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Letter to the Editors

# Morbidity and Mortality due to mental disorders in Brazil

During a recent research, while checking the official epidemiological database, hosted by the Brazilian Health Ministry (DATASUS: www.datasus.gov.br), some interesting information emerged. In determining morbidity and mortality directly related to Mental Disorders (based on World Health Organization - International Classification of Diseases [ICD 10]; "Chapter V - mental and behavioral disorders"), the following data was retrieved (Table 1).

From a national perspective, in 2006, 2007, 2008 and 2009 (latest available data) Brazil had respectively 10,256, 10,948, 11,560 and 11,861 deaths reported with mental disorders as the main cause. This represents, respectively, 5.49, 5.78, 6.09 and 6.19 deaths *per* 100,000 inhabitants. These numbers exclude part of the suicides, coded under another ICD-10 chapter (Table 1). The number of psychiatric hospital admissions in Brazil for those years were, respectively, 317,441, 290,079, 304,522 and 275,286, with an average length of stay between 45 and 50 days. The hospital mortality related to mental disorders was, respectively, 3.95, 4.22, 3.79 and 3.89 deaths per 1,000 admissions. Worldwide, about 1% of deaths can be attributed to psychiatric causes (approximately 873,000 deaths by suicide alone).[1]

As a reference, from 2003-2005, mortalities in Taiwan and United States were respectively 3.6 and 21.9/100,000 (mental disorders as underlying-cause-of death); using multiple-cause-of-death, which included a psychiatric diagnosis, the respective numbers were 10.3 and 115.4/100,000.[2] In 2007, other countries had the following mortalities due to mental disorders (per 100,000): Chile: 17.3, Finland: 23.9, France: 14, Greece: 0.7, Italy: 6.5, Japan: 1.8, Mexico: 5.1, Netherlands: 22.2, New Zealand: 12.3, Norway: 17.1, Portugal: 1.2, Spain: 2.6, United Kingdom: 16.2 (from: Organisation for Economic Co-operation and Development - www.oecd.org). The rates vary significantly from one country to another, reflecting internal particularities in healthcare, culture, coding and reporting artifacts and sub-notification. Caution is advised when interpreting these numbers. Intrinsically, psychiatric patients have a higher risk of death by any cause (RR 1.56 for men and 1.38 for women) when compared to the general population.[3] In Brazilian official records, we find about 11,000 deaths each year attributed to psychiatric causes; 10% of those, in hospital wards. The authors speculate about how many could be prevented with proper and immediate treatment.

**Table 1** Official Brazilian morbidity and mortality related to mental disorders (ICD 10 – Chapter V & Suicide: codes X60-X84), in absolute and relative frequencies (2006-2009)

| | Brazil | | | |
|---|---|---|---|---|
| | *2006* | *2007* | *2008* | *2009* |
| Deaths – Mental Disorders | 10,256 | 10,948 | 11,560 | 11,861 |
| Mortality /100,000 inhab. – Mental Disorders | 5.49 | 5.78 | 6.09 | 6.19 |
| **Hospitalizations** | 317,441 | 290,079 | 304,522 | 275,286 |
| Average permanence (days) | 46.80 | 50.06 | 45.39 | 48.3 |
| Deaths in hospital (Chapter V) | 1,257 | 1,227 | 1,157 | 1,073 |
| Hospital Mortality /1,000 admissions (Chapter V) | 3.95 | 4.22 | 3.79 | 3.89 |
| Deaths by Suicide | 8,639 | 8,868 | 9,328 | 9,374 |
| Mortality /100.000 inhab. - Suicide | 4.65 | 4.72 | 4.91 | 4.89 |

This topic of importance and concern has not been explored by research. The national and international databases (Lilacs, Scielo and Pubmed) retrieved only one paper, by Câmara,[4] discussing mental disorders in Brazil as cause of death, excluding the relationship of mental disorders and mortality for other causes.[4,5] In this paper, the author reports an increase of 62.3% psychiatric mortality from 1996 to 2005, while the number of inpatient treatments decreased. Interestingly, the mortality risk for public sector patients was 4.6 times higher than in the private sector.[1] Despite the difficulty in directly associating national policies for mental health, the unavailability of sufficient hospital beds, outpatient clinics and ECT in the public sector with these data, future research in this area might clarify the matter. Evidently, most of these deaths were avoidable, especially those inside hospitals.[4] We expect to bring this important matter to the attention of both researchers and public agents advocating for concrete actions - science and evidence-based - in order to decrease these numbers within the shortest possible timeframe.

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** Modest*
*** Significant*
**** Significant. Amounts given to the author's institution or to a colleague for research in which the author has participation, not directly to the author.*

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