1214.20A1.0001 (Aid to Psychosocial Rehabilitation of Patients Discharged from Long Psychiatric Hospitalizations in the SUS (Return Home) of Plano Plurianual (PPA - Multi-Annual Plan), had as source the Coordenação Geral de Saúde Mental, Alcool e Outras Drogas do Ministério da Saúde (CSM - General Coordination of Mental Health, Alcohol and Other Drugs of the Ministry of Health). Although there are two other specific actions of PSM in the PPA (10.302.1220.20B0.001 – Specialized Care in Mental Health and 10.301.1312.6233.0001 – Implementation of Mental Health Care Policies), which would encompass, theoretically speaking, the five remaining categories, the expenditures on these categories are better estimated based on information provided by the Coordination, as many expenditures end up being charged to other actions of the Ministry of Health. In the same way, expenditures performed by other areas can be considered PSM expenditure. The category “1.17 Research and Others” encompasses this type of expenditure.

The expenditures of the 21 researched categories were disaggregated into two types. Hospital expenditure was considered the one performed with hospitalizations or screening procedures for hospitalizations, carried out at psychiatric or general hospitals. Extra-hospital expenditure included all the other expenditures, whenever they were directed at actions, services, campaigns, events and research committed to the extra-hospital logic, i.e., with a mental health care model organized as a network and based on the community. The category “1.7 Hospital-Day” was classified as extra-hospital expenditure, as it does not perform hospitalizations of patients.

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The Ministry of Health’s expenditure had as source the Information System on Public Health Budgets.

Data were registered on an electronic spreadsheet. The expenditures were updated to values in reais of 2009 through the application of Índice de Preços ao Consumidor Amplo (Broad Consumer Price Index) provided by Instituto Brasileiro de Geografia e Estatística (IBGE – Brazilian Institute of Geography and Statistics), allowing to compare them. The values were divided by the population of each year (IBGE population projections\(^1\)), which produced the per capita/year value spent in mental health.

**RESULTS**

Mental health expenditures increased by 51.3% from 2001 to 2009. The expenditures breakdown showed an expressive increase in extra-hospital expenditures (404.2%) and a decrease in the hospital expenditures (-39.5%). The total outlay of the Ministry of Health with ASPS increased by 55.8% in the same period (Table).

The per capita expenditures on mental health had a lower, but still significant, growth of 36.2% in the period (Figure 1). The per capita expenditures of the Ministry of Health on ASPS, in turn, increased by 40.2%. The growth of the federal outlay on mental health accompanied the growth of the federal outlay on health, in a proportion with little variation (around 2.5% in the period).

The historical series of the disaggregated per capita expenditure showed an inversion in the form of funding of mental health actions in 2006 (Figure 2). While the extra-hospital per capita value increased by 354.0% from 2001 to 2009, the hospital value decreased by 45.5%.

**Table.** Ministry of Health’s expenditures on mental health in millions of R$ of 2009. Brazil, 2001-2009.

<table>
<thead>
<tr>
<th>Type of expenditure</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extra-hospital</td>
<td>205.29</td>
<td>226.80</td>
<td>305.89</td>
<td>361.45</td>
<td>483.37</td>
<td>625.42</td>
<td>840.08</td>
<td>922.28</td>
<td>1,035.08</td>
</tr>
<tr>
<td>Hospital</td>
<td>798.01</td>
<td>689.35</td>
<td>613.04</td>
<td>585.56</td>
<td>539.96</td>
<td>493.09</td>
<td>485.95</td>
<td>477.81</td>
<td>482.83</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,003.30</td>
<td>916.15</td>
<td>918.93</td>
<td>947.01</td>
<td>1,023.33</td>
<td>1,118.51</td>
<td>1,326.03</td>
<td>1,400.09</td>
<td>1,517.91</td>
</tr>
</tbody>
</table>

Source: Brazilian Ministry of Health.

\(^1\) Expenditures in millions of reais of 2009.

DISCUSSION

There was no loss of federal resources for PSM between 2001 and 2009, the period in which mental health care was reorganized in Brazil with the promulgation of Law 10,216/01. On the contrary, there was an increase in the resources invested in mental health, accompanying the investment in health in the same period. The data suggest an expressive investment in extra-hospital actions in the period that cannot be explained only by a possible migration of the resources invested in hospital actions to the extra-hospital ones. The protection of resources invested in community-based services (CAPS) in Brazil between 2002 and 2008 (by means of FAEC resources) may represent a crucial factor for the growth of resources in a moment of transition and, therefore, a risk factor for the maintenance of the resources of the PSM.

The overall expenditures on mental health in 2001 are atypical compared to the historical series. The withdrawal of the Ministry of Health’s expenditure on the defrayal of Associações de Pais e Amigos dos Excepcionais (APAE – Associations of Parents and Friends of the Mentally Challenged) from the total expenditures on mental health in 2002 may be one of the factors responsible for this specificity (the expenditures on APAE were part of component 1.10 Psychosocial Community Centers in 2001). The inflation above 12.0% registered in 2002, atypical within the analyzed period, sponsored a considerable reduction in the total budgets of the Ministry of Health and of Mental Health between 2001 and 2002, when the corresponding inflation updating indexes were applied.

Andreoli et al\(^1\) state that the resources for the PSM decreased from 5.8% to less than half (2.3%) of the health budget between 1995 and 2006. Our data do not corroborate this finding, at least for the first decade of 2000. The proportion between mental health expenditures and health expenditures varied from 2.68% to 2.60%, having oscillated around 2.5% from 2001 to 2009. Concerning the 1990 decade, there is a considerable difference between the Ministry of Health’s databases for the annual budget of the SUS and the data presented by the authors as total expenditures of the ministry (specially for 1995), which may have generated discrepancies. We have already presented our disagreement in relation to this study in another moment.\(^3\) If Brazil really had destined 5.8% of the health budget to mental health in 1995 – as the researchers allege –, the country would have been better at that time than a large part of the European countries that inherited the golden age of the Welfare State. Further studies on the funding of PSM are necessary so that sources and methodologies can be adjusted and discussions can be intensified.

Brazil has invested approximately 2.5% of the federal health budget in the Mental Health Policy in recent years. According to the World Health Organization (WHO),\(^4\) more than 61.5% of the countries in the European region spend more than 5% of the health budget in mental health. McDaid\(^5\) informs that 9.6%...

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of the European Community countries present mental health budgets between 2.0% and 5.0% of the total health budget. Four countries (8.0%), among them England, allocate more than 10.0% of their health budget to mental health actions/services, while 16.0% of the countries allocate between 5.0% and 10.0%. In 46.1% of the European Community countries this information is not available.

In the Americas, 33.3% of the countries that provide this datum allocate more than 5.0% of their health budget to mental health. Of the American countries, 44.4%, including Brazil, spend between 2.0% and 5.0% of their health budget on mental health. This is one of the main problems to be faced in the coming years by the Mental Health Policy in Brazil. It is necessary to increase the representation of the mental health budget in the budget, within a political/economic context in which the health budget itself has been facing obstacles to its growth. The increase in mental health expenditures, on the other hand, is a little lower than the increase in the total expenditures of the Ministry of Health – here, the challenge of the sustainability of the Mental Health Policy is a crucial issue.

Raising the mental health budget is not enough; it is necessary to know where the resource is invested and whether this investment is cost-effective. The data show a clear shift of investments in Brazil towards community-based services, in agreement with the trend of other countries and with recommendations of the WHO. Brazil’s Mental Health Policy has induced, by means of funding, the change to community-based health care, not hospital-based care.

European researchers\(^2\,4\,6\,7\) point to a better cost-effectiveness relationship of community-based care compared to hospital care.\(^8\) Brazil needs to further research the cost-effectiveness relation of the community-based mental health care actions/services. Economic evaluations are fundamental to list cheaper and, at the same time, more effective interventions, i.e., interventions which produce results in many dimensions that affect in a more or less permanent way the subjects’ quality of life. This information can be crucial to the public health managers’ investment in a scenario in which mental disorders increase and resources decrease.

Investment in primary care actions has become fundamental in this context. Until 2009, the federal spending on mental health in Brazil used to be modest concerning mental health actions in primary care – the methodology, due to its limitations, captures only the federal expenditure on essential mental health drugs and is not able to capture the effective expenditure of the Family Health Program, for example, on mental health actions. With the creation of the Núcleos de Apoio à Saúde da Família (Family Health Support Teams) in 2008, it will be possible to easily calculate this component in the next years. Here, the resource destination reflects the investment in a certain type of care: extra-hospital care.

Many are the possible methodologies to estimate Brazil’s federal spending on the Mental Health Program. The choice of one strategy that enables the formation of a historical series depends essentially on the availability of a stable range of data to the researcher. The utilized methodology does not result only from research activity. It derives from management work to avoid the loss of resources in the period of transition of the models of care and to ensure the injection of new resources to community-based actions. In this case, not only the data available to the manager are larger than those available to the common researcher – due to the access that managers have to the varied sectors of the institution that produce the necessary data, but part of the data is produced by the management activity itself. Thus, CSM is the source of part of the data. This fact introduces important limitations to the utilized methodology. The data whose source is CSM itself represent, however, just approximately 1.0% of the expenditures in the years of the presented historical series.

Another limitation of this study is viewing the federal spending on PSM as Brazil’s total budget to address mental health issues. Health funding is the responsibility of the three federative entities (Union, States and Municipalities). This study underestimates the country’s outlay on mental health, as it does not consider the States’ and municipalities’ investment in such actions. There is no available methodology or stable sources to produce historical series that consider the expenditures of the three entities on these actions/services. Further studies are necessary in this field so that new methodologies are constructed.

Further research is needed into funding and its impact on state and municipal mental health networks, and it is crucial to distinguish their hospital and extra-hospital components. It is necessary to build methodologies that are able to capture these investments, as well as the political and economic conditions to create specific budgets to the Mental Health Policies of the federative entities. The first attempt of the WHO to collect data on the budget destined to mental health in the world is recent (Atlas Project, 2001);\(^9\) but with great inducement force to the countries. It is necessary, on the one hand,


that each federative entity is able to produce this figure systematically. On the other hand, this figure needs to be translated to the managers, subsidizing choices with better cost-effectiveness relation. This is one of the general recommendations of the WHO to countries with scarce or average mental health resources, besides investments in primary care treatment, in the qualification of professionals and in the opening of beds in general hospitals.

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REFERENCES


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