SOCIAL COST OF MENTAL DISORDERS: DISABILITY AND WORK DAYS LOST. RESULTS FROM THE MEXICAN SURVEY OF PSYCHIATRIC EPIDEMIOLOGY

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SUMMARY

Introduction

When the impact of illness is evaluated by indicators like mortality, mental illness has a less significant impact than other illnesses. As a result, the impact of mental disorders was underestimated until the last two decades of the previous century. This perception began to change as a result of two factors: On the one hand, the study of the Global Burden of Disease reported by Murray and Lopez, and, on the other hand, the definition of mental disorders by the American Psychiatric Association. The common element shared by these two factors is the inclusion of the concept of disability.

Disability is the deterioration of the expected functioning of a subject of a particular age and sex in a social context. It is a part of the social cost of illness.

Objective

To assess the disability burden associated with depression, mania, agoraphobia, social phobia, general anxiety, panic disorder, and post-traumatic stress disorder (PTSD) according to the Mexican Psychiatric Survey and to compare results with the disability produced by some chronic non-psychiatric conditions.

Method

This survey is based on a stratified, multistage area, probabilistic sample of adults living in urban areas of Mexico. The instrument used was the third version of the Composite International Diagnostic Interview. We report the 12-month prevalence of psychiatric disorders as defined by DSM-IV criteria. We also evaluated non-psychiatric chronic conditions like diabetes, arthritis, hypertension, backache, and other painful illnesses, identified in general as "chronic conditions". Indicators of disability were Sheehan's scale and number of work days lost. This is an easy and fast self reporting scale, which can be used both in the clinic or research. The sub-scales can be added or averaged to obtain a total score. The scale of responses is a horizontal line with numerals from 0 to 10 and five verbal descriptions, with the description "Not at all" corresponding to a value of 0; "Mild" rangimg from 1 to 3; "Moderate" from 4 to 6; "Severe" from 7 to 9; and "Very severe" corresponding to 10.

Results

Close relationships and social life were the areas most deeply affected. The disorders found to produce the highest levels of disability were depression, social phobia, and PTSD. The lowest disability levels were observed in chronic conditions. On the total score of Sheehan's scale, disorders with the highest level of disability were PTSD (mean 5.35 ± 0.307) and depression (mean 4.72 ± 0.167). Depression and panic attacks were the disorders by which most days were lost on average in the previous year (25.51, CI_{95}: 16.53-34.5; 20, CI_{95}: 3.02-36.97). Days lost were lower in chronic conditions than in the seven mental disorders studied (6.89, CI_{95}: 3.04-10.74).

Discussion

This is the first paper to demonstrate the impact of mental disorders in Latin America evaluating the association of disability with common mental disorders.

We have shown that mental disorders, especially depression, are associated with deficits in functioning and result in the loss of work days. We have also shown that persons with common mental disorders have, on average, higher levels of disability than those observed among persons with a wide range of chronic physical conditions. These results are consistent with prior studies in North America and Europe that have found that persons with common mental disorders experience substantial disability in social role functioning.

Key words: Social cost, disability, lost days, depression, mental disorders.

RESUMEN

Introducción

Hasta las últimas dos décadas del siglo pasado se subestimaba el impacto de los trastornos mentales. Semejante percepción cambió debido a dos factores: por un lado, el estudio de la carga global de la enfermedad y, por otro, la definición de los trastornos mentales según la Asociación Psiquiátrica Americana. En estos dos factores el elemento común es la inclusión del concepto de

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discapacidad. La discapacidad se refiere al deterioro en el funcionamiento que se espera de un sujeto de cierta edad y sexo en un contexto social, y forma parte del costo social de la enfermedad. En el estudio de la Carga Global de la Enfermedad, la depresión se consideró como la enfermedad más discapacitante y ocupó el cuarto lugar en ese estudio. Otros cuatro trastornos psiquiátricos se incluyeron también entre las 10 enfermedades más discapacitantes. En 1985, en la versión revisada de la tercera edición del Manual Diagnóstico y Estadístico de los Trastornos Mentales, la Asociación Psiquiátrica Americana incluyó el deterioro en diferentes áreas de funcionamiento como criterio diagnóstico de los trastornos mentales. En 1992, la Organización Mundial de la Salud incluyó también el deterioro de la actividad entre las pautas diagnósticas de algunos trastornos mentales.

Así, el objetivo principal de este trabajo es reportar la discapacidad producida por los trastornos afectivos y los trastornos de ansiedad identificados con mayor frecuencia en la Encuesta Nacional de Epidemiología Psiquiátrica a fin de compararla con la discapacidad producida por algunas enfermedades crónicas no psiquiátricas.

Material y métodos

Los datos analizados en este trabajo se recabaron durante la Encuesta Nacional de Epidemiología Psiquiátrica. Los diagnósticos se basan en el DSM-IV. La entrevista se realizó con una versión computarizada de la Entrevista Internacional Compuesta de Diagnóstico (CAPI, versión 15 certificada del CIDI). También se evaluó la prevalencia en los últimos 12 meses de las siguientes enfermedades crónicas no psiquiátricas: diabetes, artritis, hipertensión, cefalea, dolor de espalda y cuello, y otras enfermedades dolorosas. Todas éstas se identifican globalmente como "enfermedades crónicas".

En este trabajo se presenta la discapacidad producida por la depresión, manía, agorafobia sin pánico, fobia social, ansiedad generalizada, trastorno de pánico y estrés postraumático, y se compara con la discapacidad producida por las enfermedades crónicas.

La discapacidad se evaluó con la Escala de Discapacidad de Sheehan y el número de días productivos perdidos. Esta escala es un instrumento de autorreporte que evalúa la discapacidad en diferentes áreas. Las subescalas se promedian y se obtiene así una puntuación total que va de 0, sin deterioro en el funcionamiento, hasta 10, que indica un funcionamiento totalmente deteriorado.

También se preguntó a cada entrevistado sobre el número de días en que fue totalmente incapaz de trabajar debido a un trastorno presente en los últimos 12 meses.

Se hicieron 5826 entrevistas completas y los resultados se sometieron a un complejo proceso de ponderación. Los datos que se reportan se basan en los pesos de la parte 2, que utiliza un total de 2362 entrevistas.

Resultados

De las cuatro áreas evaluadas, las de las relaciones con personas cercanas y la vida social fueron las más afectadas. Los trastornos que producen los niveles más elevados de discapacidad fueron la depresión (4.63 y 4.8), la fobia social (5.37 y 5.8) y el trastorno por estrés postraumático (5.61 y 5.35). La depresión tuvo el mayor impacto en el área laboral (4.88). En la puntuación total de la escala, los trastornos que produjeron mayor nivel de discapacidad fueron el estrés postraumático (5.35) y la depresión (4.72).La pregunta sobre cuántos días fueron totalmente incapaces de trabajar los entrevistados en el último año, reveló que la depresión y el trastorno de pánico fueron los trastornos por los que, en promedio, se perdieron mas días de actividad. Los días perdidos por enfermedades crónicas (6.89) fueron menos que los que se perdieron por depresión (25.51), agorafobia (18.56), ansiedad generalizada (9.5), trastorno de pánico (20) y trastorno por estrés postraumático (14.21).

Discusión

Los resultados más sobresalientes son los siguientes. En primer lugar, el efecto de los trastornos del estado de ánimo y de ansiedad es mayor que el efecto de algunas enfermedades crónicas no psiquiátricas. En las cuatro áreas de funcionamiento evaluadas, los trastornos psiquiátricos obtuvieron en promedio puntuaciones más elevadas que las enfermedades crónicas. En segundo lugar, debe destacarse el efecto discapacitante de un trastorno aparentemente poco grave como la fobia social. Si se considera que existen tratamientos efectivos, sobre todo para pánico y depresión, puede decirse que es posible disminuir el costo social de los trastornos del estado de ánimo y los trastornos de ansiedad.

Este es el primer artículo en América Latina en que se reporta el impacto de los trastorno mentales según la discapacidad y los días de actividad perdidos que generan.

Palabras clave: Costo social, discapacidad, días perdidos, depresión, trastornos mentales

INTRODUCTION

When the impact of illness is evaluated by indicators like mortality, mental illness has a less significant impact than other illnesses. As a result, the impact of mental disorders was underestimated until the last two decades of the previous century. This perception began to change as a result of two factors: on the one hand, the study of the Global Burden of Disease, reported by Murray and Lopez (1996), and, on the other hand, the definition of mental disorders by the American Psychiatric Association (1987). In the revised version of the third edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-III-R), the American Psychiatric Association (1987) included the impairment of different areas of functioning as a diagnostic criteria for mental disorder. Later, the World Health Organization (1992) also included the deterioration of activity in the standard diagnoses of some mental disorders. The common element shared by these two factors is the inclusion of the concept of disability.

Disability is the deterioration of the expected functioning of a subject of a particular age and sex in a social context. It forms part of the social cost of the illness. In the Global Burden of Disease study (Murray, 1996), mental disorders were identified as producers of disability. Depression was considered the major cause of disability and occupied the fourth place in the Global Burden of Disease, calculated as the sum of years lost due to premature death and the years lived with a disability (DALYS: Disability Adjusted Life Years). Projections for 2020 indicate that depression will occupy a second place, after coronary illnesses. Four other psychiatric disorders are included among the 10 most disabling illnesses: alcohol-related

disorders, bipolar disorder, schizophrenia, and obsessive-compulsive disorder.

So far, population-based studies of the burden of mental disorders have been largely limited to Europe, North America and Australia. This report presents the first population-based estimates of the disability burden of specific mental disorders among a representative population sample from Mexico. The National Survey of Psychiatric Epidemiology includes specific indicators of disability associated with mental disorders: the Sheehan Disability Scale and the number of workdays lost.

The main objective of this work is to assess the disability burden associated with specific affective and anxiety disorders identified in the National Survey of Psychiatric Epidemiology to compare results with the disability produced by some chronic non-psychiatric conditions.

METHODOLOGY

Sample

Sample description and methodology have been previously published (Medina-Mora et al., 2003, 2005). The Mexican Psychiatric Survey is based on a stratified, multistage area, probabilistic sample of individuals aged 18-65 years from the non-institutionalized population living in urban areas (population ≥2500) of Mexico. Approximately 75% of the Mexican population is urban, so defined. Personel from Berumen and Associates, an established survey firm in Mexico, conducted the field work, after being trained by licensed mental health professionals in the interview instrument. Data collection took place from September 2001 through May 2002. In all strata, the primary sampling units (PSU) were the 1995 census count areas (Area Geográfica Estadística Básica, or groups of them), similar to US census tracts, cartographically defined by the Instituto Nacional de Estadística, Geografía e Informática in 1994 and updated during field work. Secondary sampling units were city blocks (or groups of them). Five city blocks were selected within each PSU with probability being proportional to measure of size. All household units within the selected city blocks were listed, and compact segments of approximately 10 households were formed from which one segment was selected with equal probability. Finally, one respondent was randomly selected from eligible members of each household. Eligible household members are all defined as Spanish-speaking persons who normally eat, sleep, prepare meals, and shelter themselves in the household and who are between the ages of 18 and 65 years.

The response rate was 76.6% of the eligible respondents (from a total of 5826 interviews, well above the original targeted sample size of 5000) and within the scope of other surveys from the World Mental Health Initiative (50.6-87.7% response rate range). The main reason for non-participation was "being absent at the time" (7.8% of the listed individuals). Direct refusals were also infrequent (6.2% of the listed individuals). All 5826 respondents answered a part 1 interview and a selected sub-sample of 2362 answered an additional number of questions on risk factors and supplemental mental disorders. The sample submitted to part 2 consisted of all respondents who screened positive for any disorder on part 1 plus a probability sub sample of other part 1 respondents. All interviews were conducted at each respondent's home after a careful description of the study goals was given and informed consent was obtained. No financial incentive was given for respondents' participation. The Ethics Committee of the National Institute of Psychiatry approved all recruitment and consent procedures.

Diagnostic assessment

On this paper, we report on the 12-month prevalence for psychiatric disorders, defined according to DSM-IV criteria for diagnoses (Medina-Mora et al., 2005).

The instrument used was the World Mental Health Survey Initiative version of the CIDI (WHO, 2001). This structured diagnostic interview was administered by an interviewer in face-to-face interviews using a laptop computer version (i.e. CAPI) and yielded DSM-IV diagnoses (American Psychiatric Association, 1994). Adequate inter-rater reliability (Cottler et al., 1991; Wittchen et al., 1991), test-retest reliability (Wacker et al., 1990), and validity (Farmer et al., 1987; Janca et al., 1992) of earlier CIDI versions has been documented (for a review of studies which report the psychometric properties of the CIDI, see Andrews & Peters, 1998). These instruments have shown good performance in validity studies in Mexico (Caraveo et al., 1991, 1998) and other Spanish-speaking countries (Wittchen, 1994). The translation of the WMH-CIDI into Spanish was carried out according to WHO recommendations, utilizing material currently in use in Spanish (ICD-10, DSM-IV, and SF-36); this includes a back-translation of selected items and terms of the clinical sections. An international expert panel, comprised of mental health experts qualified as clinicians and researchers, solved the inconsistencies found in the back-translation. This same panel worked with an international harmonization group. The inconsistencies found in the back-translation were solved by consensus. The international expert panel produced a list of problematic terms for translation into Spanish and they agreed upon translation. Additional

minor adaptations to the Mexican context were made by consensus among the Mexican team.

We also evaluated the prevalence through the last 12 months of certain non-psychiatric chronic conditions including: diabetes, arthritis, hypertension, headache, backache, other painful conditions, hay fever, stroke, heart attack, heart diseases, asthma, tuberculosis, chronic obstructive pulmonary disease, gastric ulcer, HIV or AIDS, epilepsy and cancer. All are identified as a whole as "chronic conditions" and this category is used to compare disability levels among individuals with chronic physical conditions to disability levels among individuals with mental disorders.

In this work we present the disability produced by the following anxiety and depressive disorders: depression, mania, agoraphobia, social phobia, general anxiety, panic disorder, and post-traumatic stress disorder.

Evaluation of disability

There are different measurements of the impact produced by mental disorders. We present here the two indicators of disability evaluated according to the disorders presented in the last 12 months: Sheehan Disability Scale and the number of work days lost.

The Sheehan scale was initially used in clinical studies of patients with panic disorder. The original scale (Sheehan, 1986) evaluates disability in three areas: 1. work, 2. social life and recreational activities, and 3. family life and home responsibilities. In this work the last sub-scale is divided into two parts: an evaluation of relationships with people close to the patient and an evaluation of home activities.

The Sheehan scale is a graphic scale with verbal and numerical anchors. For example, when the subject met the criteria for a depressive episode during the last 12 months, he/she had to answer the question: "Using a 0 to 10 scale, where 0 means no interference and 10 means very severe interference, what number describes how much your (sadness/discouragement or lack of interest) interfered with each of the following activities during the past 12 months?". The specific areas mentioned were: home (household management like cleaning, shopping, and taking care of the house/apartment), ability to work, close relationships (ability to establish and maintain close relationships with other people) and social life. The scale of responses is a horizontal line with numerals from 0 to 10 and five verbal descriptions. The description "Not at all" corresponds to a value of 0; "Mild" ranges from 1 to 3; "Moderate" ranges from 4 to 6; "Severe" ranges from 7 to 9; and "Very severe" is 10.

This is an easy and fast self-reporting scale, and may be used in clinical settings or research. Leon et al. (1997) observed a high internal consistency (0.89) in the sub-scales; these can be added or averaged to obtain a total score. It is an evaluation tool of disability non- specific to a diagnosis. In this work it was used in every diagnostic category present in the last 12 months.

The second method of evaluation of disability involves the following question posed to the subject: "About how many days out of 365 in the past 12 months were you totally unable to work or carry out your normal activities because of your (sadness/discouragement or lack of interest)?". This was used to determine the number of days lost due to a the disorder over the past 12 months. This question was posed for each disorder meeting the diagnostic criteria.

Analyses

Two sets of weights were developed for the survey. Details have been previously described (Medina-Mora et al., 2005).

As a result of the complex sample design and weighing, estimates for standard errors in proportions (last 12 months prevalence) were adjusted. For the purpose of this paper, the data reported here were based on part 2 weights, for a total of 2362 interviews. All analyses were done using SAS software.

RESULTS

The general characteristics of the subjects interviewed have been published elsewhere (Medina-Mora et al., 2003, 2005). About 54% of the sample were women, and about 40% were in the youngest group (18-29 years old). The sample reflects the low education level of the country; almost 68% had only gone to primary school (sixth grade) and only 12% had completed university. The majority of the sample was married formally or informally, and was currently working (58%).

From the four areas of functioning evaluated by the Sheehan Disability Scale (table 1 and graphic 1), the close relationships and social life areas were the most deeply affected. The disorders found to produce the highest levels of disability were depression, social phobia, and post-traumatic stress disorder. When compared to people reporting chronic physical conditions, the lowest levels were observed in the chronic conditions evaluated.

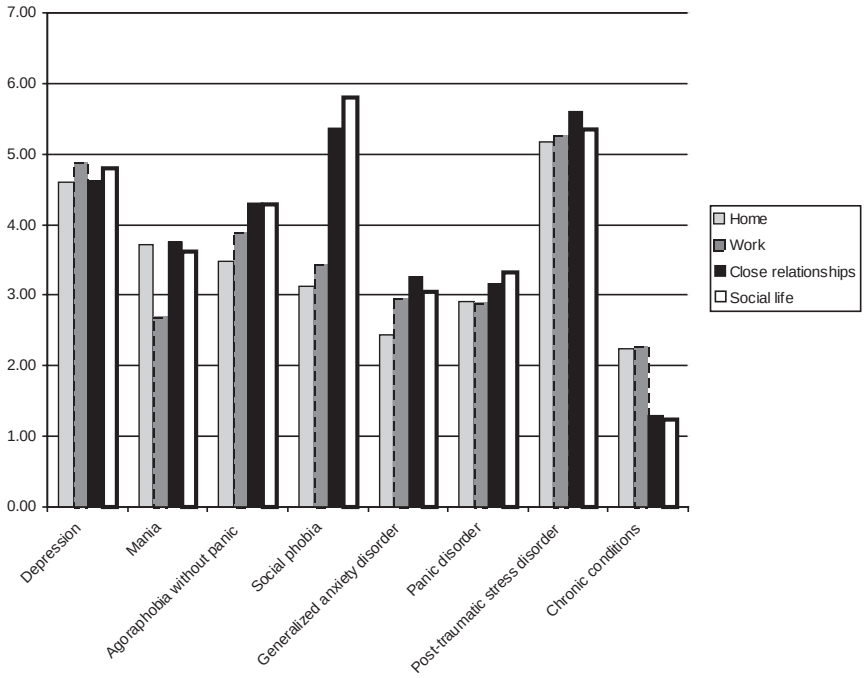
The importance of the association of disability with mental disorders is confirmed with the analysis of the total score on the Sheehan scale. Here, the disorders causing the highest level of disability were post-traumatic stress disorder and depression (table 2).

In response to the question regarding how many days a patient was totally incapacitated to work in the past year, depression and panic attacks were the disorders

TABLE 1. Scores and confidence intervals in Sheehan Scale and productive days lost by diagnosis

Disorder	*n*	*Work*	*Social life*	*Home*	*Close relationships*	*Lost days*		
	(2362)	*Mean CI95%*	*Mean CI95%*	*Mean CI95%*	*Mean CI95%*	*Total*	*Mean*	*CI95%*
Depression	86	4.88 4.50 - 5.27	4.80 4.3 - 5.20	4.60 4.24 - 4.98	4.63 4.21 - 5.04	1978	25.51	16.53 - 34.50
Mania	20	2.69 2.05 - 3.33	3.62 2.78 - 4.46	3.71 3.1 - 4.30	3.76 2.74 - 4.78	72	3.80	0.35 - 7.24
Agoraphobia without panic	16	3.89 2.80 - 4.99	4.29 3.42 - 5.48	3.47 2.35 - 4.60	4.31 3.29 - 5.34	211	18.56	-4.15 - 41.27
Social phobia	39	3.43 2.85 - 4.01	5.80 5.27 - 6.32	3.12 -0.32 - 12.75	5.37 4.79 - 5.96	174	5.58	1.07 - 10.08
Generalized anxiety disorder	10	2.95 1.95 - 3.94	3.04 2.55 - 3.52	2.45 1.49 - 3.40	3.27 2.72 - 3.83	80	9.53	0.86 - 18.21
Panic disorder	15	2.90 2.45 - 3.34	3.33 2.72 - 3.94	2.91 2.34 - 3.48	3.17 2.56 - 3.77	280	20.00	3.02 - 36.97
Post-traumatic stress disorder	13	5.27 4.17 - 6.37	5.35 4.27 - 6.43	5.18 4.11 - 6.25	5.61 3.52 - 7.70	108	14.21	12.00 - 16.41
Chronic conditions	1003	2.29 2.08 - 2.50	1.23 1.04 - 1.43	2.25 1.93 - 2.57	1.29 1.11 - 1.48	5320	6.89	3.04 - 10.74

Graphic 1. Scores of Sheehan Scale by diagnosis



by which more days were lost on average (table 1 and graphic 2). For chronic conditions, the number of days lost was lower than for five of the seven mental disorders studied.

DISCUSSION

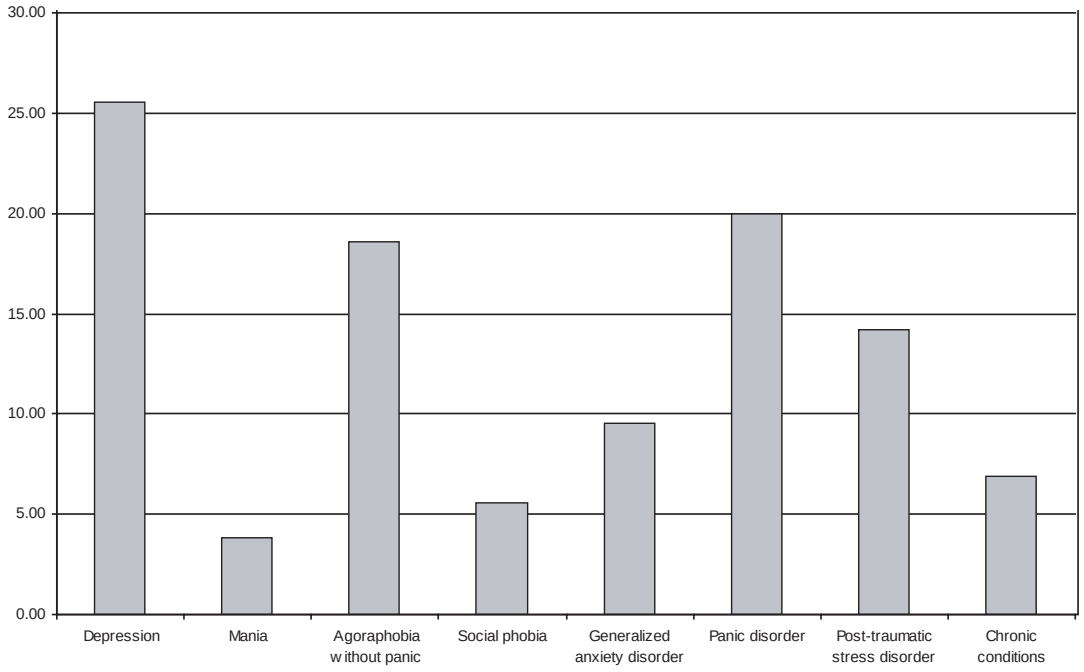
The personal and social impact of mental disorders, considered by some authors as the social cost of these illnesses, has been defined in different ways. For some it refers to financial dependence (money paid for sick time or unemployment), the search for support, and comorbidity resulting from the use of drugs and alcohol (Leon et al., 1995). Lepine et al. (1997), in the Study of Depression in the European Society, concluded that the social cost corresponds to the search for treatment and the number of work days lost as a result of depression.

Disability is a part of the social cost of illness. Traditionally, disability has been assumed to be largely due to chronic physical conditions, but more recent research has shown that common mental disorders are among the leading causes of social role disability in the general population. This study is the first population-based evaluation of the extent of disability among individuals in Latin America, specifically Mexico, confirming that mental disorders are among the leading causes of disability in this population.

TABLE 2 . Mean total score in Sheehan Scale

	Mean	*Standard error*
Depression	4.72	0.167
Mania	3.44	0.228
Agoraphobia without panic	4.03	0.425
Social phobia	4.42	0.198
Generalized anxiety disorder	2.92	0.253
Panic disorder	3.07	0.190
Post-traumatic stress disorder	5.35	0.307

Graphic 2. Mean of work days lost in the past 12 nonths by diagnosis



The evaluation of disability is important not only as a measure of the social cost or impact, but also because of its relevance in diagnosis. Slade and Andrews (2001) evaluated patients with general anxiety using the SF-12 (a short version form of the Medical Outcomes Study) and found that the diagnoses had a discrepancy with the ICD-10 and the DSM-IV due to inclusion of the criterion "clinically significant" as a result of deterioration (disability); this makes the two classifications different. Bird et al. (2000) have also shown that impairment measures are important in diagnostic assessments to distinguish individuals whose psychopathology is of clinical significance.

The work of Wells et al. (1989) comparing depressed patients and subjects with other pathologies was a pioneering effort in recognizing the impact of depression in the functioning and well-being of the subjects. Wells et al. observed that the worst physical functioning was comparable to or worse than that associated with chronic conditions such as hypertension, diabetes or arthritis. In addition, the relationship between days in bed and symptoms of depression was higher than with the aforementioned chronic conditions. The coexistence of depression and medical conditions had a combined effect in the deterioration of a patient´s functioning.

In this study there are several results to be emphasized. In the first place, the effect of affective and anxiety disorders is greater than the effect of some non-psychiatric chronic conditions. In the four areas evaluated, psychiatric disorders obtained on average higher scores than other chronic conditions. Some of those included are not serious, but they can be the cause of limitations as great as those caused by low back pain. In this paper we highlight only the general effects without analyzing each condition on its own and without evaluating the effect of the comorbidity of physical and mental disorders, which we suppose may have a combined effect, as observed by Wells et al. (1989).

Another very important result is the incapacitating effect of disorders that are sometimes considered less serious, such as social phobia, but that were shown to be associated with levels of disability comparable to those of post-traumatic stress disorder and depression.

The correlation of the Sheehan scale with the days lost due to disability is moderate, which indicates that each scale evaluates different aspects of disability; they may be considered complementary. Disorders that cause the greatest loss of work days are depression, panic, and agoraphobia, inasmuch as the highest levels of disability are produced by post-traumatic stress disorder, depression and social phobia. The identification of factors associated with disability will allow us to propose some explanations. In this study we are only presenting the magnitude of the disability.

Disability

Comparisons of our results with those of other authors are limited, in part due to the environment in which the patients were identified and in part because of the differing methods used in the evaluation of disability.

TABLE 3. Comparison of mean scores in Sheehan Scale with results of other authors (details in text)

	Primary care	*Panic disorder*				*Social phobia*			*Depression*			
	Leon 1997	*Leon 1992*	*Sheehan 1996*	*Rubin 2000*	*Lara 2007*	*Davidson 1993*	*Sheehan 1996*	*Lara 2007*	*Demyttenaere 2001 Women*	*Demyttenaere 2001 Men*	*Lara 2007 Women*	*Lara 2007 Men*
Work	2.01	4.83	5.42	4.78	2.90	5.7	6.67	3.43	5.8	6.1	4.79	5.06
Social life	2.02	6.13	6.14	4.84	3.33	6.5	7.17	5.8	5.8	5.3	4.89	4.61
Family life	2.08	4.32	5.18	3.1	3.03*	3.8	4.57	4.24*	6.5	5.6	4.77*	4.29*

*Average of close relationships and home

Among the most frequently used measures are different forms of MOS (SF-36 and SF-20). Sherbourne et al. (1996) compared patients with panic, hypertension, diabetes, coronary ailments, arthritis, chronic lung problems, and major depression, using SF-20 and SF-36. In patients suffering from panic, role functioning and mental health were lower than in patients having chronic medical illnesses but greater than in patients suffering from depression. The levels of physical functioning and the perception of the current state of health were like those of patients with hypertension and similar to those of the general population.

Although the validity of subjective evaluations is difficult to establish, the results we have obtained with the Sheehan scale are consistent with those from other research and correspond to those expected in accordance with the characteristics of the subjects evaluated.

In primary care, ratings are the lowest (Leon, 1992) (table 3). Direct comparison is only possible with panic disorder, social phobia, and depression because these are the only disorders in which the Sheehan scale was used to evaluate disability (table 3).

In the case of panic disorder, most patients evaluated with the Sheehan scale have been included in clinical trials, have sought psychiatric help, and require drug treatment (Leon, 1992; Sheehan, 1996; Rubin, 2000). Comparing our results with those from other authors, we have observed that patients with panic disorder identified in the community obtained lower ratings, as expected, than patients with the same diagnosis included in clinical trials. However, it should be emphasized that the social is the area most affected in all of the studies (table 3).

For social phobias, the lowest ratings were given to the patients we evaluated in the community and the most affected category is the social one in all studies reviewed (Davidson, 1993; Sheehan, 1995).

Demyttenaere et al. (2001) used the Sheehan scale in the evaluation of the treatment of depressed patients at primary care. The largest deterioration in women was in family functioning. For men, the greatest impact was on the job. It might be that fewer women worked outside home. For men, our results are also consistent with those of Demyttenaere et al (2001), who found more disability in the workplace. These authors propose as a diagnostic criterion at least a moderate deterioration (a rating of 4 or higher) in the three areas of functioning measured with the Sheehan scale. They add that it is not only important to avoid under-diagnosis but also over-diagnosis. It is interesting to note that in our results for patients with depression, the average for all areas was above 4, and the ratings were close to those obtained in depressed patients being treated in primary care.

In another study in primary care (Ormel et al., 1993), it was also found that depression and anxiety have their greatest impact on social and occupational performance. They found a moderate disability in patients with depression, and mild disability in patients with anxiety. It is not possible to make a direct comparison with our results because in this study another measurement of disability was used (the Groningen Social Disability Scale).

Work days lost

The comparison of lost days is limited by differences in intervals, contexts, and the very definition of "lost days." Our results refer to subjects who had had a diagnosis in the last 12 months and the days in which they were totally incapacitated from work or from normal activities due to the presence of the disorder during the last year. Defined in this way, they stand out as diagnostic categories responsible for work days lost, depression, and panic disorder.

In general terms, this study has two limitations. The first is the transversal and retrospective nature of the data. The second is the subjectivity of the evaluations. Even so, our results are consistent with those from other authors and follow the expected direction. With respect to the lost days, Revicki et al. (1994), have demonstrated an agreement between the sick days reported by the patients and the sick days shown in administrative records.

Despite these limitations, our data show that the identified mental disorders produce more disability and a higher loss of work days than non-psychiatric chronic illnesses. Considering that there are effective treatments, especially for panic and depression, it should be possible to lower the social cost of affective and anxiety disorders.

CONCLUSIONS

This is the first paper to assess the impact of mental disorders in Latin America, evaluating the association of disability with common mental disorders.

We have shown that mental disorders, especially depression, are associated with deficits in functioning and result in the loss of work days. We have also shown that people with common mental disorders have, on average, higher levels of disability than those observed among individuals with a wide range of chronic physical conditions. These results are consistent with prior studies in North America and Europe that have found that people with common mental disorders experience substantial disability in social role functioning.

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