Prevalence of common mental disorders in primary health care

Prevalência de transtorno mental comum na atenção primária

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Abstract

Objective: To assess the prevalence of common mental disorder and its related factors in primary health care.
Methods: Cross-sectional study with 607 individuals in a primary health care service. The instrument of the study was the Self Reporting Questionnaire 20.
Results: Out of the interviewed subjects, 31.47% showed greater probability of occurrence of a common mental disorder. The following predictive variables were associated with a lower probability of occurrence of common mental disorder: sex, being single, being a student or a worker with signed labor, having higher education levels and income over four times the minimum wage. The variables associated with a higher probability of occurrence of a common mental disorder were being self-employed, housewife, with children, having lower education level and low income.
Conclusion: The prevalence of a common mental disorder was high and the associated factors were: being female, divorced, Asian, aged between 18 and 59, housewife, with children, having four to seven years of education, income up to one minimum age and living in a borrowed or donated house.

Resumo

Objetivo: Estimar a prevalência de transtorno mental comum e seus fatores associados em serviço de atenção primária.
Métodos: Estudo transversal que incluiu 607 indivíduos em serviço de atenção primária. O instrumento de pesquisa foi o questionário *Self Report Questionnaire* 20.
Resultados: Dos sujeitos entrevistados, 31,47% apresentaram maior probabilidade para transtorno mental comum. Foram associadas à menor probabilidade de desenvolvimento do Transtorno Mental Comum as variáveis preditoras: gênero, estado civil solteiro, ocupação estudante e com carteira assinada, maior nível de escolaridade e renda acima de quatro salários mínimos. E, à maior probabilidade de desenvolvimento do Transtorno Mental Comum as variáveis referir ocupação autônoma, do lar, ter filhos, menor escolaridade e baixa renda.
Conclusão: A prevalencia de Transtorno Mental Comum foi alta e os fatores associados foram: no gênero feminino, divorciado ou separado, cor da pele amarela, idade de 18 a 59 anos, ocupação do lar, com filhos, com quatro a sete anos de estudo, renda de até um salário mínimo e residindo em moradia emprestada ou doada.

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Introduction

Estimates suggest that 14% of the overall load of non-psychotic mental disorders come from neuropsychiatric disorders.[1,2] The chronic and disabling nature of the disease is associated with this figure, which draws the attention to its importance for public health. This situation worsens when the mental disorder is associated with other morbidities, such as increased risk of communicable or non-communicable diseases, and contributes to expected and unexpected injuries.[1]

In that sense, the mental illness is followed by a series of developments in biological, cultural, social, economic and political aspects.[3] And among mental disorders, this study analyzed common mental disorder (CMD), as it represents the most prevalent disorder in the world population.[2,4]

The common mental disorder, also called non-psychotic mental disorder, is diagnosed when people are mentally ill and present somatic symptoms such as irritation, fatigue, forgetfulness, concentration decrease, anxiety and depression.[2,5] Global projections for 2030 seek to include these disturbances among the most disabling for human beings.[2] In Brazil, the prevalence varies between 28.7 and 50% and is considered by specialists to be high, especially among women and elderly people.[5-8] This information demonstrates the importance of tracking actions for possible cases of common mental disorder within a community, particularly in the primary health care and family health programs.[7] Among the instruments used for its identification is the Self Reporting Questionnaire 20 (SRQ-20), because of its psychometric features in the breakdown of possible cases of common mental disorder within the community, as well as its capacity to identify emotional disorders and needs in mental health.[5,9]

The SRQ-20 was validated in Brazil in 1986 and remodeled as a cutoff point for tracking common mental disorder within communities in 2008. Since then, the instrument has been used with the general population, with elderly people and people with diabetes.[5,7-11]

However, the estimate of common mental disorder in primary health care deserves further research, as health care, at this level, has the incorporation of mental health practices as one of its challenges, and this achievement will be consolidated after the real picture has been properly analyzed.

The objective of this study is to assess the prevalence of common mental disorder and its related factors in primary health care.

Methods

Sectional, observational and analytical study carried out in a medium-sized municipality in the center-west of Brazil with significant socioeconomic representativeness in the region.

A total of 1,440 families are registered in this service, with approximately 4,810 people. Convenience sampling was used. Excluded individuals were: those diagnosed with severe and persistent mental disorder, with cognitive deficit or under the influence of alcohol or other drugs, with non-matching address and individuals who were not located.

Data were collected between July 2011 and February 2012. The instrument used for data collection was the Self Reporting Questionnaire (SRQ-20), which is made up of 20 questions related to mental health conditions in the last 30 days. The answers may be "YES" or "NO", and each "YES" corresponds to one point. The result may vary from 0 (no probability of common mental disorder) to 20 (very high probability of common mental disorder). The cutoff point considered for this study was ≥7 for both genders.[5]

The individuals who had scores ≥7 were sent to psychological care in a basic health care unit (UBS, as per its acronym in Portuguese) of the health care program network in the municipality or to a psychosocial care center.

Data were entered into Microsoft Excel for Windows® 2003-2007 spreadsheet after a double-check. The analysis of data was performed by frequency and relative frequency distribution, mean, and standard deviation with the Software for Windows® Statistical Package for Social Science for Windows (SPSS) version 15.0.[12] For the univariate analysis, the score ≥7 was considered as outcome (higher probability of having common mental disorder), also considering predictive variables and the sociodemographic. For univariate analysis between the probability of common mental

disorder and predictive variables, the chi-square test $(c)^2$ or Fischer's test was performed, with a significance level of 5%. The effect measure used was the prevalence ratio (PR) and the respective confidence intervals (CI95%). Factors were associated with the outcome variable when *p* was lower than 0.05.[13]

The development of the study complied with national and international ethical guidelines for studies involving human beings.

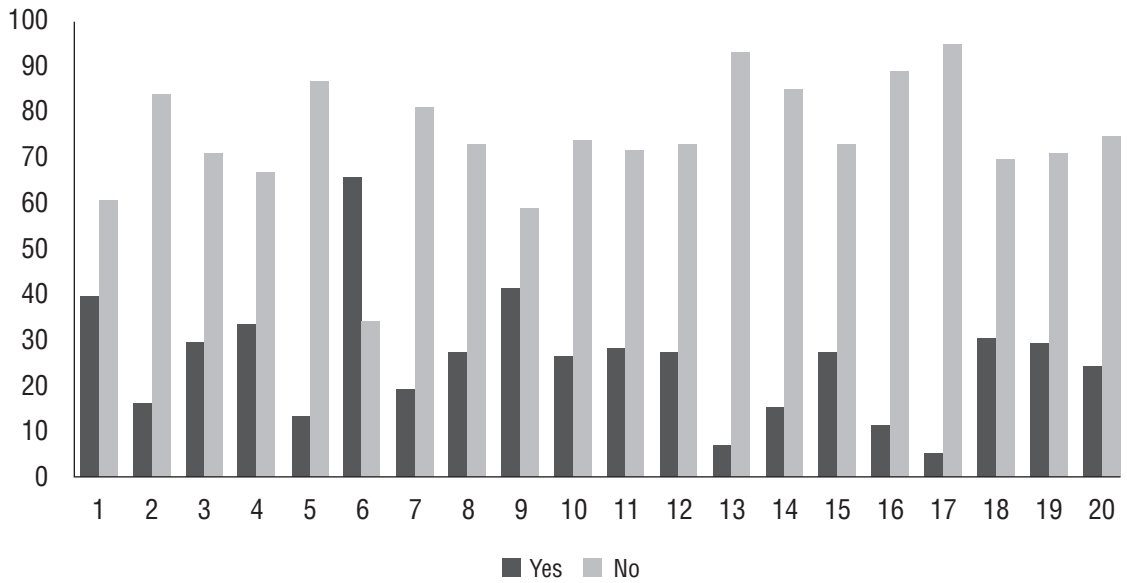
Results

Study participants were 607 individuals, out of which 31.47% had high probability of having common mental disorder. The lowest SRQ-20 score was zero and the highest was 19 (YES), with a 5.35 mean and 4.00 median (±4.177) for the answer "YES". Table 1 shows the characteristics of the sample.

Table 1. Socioeconomic and demographic characterization

Variables	n(%)	≥7 SRQ 20 n(%)	<7 SRQ 20 n(%)	PR	CI95%	p-value
Gender						
Male	150(24.7)	18(12)	132(88.0)	0.32	(0.20-0.50)	0.000*
Female	457(75.3)	173(37.9)	284(62.1)		1.00	
Marital status						
With partner	417(68.7)	137(32.9)	280(67.1)	1.16	(0.89-1.51)	0.275
Single	102(16.8)	22(21.6)	80(78.4)	0.64	(0.44-0.95)	0.018*
Widowed	49(8.1)	15(30.6)	34(69.4)	0.97	(0.63-1.51)	0.893
Divorced/Separated	39(6.4)	17(43.6)	22(56.4)		1.00	
Color skin						
White	310(51.1)	96(31.0)	214(69.0)	0.97	(0.77-1.22)	0.787
Black	48(7.9)	15(31.3)	33(68.8)	0.99	(0.64-1.54)	0.973
Brown	228(37.6)	71(31.1)	157(68.9)	0.98	(0.77-1.25)	0.893
Asian	21(3.5)	9(42.9)	12(57.1)		1.00	
Age						
18 to 59 years	510(84.0)	163(32.0)	347(68.0)	1.11	(0.79-1.55)	0.547
≥60 years	97(16.0)	28(28.9)	69(71.1)		1.00	
Occupation						
Student	40(6.6)	6(15.0)	34(85.0)	0.46	(0.22-0.97)	0.020*
Signed labor	118(19.4)	22(18.6)	96(81.4)	0.57	(0.38-0.85)	0.002*
Self-employed	132(21.7)	52(39.4)	80(60.6)	1.35	(1.04-1.73)	0.026*
Housewife	187(30.8)	77(41.2)	110(58.8)	1.52	(1.20-1.91)	0.000*
Unemployed/Retired/Pensioner	130(21.5)	34(26.2)	96(73.8)		1.00	
With Cildren						
Yes	525(86.5)	178(33.9)	347(66.1)	2.14	(1.28-3.57)	0.001*
No	82(13.5)	13(15.9)	69(84.1)		1.00	
Years of education						
None	33(5.4)	8(24.2)	25(75.8)		1.00	
1 to 3 years	58(9.6)	18(31.0)	40(69.0)	1.01	(0.68-1.51)	0.954
4 to 7 years	159(26.2)	66(41.5)	93(58.5)	1.49	(1.17-1.81)	0.001*
8 to 11 years	275(45.3)	87(31.6)	188(68.4)	1.01	(0.80-1.28)	0.934
≥12 years	82(13.5)	12(14.6)	70(85.4)	0.43	(0.25-0.73)	0.000*
Living in the household						
One resident	37(6.1)	14(37.8)	23(62.2)		1.00	
2 to 3 people	107(17.6)	30(28.0)	77(72.0)	0.87	(0.63-1.21)	0.400
4 or more	463(76.3)	147(31.7)	316(68.3)	1.04	(0.79-1.37)	0.787
Income						
Up to 1 MW	69(11.4)	31(44.9)	38(55.1)	1.51	(1.13-2.02)	0.010*
1 to 3 MW	401(66.1)	132(32.9)	269(67.1)	1.14	(0.88-1.48)	0.299
4 to 6 MW	121(19.9)	28(23.1)	93(76.9)	0.69	(0.49-0.98)	0.026*
≥7 MW	15(2.5)	-	15(100.0)	0.00	(0.00-0.72)	0.003*
Housing						
Owned	424(69.9)	125(29.5)	299(70.5)	0.86	(0.67-1.10)	0.240
Rented	162(26.7)	57(35.2)	105(64.8)	1.17	(0.91-1.50)	0.233
Borrowed/donated	21(3.5)	9(42.9)	12(57.1)		1.00	

MW - Minimum Wage; SRQ 20 - Self Report Questionnaire 20; PR - Prevalence Ratio; CI - Confidence Interval; Chi-square $(c)^2$; *p<0.05; n=607



1- Do you often have headaches?; 2- Is your appetite poor?; 3- Do you sleep badly?; 4- Are you easily frightened?; 5- Do your hands shake?; 6- Do you feel nervous, tense or worried?; 7- Is your digestion poor?; 8- Do you have trouble thinking clearly?; 9- Do you feel unhappy?; 10- Do you cry more than usual?; 11- Do you find it difficult to enjoy your daily activities?; 12- Do you find it difficult to make decisions?; 13- Is your daily work suffering?; 14- Are you unable to play a useful role in life?; 15- Have you lost interest in things?; 16- Do you feel that you are a worthless person?; 17- Has the thought of ending your life been on your mind?; 18- Do you feel tired all the time?; 19- Are you easily tired?; 20- Do you have uncomfortable feelings in your stomach?

Figure 1. Affirmative and negative answers among the 191 individuals who had a score of ≥ 7

After univariate analysis, there was an association with the outcome in the following predictive variables: gender p=0.000 (PR:0.32 [CI 95%: 0.20- 0.50]); single marital status p=0.018 (PR:0.64 [CI 95%: 0.44- 0.95]); occupation student p=0.020 (PR:0.46 [CI 95%: 0.22- 0.97]); signed labor p=0.002 (PR:0.57 [CI 95%: 0.38- 0.85]); occupation self-employed p=0.026 (PR:1.35 [CI 95%: 1.04- 1.73]); housewife p=0.000 (PR:1.52 [CI 95%: 1.20- 1.91]); with children p=0.001 (PR:2.14 [CI 95%: 1.28- 3.57]); 4 to 7 years of education p=0.001 (PR:1.49 [CI 95%: 1.17- 1.81]); ≥12 years of education p=0.000 (PR:0.43 [CI 95%: 0.25- 0.73]); income up to 1 minimum wage p=0.010 (PR:1.51 [CI 95%: 1.13- 2.02]); income of 4 to 6 minimum wages p=0.026 (PR:0.69 [CI 95%: 0.49- 0.98]); income of ≥7 minimum wages p=0.003 (PR:0.00 [CI 95%: 0.00- 0.72]).

Regarding the questions explored by the SRQ-20, figure 1 describes the negative and affirmative answers among the 191 subjects who had a score of ≥7.

Of the answers obtained with the tracking instrument of common mental disorder, the answer YES prevailed for: feeling nervous, tense or worried (65.7%), feeling unhappy (41.4%) and often having headaches (39.4%). On the other hand, the highest prevalence of NO answers was for: the thought of ending life (94.9%), suffering daily work (92.9%) and feeling worthless (88.9%).

Discussion

The limitations involving this study include its sectional methodological design, which does not allow inferring a causal connection, as it describes the phenomenon at a given place and time. Another limitation concerns the convenience sampling technique.

However, the results of the study estimated the prevalence of common mental disorder and described relevant characteristics of people who obtained a score of ≥7 in the SRQ-20, such as symptoms related to depression, anxiety and somatotropics, which indicate the need for better organization of primary health care and family care in the development of mental health promotion. These aspects contribute to the development of nursing practices, as the instrument used was low-cost, easy to interpret and can be largely applied by the health staff, especially the nursing staff in the tracking of non-psychotic mental disorders, in order to revert the underreporting of this morbidity, as noted by some authors.[5,7]

Regarding the results, this study showed that the prevalence of suspected cases of common mental disorder within the population studied was 31.47%, which confirms the results obtained by other studies carried out in other parts of Brazil using the SRQ-20 test.[5,7,11]

In these studies, the prevalence of non-psychotic disorders varied 28.7% in a municipality of Santa Cruz do Sul, southern Brazil; 29.9% in Feira de Santana, northeastern region; 39.44% in Blumenau, southern region.[5,10,11] The highest percentage was found in the municipality of São João Del-Rei, southeastern region, with 43.70%.[7]

When the sociodemographic particularities were considered, a lower prevalence was observed among men regarding non-psychotic morbidities when compared to women; and this was also observed in other studies.[2,5,7,10-13]

Considering the strong relationship between men and work, it is understood that any mistake or failure may affect the social and personal context, resulting in emotional/psychological problems. Nevertheless, a closer link between women and common mental disorder can be established due to work and family responsibility, as they frequently give up self-care to dedicate themselves to others, resulting in dismay, anxiety, frustration, angst, illness, and most of all, the occurrence of mental disorders.[13,14]

After a bibliographic review of the literature, the systematic knowledge regarding inequalities of gender and common mental disorder revealed that high rates of disorders in women result from their depreciation within society, from weariness due to workload both at home and at work, and from violence they suffered from their partners. Moreover, women easily notice their illness, promptly report their symptoms and search for health services more frequently than men.[3]

Regarding marital status, the association of common mental disorder with being single revealed an unprecedented event in this study when compared with previous ones, which presented an association of common mental disorder with divorced or separated and widowed individuals.[11,12] There is a contradiction regarding a significant statistical association of marital status with common mental disorder when we say that family coexistence is essential for the individual's conception as a social element, as it is within the family environment that one outlines the constitution of the individual, the organization of the identity, the psychological development and personality.[12]

Based on the derivatives related to occupation, the association in this study of common mental disorder with the predictive variables of being a "housewife" and "self-employed" corresponds to the categories with the largest predisposition to common mental disorder. In that sense, housewives perform household duties and are closely related to risk variables for depression and anxiety. This risk is explained by the fact that these women, by being isolated at home, are forced to give up on their professional satisfaction and consequently on their socialization.[15]

On the other hand, most self-employed workers, who can be classified as informal workers since they do not have a signed labor, experience situations such as uncertainty regarding their working situation, income restraint, lack of social benefits and lack of protection from labor legislation; and all of these factors trigger anxiety and depression.[3] Therefore, when it comes to the "occupation" variable, the individuals who showed lower probability of having common mental disorder were students and individuals with a signed labor contract.

Another significant statistical association with common mental disorder in this study was the predictive variable "with children". The disorders resulting from the duality of roles played, that comprehends both the upbringing of children and responsibilities regarding profession, were confirmed by the results of a previous research, which revealed that having children may be a risk factor for the occurrence of common mental disorder among female workers but not among housewives.[16]

Regarding the years of education, there was a prevalence of the interest condition in the group with common mental disorder in relation to the non-exposed group, that is, which did not present common mental disorder in two periods of education. The interviewees who declared having studied for 4 to 7 years showed lower probability of having common mental disorder. This finding does not differ substantially from that described in another study with individuals in primary health care who had the same education level.[7]

A greater number of years of education also represented a lower probability of having common mental disorder, so those who have higher education have fewer chances of developing non-severe disorders. Generally speaking, this inverse linear correlation between the chances of having a disorder and education level is also revealed by other researchers.[17]

On the other hand, fewer years of education is a factor that is closely related to the occurrence of non-psychotic disorder. This fact implies in difficulties in entering the work market, low income, lack of appreciation and uncertain life conditions; and it may be considered to be the root of other social problems resulting in poor quality of life and consequent psychological problems in the future.[17]

In the current social context, many children that come from low income families usually drop out of school as they need to work to contribute to the household income. The fact that these families have low income is mostly due to the fact that parents did not have a higher level of labor insertion. Consequently, this problem becomes cyclical and affects general health conditions and essentially mental health.[17]

Regarding monthly incomes, individuals who had up to one minimum wage of income showed higher probability of developing common mental disorder. This finding also came up in another research in which subjects with incomes under or equal to one minimum wage were more likely to have non-psychotic disorders.[11]

An inverse relationship regarding wealthier people (more than 4 MW) was also observed and confirmed by a previous study, in which lower family incomes of participants indicated more probability for mental disorders.[7]

This relationship was also highlighted by the indication that people who lived with less than one minimum wage were four times more likely to have common mental disorder than people who lived with more than three minimum wages.[16] Therefore, low incomes are related to high rates of psychological problems arousing from a decrease of power, greater uncertainty, a painful compliance with social rules, stressful events in daily life that result in low self-esteem and, consequently, in greater chances of developing mental disorders.[3,7]

Regarding the questionnaire, from the answers obtained with the help of SRQ-20 to indicate common mental disorder, it is important to highlight the prevalence of an anxious-depressed mood resulting from feelings of nervousness, tension or worries, along with somatic symptoms and frequent headaches. This set of symptoms also prevailed in another study.[15]

Individuals who were more likely to develop a common mental disorder have different levels of anxious, depressive or somatoform disorders.[2] In view of this situation, it is recommended that the search for common mental disorder be systematized in primary health care, as well as specific mental health care actions at this level.[17]

Consequently, within the population studied, a lower prevalence of thoughts such as giving an end to life or feeling worthless was observed. From this analysis, there is a certain profile of

individuals that stands out: those who are more affected by an anxious-depressive mood and less by suicidal thoughts.

A higher rate of "NO" answers was observed for symptoms of decrease of vital energy in the item "suffering daily work". Despite the fact that the "housewife" and "self-employed" occupations presented an association with common mental disorder through the univariate analysis, occupation was not considered to be a relevant factor for the decrease of vital energy.

In that sense, it is understood that the occupation appears in the health-illness process proportionally to the degree of expectations experienced by the worker. Factors such as overload, underload, lack of control over work, gap between control groups and subordinate staff, social withdrawal in the work environment, role conflicts, social disorder and absence of social support can cause physical and mental suffering.[18]

Conclusion

The prevalence of common mental disorder was higher among women, divorced individuals, Asian, aged between 18 and 59 years, housewives, individuals with children, having four to seven years of education, income up to one minimum age and living in a borrowed or donated house.

Collaborations

Lucchese R participated in the conception of the project, analysis and interpretation of data, writing of the article, critical review of the content and final approval of the version to be published. Santana FR participated in the conception of the project, critical review of the content and final approval of the version to be published. Vera I participated in the analysis and interpretation of data, critical review of the content and final approval of the version to be published. Sousa K and Bonfim SP were field researchers, and participated in the writing of the article, critical review of the content and final approval of the version to be published.

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