

João Silvestre da Silva-Junior<sup>I</sup>Frida Marina Fischer<sup>II</sup>

# Disability due to mental illness: social security benefits in Brazil 2008-2011

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## ABSTRACT

This communication aimed to analyze the profile variation of disability benefits due to mental disorders. Secondary data published by Brazilian Social Security between 2008 and 2011 were evaluated. Mean annual variation rates over the period were calculated for the economically active population, as were the number insured, paid out overall sickness benefits and for mental and behavioral disorders. Mental disorders are the third most common reason for disability benefits. There was an average annual increase of 0.3% in new benefit claims, with a 2.5% fall in mean annual incidence. Work-related disease was identified in 6.2% of cases, most of it due to mood disorders. The government should use the data from the Social Security Institute to support a debate of public policies regarding mental health.

**DESCRIPTORS:** Mental Disorders. Salaries and Fringe Benefits. Social Security. Occupational Health. Ecological Studies.

<sup>I</sup> Programa de Pós-Graduação em Saúde Pública. Faculdade de Saúde Pública. Universidade de São Paulo. São Paulo, SP, Brasil

<sup>II</sup> Departamento de Saúde Ambiental. Faculdade de Saúde Pública. Universidade de São Paulo, SP, Brasil

### Correspondence:

João Silvestre da Silva-Junior  
Departamento de Saúde Ambiental  
Faculdade de Saúde Pública  
Av. Dr. Arnaldo, 715  
01255-000 São Paulo, SP, Brasil  
E-mail: silvajunior.js@gmail.com

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## INTRODUCTION

Benefit systems exist to provide financial support to the adult population who contribute to social security and need leave from work temporarily or permanently. Income transferred from the institution to the insured individuals plays an important role in the internal economy of the country and is related to social stability.<sup>3</sup>

It is the employer's competence to pay the employee full salary in cases of absence from work up to 15 days due to confirmed illness. After the 16<sup>th</sup> day, the worker should be referred to claim benefit from the Brazilian National Social Security Institute (INSS), institution of the Ministry of Social Security. There is a specific sickness benefit paid to the insured who proves disability to work due to some health problem.

Among illness, mental and behavioral disorders are common and often disabling. They evolve naturally with absenteeism due to illness and reduced productivity.<sup>4</sup> Disability due to mental illness was the third most common cause of claiming sickness benefit in 2008 (10.7%) and 8.5% of these were work-related health problems.<sup>2</sup>

The importance of studying such chronic illness is justified by the volume of spending on payment of sickness benefit and the social cost resulting from being excluded from working.

The aim of this study was to analyze variations in the profile of sickness benefits claimed for mental and behavioral disorders.

## METHODS

This was an ecological study using secondary data from the Ministry of Social Security between 2008 and 2011. The data sources were the Social Security Annual Statistical Reports (SSASR) issued between 2009 and 2012<sup>a,b,c,d</sup> and the online database of the Ministry of Social Security.<sup>e</sup>

Data on the evolution of the number of contributors and sickness benefits were described. The focus was on new benefits claims by the workers who were unable to continue to work due to a mental and behavioral disorder (MBD), according to Chapter V of the International Statistical Classification of Diseases and Related Health Problems, 10<sup>th</sup> revision (ICD-10).

Taken from individuals insured under the General Social Security Regime (GSSR), the study population

was defined as those individuals who had paid at least one contribution, in any month of the studied period of time (2008-2011).

Sickness benefit was sub-classified by type in non-work-related (B31 – when the medical examiner did not relate the health problem to work), and work-related (B91 – when social security made no link between the illness and work).

Based on absolute numbers, the rates of mean annual variation in the period were calculated for the economically active population, those insured under the GSSR, number of sickness benefit claims granted for any type of disability illness and those conceded for MBD.

## RESULTS

The economically active population was, on average, 98 million individuals, of which 59.4% were registered as insured in Social Security System, during the period. Mean annual growth of the economically active population was 0.4%, and 6.2% for GSSR taxpayers.

Between 2008 and 2011, the mean incidence was 375 sickness benefits granted per 10,000 insured individuals. There was a mean annual increase in concession of 2.9%. However, annual incidence underwent a negative mean variation of 3.17%.

At the same period of time, the non-work-related benefit type (B31) underwent a mean decrease of 2.1% in the incidence of new grants. The work-related type B91, showed a mean incidence of 57 concessions/10,000 insured individuals. There was a persistent decrease in annual incidence, with a mean of 9.16% per year (Figure).

The three main reasons for sickness benefits concessions were the same in the evaluated period. The most common causes were health problems from Chapter XIX of the ICD-10 (injury, poisoning and certain other consequences of external causes), with mean annual incidence of 29.2%, or 109.7/10,000 insured individuals. The second most common was disabling illness classified in Chapter XIII of the ICD-10 (diseases of the musculoskeletal system and connective tissue) with mean annual incidence of 20.7% or 77.9/10,000 insured individuals. Disorders related to Chapter V of the ICD-10 (mental and behavioral disorders) remained the third most common cause of sickness benefit, with a

<sup>a</sup> Ministério da Previdência Social. Anuário estatístico da Previdência Social 2008. Brasília (DF): Ministério da Previdência Social/DATAPREV; 2009.

<sup>b</sup> Ministério da Previdência Social. Anuário estatístico da Previdência Social 2009. Brasília (DF): Ministério da Previdência Social/DATAPREV; 2010.

<sup>c</sup> Ministério da Previdência Social. Anuário estatístico da Previdência Social 2010. Brasília (DF): Ministério da Previdência Social/DATAPREV; 2011.

<sup>d</sup> Ministério da Previdência Social. Anuário estatístico da Previdência Social 2011. Brasília (DF): Ministério da Previdência Social/DATAPREV; 2012.

<sup>e</sup> Ministério da Previdência Social. Estatísticas: segurança e saúde ocupacional: tabelas: auxílios-doença acidentários e previdenciários segundo os códigos da Classificação Internacional de Doenças - CID-10. Brasília (DF) [cited 2013 Feb 1]. Available from: <http://www.previdenciasocial.gov.br/conteudoDinamico.php?id=502>

mean annual incidence of 9.3% or 34.9/10,000 insured individuals. The incidence of disabling mental disorders decreased annually, by 2.5% on average.

New sickness benefits payments for MBD showed an annual mean of 203,299 cases. There was a mean increase of 0.3% per year of new benefits, with a mean annual impact of R\$ 186 million on the social security system. There was a mean annual increase of 7.1% per year on the value of spending on new benefits for mental disorders.

Sickness benefits for non-work-related mental and behavioral disorders underwent a mean annual increase of 0.5% per year. There was a significant fall between 2008-2009. In the two latter two-year periods this fall in non-work related MBD benefits rates persisted, but with lower percentages (Figure).

Benefits for those with work-related MBD represent, on average, 6.3% of the MBD total and underwent a mean decrease of 1.1% between 2008 and 2011. However, the relative data showed an incidence reduction around 6.71% (Figure).

Regarding work-related benefits, mood [affective] disorders was the most commonly diagnosed group (ICD-10 F30-F39), with a mean annual frequency of 47.7%. The second diagnosed group was neurotic, stress-related and somatoform disorders (ICD-10 F40-F48), with a mean annual frequency of 43.7%. An inversion in this order was detected, with a decrease in records of ICD-10 F30-F39 and a progressive increase in ICD-10 F40-F48 health problems.

## DISCUSSION

The number of GSSR contributors continued to increase, with a lower annual growth rate of sickness benefit granted. This may explain the persistent decrease in mean annual incidence of new benefits payment.

Mental and behavioral disorders remained the third most common cause of absence from work in the studied period. Thus, as other study showed,<sup>1</sup> there was a growing increase in the absolute number of MBD sickness benefit granted. However, the percentage shared by metal disorders as a reason for not being able to work decreased among illnesses over the studied period.

The numbers of those who received work-related benefits increased from 2007 onwards, due to the implementation of the so-called social security epidemiological technical nexus (NTEP).<sup>5</sup> The basic aim of this tool is to minimize underreporting of work-related health

problems. In this study, there was an overall decline in the absolute and relative number of work-related benefit claims, as well as in the group of those with disabling MBD.

Mood [affective] disorders (F30-F39), including depressive disorders, are the most frequently reported work-related MBDs in epidemiological studies in other countries.<sup>2</sup> The same occurred in Brazil between 2008 and 2010. However, the group of “neurotic, stress-related and somatoform disorders” (F40-F48) became the most frequent cause for work-related MBD sickness benefit granted in 2011, similar to the French pattern.<sup>2</sup>

Administrative issues of the Brazilian Social Security System may partially explain some of the observed results. Actions established in the last decade, such as public tenders to increase the number of public servants and the plan to expand the INSS attention network,<sup>f</sup> have facilitated public access to social security services. This public policy increased consultations with social security physicians, and may have influenced an absolute increase in sickness benefit concessions.

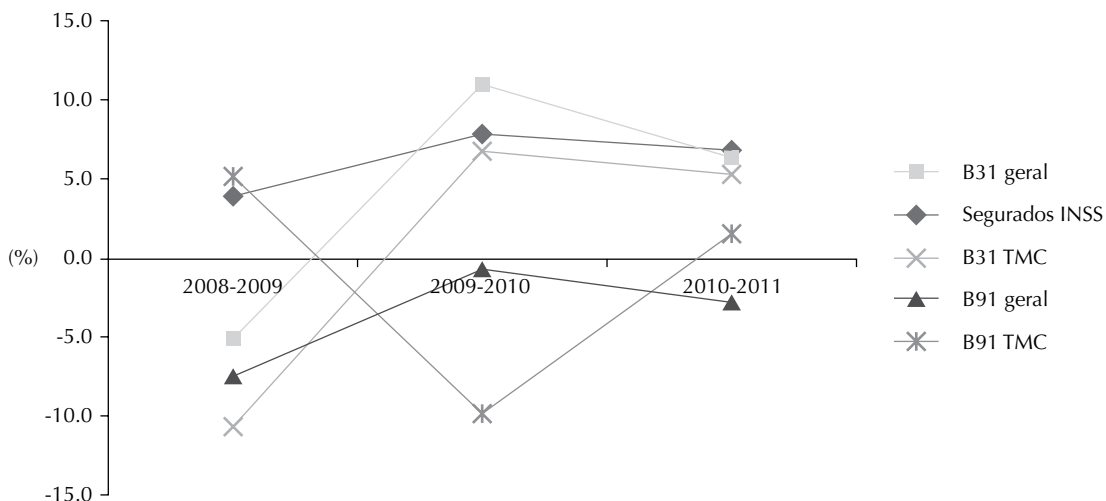
From 2008 onwards, support guidelines for the social security medical decisions were published, indicating technical parameters to assist in evaluating work disability. It can be hypothesized that using a theoretical framework has influenced the technical accuracy of medical evaluations, contributing to the overall decrease in incidence of new benefits concessions. However, the published guidelines do not approach causal relationships between disabling health problems and working conditions. This may have contributed to the sharp decrease in characterization of work-related benefits, in overall causes and also concerning benefits due to MBD.

A strike among social security medical doctors that occurred between June and September 2010,<sup>g</sup> may have contributed to the results described here. There was an estimated reduction of 70.0% in the volume of appointments to assess work disability for the purpose of claiming benefits. In 2010, specifically, there may have been underreporting of long absences from work due to MBD and, consequently those which were work-related.

The reasons mentioned are limitations of the observed results. However, the data in this study represent longitudinal historical trends and allow us to see a reduction in incidence of social security benefit granted for any reasons, and for mental and behavioral disorders in Brazil, between 2008 and 2011.

<sup>f</sup> Ministério da Previdência Social. Expansão da Rede de Atendimento do INSS. Brasília (DF): Ministério da Previdência Social; 2009 [cited 2013 Jul 1]. Available from: [http://www.previdencia.gov.br/arquivos/office/3\\_090316-092117-572.pdf](http://www.previdencia.gov.br/arquivos/office/3_090316-092117-572.pdf)

<sup>g</sup> Peritos do INSS encerram greve após decisão judicial. Folha de São Paulo. 2010 Set 17: Mercado. [cited 2013 Jul 1]. Available from: <http://www1.folha.uol.com.br/mercado/2010/09/800475-peritos-do-inss-encerram-greve-apos-decisao-judicial.shtml>



Source: AEPS 2009, 2010, 2011, 2012.

B31 for MBD: non-work-related sickness benefit due to mental and behavioral disorders; B91 for MBD: work-related sickness benefit due to mental and behavioral disorders; INSS: National Social Security Institute

**Figure.** Variation in the number of contributors to Social Security System, regarding sickness benefit claims for mental disorders and its subtypes, (non-work-related benefit-B31 and work-related benefit-91). Brazil, 2008 to 2011.

The decrease in economic production, especially when the illness affects the economically active population, represents a significant cost to the State, as it indirectly reduces economic growth. The onus of social exclusion may further aggravate the chronic suffering of sick individuals, encouraging a vicious circle. This situation does not contribute to improving either the physical or mental wellbeing.

Minimizing the development or worsening of disorders which lead to new benefit payments is essential for the financial balance of public social security.

The governmental agenda should support programs dealing with research into mental health, promoting national discussions on their official data. Thus, specific public policies for promotion, prevention and rehabilitation of health can be created.

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Article based on the master's dissertation of Silva-Júnior JS, entitled: "Afastamento do trabalho por transtornos mentais e fatores associados: um estudo caso-controlado entre trabalhadores segurados da Previdência Social", presented to the *Faculdade de Saúde Pública* of the *Universidade de São Paulo*, in 2012.

This study was presented at the 15<sup>o</sup> Occupational Medicine Congress, of the Brazilian National Association of Occupational Medicine (ANAMT), Sao Paulo, in 2013.

The authors declare that there are no conflicts of interest.