

Common Mental Disorders in Colombian Women*

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Abstract

Objective: To explore the prevalence of common mental disorders and their association with health-related behaviors in Colombian women. *Method:* A cross-sectional study was carried out with a multi-stage probability sample of women from the general population. Common mental disorders were explored with the General Health Questionnaire (GHQ-12) with a cut-off point of eleven or more. Non conditional logistic regression was computed to adjust associated variables. *Results:* A total of 1,740 women participated in this research. The mean age of participants was 38.3 years (SD=13.3), mean years of education were 8.8 years (SD=3.9), 59.5% were married, 37.0% were employed, 1.4% reported abusive alcohol consumption, 6.3% daily cigarette smoking, 44.5% daily coffee intake, 17.5% a medical condition, and 15.7% (95% CI 14.0-17.4) scored for a common mental disorder. Abusive alcohol consumption (OR=6.4, 95% CI 2.7-15.2), daily cigarette smoking (OR=3.3, 95% CI 2.1-5.0), medical condition (OR=2.0, 95% CI 1.4-2.8), and daily coffee intake (OR=1.3, 95% CI 1.0-1.8) were associated with common mental disorders, adjusted for age and education. *Conclusions:* Common mental disorders are frequent in Colombian women. Health risk behaviors and stressful events are strongly related to common mental disorders. It is necessary to identify and treat these mental disorders early on to reduce health risk behaviors in women.

Key words: Mental disorders, prevalence, women's health, cross-sectional studies.

Título: Trastornos mentales comunes en mujeres colombianas

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Resumen

Objetivo: Explorar la prevalencia y variables asociadas a trastornos mentales comunes en mujeres de Bucaramanga, Colombia.

Método: Se realizó un estudio transversal. Además, se tomó de la población general una muestra probabilística multietápica de mujeres. Los trastornos mentales comunes se cuantificaron con el Cuestionario General de Salud (GHQ-12). Las variables asociadas se ajustaron mediante regresión logística.

Resultados: Participaron 1.740 mujeres. La media para la edad fue 38,3 años (DE=13,3) y para la escolaridad, 8,8 años (DE=3,9). El 59,5% estaba casada, el 37% era empleada, el 1,4% informó consumo abusivo de alcohol, el 6,3% consume cigarrillos diariamente, el 44,5% toma café todos los días, el 17,5% posee una condición médica conocida y 15,7% (IC 95%: 14,0-17,4) puntuó para un trastorno mental común. El consumo abusivo de alcohol (OR=6,4; IC 95%: 2,7-15,2), consumo diario de cigarrillo (OR=3,3; IC 95%: 2,1-5,0), presentación de una condición médica (OR=2,0; IC 95%: 1,4-2,8) y consumo diario de café (OR=1,3; IC95%: 1,0-1,8) se asociaron estadísticamente a trastornos mentales comunes, con ajuste por edad y educación. **Conclusiones:** Los trastornos mentales comunes son frecuentes en mujeres de Bucaramanga, Colombia. Comportamientos relacionados con la salud (consumo abusivo de alcohol, consumo diario de cigarrillo y consumo diario de café) y eventos estresores (condición médica) se relacionan significativamente con trastornos mentales comunes.

Palabras clave: Trastornos mentales, prevalencia, salud de las mujeres, estudios transversales.

Introduction

The common mental disorders represent a major public health problem. The prevalence of common

mental disorders varies according to the method of evaluation, either with the use of a scale or conducting an interview. The prevalence of common mental disorders is almost 25%, if it is used the General Health Questionnaire (GHQ-12). (1) Common mental disorders are more frequent among women than men; it seems that women are more sensitive to stressors. Around the world, common mental disorders produce a negative impact on life quality of many women. However, in developing countries a significant number of women with a common mental do not ask for medical or psychological help due to the stigma attached to mental disorders (2).

Common mental disorders show a complex relationship with genetic and environmental factors. Environmental factors play an important role in the onset and persistence of symptoms of mental health problems more common in the general population (3).

The lifestyles or health-related behaviors such as drinking coffee, cigarette smoking and alcohol use, may change the course of many mental health problems. Health-related behaviors are associated with common mental disorders. Both men and women, drinking coffee, cigarette smoking and alcohol consumption are related to common mental disorders (4). Similarly, medical diagnoses present a significant association with common mental disorders (5).

Colombia is a South American country that presents significant differences with other Latin American countries. The social and political features of Colombia involve several psychosocial stressors. The political violence causes many deaths, more frequent among men than women. However, the forced displacement is more common for women than for men. Bucaramanga is a city settles in Northeast Colombia that receives a large number of inner migrants each year, a high percent of internally displaced women.

In female population, it is necessary to explore the prevalence of common mental disorders and estimate its relationship to health risk behaviors, such as abusive alcohol consumption, cigarette smoking, and coffee intake. This information would be useful to design rational programs to early clinical identification and treatment. However, the prevalence of common mental disorders and its association with health-related behaviors have not been studied in Colombian population.

The aim of this survey was to explore the prevalence of mental common disorders and its relationship to health-related behaviors in a sample of adult women from the general population in Bucaramanga, Colombia.

Method

A cross-sectional study was designed. It was approved by the

Committee of Ethics of the Medicine Faculty of the Autonomous University of Bucaramanga, Colombia, that described as a low-risk investigation for the possible participants. All the participants signed a consent informed, after knowing the goals of the study.

A multi-stage probability sample of adult women was taken from the general population. For this process was taken randomly a total of 2,525 from the 64,206 properties registered in the Land Management Plan of the city of Bucaramanga. In each property, if there was more than one residence was taken over, and in every home was made a list of women between 18 and 65 years, one woman was chosen to take part in the study. These selections were made randomly drawn from lists of random numbers in Epi-Info 6.04.

Inclusion criteria were women between 18 and 65 years and residents in the city urban area. Exclusion criteria included clear physical and cognitive disabilities for reading or writing.

The demographic characteristics were recorded. It was also asked the daily cigarette smoking and coffee drink during the last month and the existence of a formal medical diagnosis of any disease. Common mental disorders were explored with the General Health Questionnaire (GHQ-12) (cut-off point of eleven was taken, as suggested by the validation of this scale for Latin America).

Alcohol problem use was measured with the CAGE questionnaire (cut-off point of two was used). First, descriptive analysis was done. Then, the association between variables of interest and common mental disorders was computed. Finally, non conditional logistic regression was computed to adjust associated variables which showed association with p value lower than 0.25. All calculations were made in STATA for Windows 9.0.

Results

A total of 2.034 women were invited to take part in this study; but 294 (14.4%) of them refused completing the survey. This report was conducted with 1,740 women. The mean age was 38.3 years (SD = 13.3) and mean years of education, 8.8 years (SD = 3.9). A total of 1,036 women (59.5%) were married; 644 (37.0%) were employed; 506 (29.1%) lived in low-class neighborhood; and 1,234 (70.9%), in middle- and high-class (high-class women were underrepresented); 25 (1.4%) reported abusive alcohol consumption; 109 (6.3%) daily cigarette smoking;

775 (44.5%) daily coffee intake; 309 (17.5%) known medical condition; and 273 (15.7%, 95%CI 14.0-17.4) scored for common mental disorders.

The clinical rating scales showed acceptable internal consistency reliability; Cronbach alpha coefficient for the GHQ-12 was 0.78 (good), and Kuder-Richardson coefficient for the CAGE questionnaire, 0.71 (acceptable). The bivariable and multivariable analysis are presented in table 1; abusive alcohol consumption, daily cigarette smoking, medical condition and daily coffee intake were associated with common mental disorders, adjusted for age and education (Hosmer-Lemeshow goodness-of-fit test, $\chi^2 = 5.84$, $df = 10$, $p = 0.665$).

Discussion

The present study shows a statistically significant association between alcohol abusive consumption, daily cigarette smoking, the presence of a medical condition and daily coffee intake and common mental disorders in adult women.

In the present research, 15.7% of women reported a common mental

Table 1. Variables related to common mental disorders

Variable	Crude OR (95% CI)	Adjusted OR (95% CI)*
Abusive alcohol consumption	10.1 (4.5-22.6)	6.4 (2.7-15.2)
Daily cigarette smoking	4.1 (2.8-6.2)	3.3 (2.1-5.0)
Medical condition	1.7 (1.2-2.3)	2.0 (1.4-2.8)
Daily coffee intake	1.4 (1.1-1.8)	1.3 (1.0-1.8)

* Adjusted for age and education.

disorder. The prevalence of common mental disorders varies according to population and tools used and score form. In the Colombian general population, Harpham et al. observed that 32.4% of young women reported a common mental disorder (7); and Puerta et al., 31% (8). In the other hand, in Brazil, Marín-León et al. reported a prevalence of 24.4% of common mental disorders (9). In these researches, the Self-Report Questionnaire (SRQ-20) was used to measure the common mental disorders. In other world countries, Bobak et al. reported the prevalence of depressive symptoms, based on the Center for Epidemiological Studies Depression Scale, and found frequencies of 44% in Russia, 40% in Poland, and 34% of women in Czech Republic (10). And Laaksonen et al., investigated common mental disorders in Finland and England, with the GHQ-12, and reported that 26% of women presented a common mental disorder (3).

In present study, some health compromising behaviors such as abusive alcohol consumption, daily cigarette smoking and daily coffee intake showed a strong association with common mental disorders. Other researchers reported similar findings. For instance, Pirkola et al. found that common disorders increased the risk for alcohol problems (11); Araya et al. reported that smoking is related to mental common disorders (12), and Leibenluft et al. referred that coffee

consumption was associated with depressive symptoms (13). Various hypotheses have been proposed for explaining these associations. For example, first, the consumption of legal substance could be a way of self-medication to improve a negative emotional status (14). And second, substance use and common mental disorders could share some predisposing factors (15).

In the present research, similarly medical condition is related to common mental disorders. Several studies found similar findings. Patel et al. observed that patients who reported a chronic medical condition were in high risk to meet criteria for common mental disorders (5). Medical diseases may represent an important risk factor for common mental disorders. Several mechanisms may explain the association such as common psychosocial and biological pathways. It is thought that stressors increase the risk for a common mental disorder in particularly susceptible people (1,9).

These findings have some implications. Women with common mental disorders should need a comprehensive clinical evaluation to find health related behaviors that could deteriorate the course of mental disorder. And physicians should give special attention to the role of comorbid medical conditions in women.

This research presents some limitations. First, common mental

disorders and abusive alcohol consumption were asked using scales. These tools only give an approach to formal diagnosis. And, second, high-class women were underrepresented. As conclusions, common mental disorders are frequent in Colombian adult women. Health risk behaviors (abusive alcohol consumption, daily smoking, and daily coffee drink) and stressing events (medical condition) are related to common mental disorders. It is necessary to identify and treat early these mental disorders or cut health risk behaviors in women. More researches are needed to show the causal relationship.

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References

1. Laaksonen E, Martikainen P, Lahelma E, et al. Socioeconomic circumstances and common mental disorders among Finnish and British public sector employees: evidence from the Helsinki Health Study and the Whitehall II Study. *Int J Epidemiol.* 2007;36:776-86.
2. Wang J, Fick G, Adair C, et al. Gender specific correlates of stigma toward depression in a Canadian general population sample. *J Affect Disord.* 2007;103:91-7.
3. Ludermir AB, de Melo DA. Condições de vida e estrutura ocupacional associadas a transtornos mentais comuns. *Rev Saude Publica.* 2002;36:213-21.
4. Ma X, Xiang Y-T, Cai Z-J, et al. Smoking and psychiatric disorders in the rural and urban regions of Beijing, China: A community-based survey. *Drug Alcohol Depend.* 2009;100:146-52.
5. Patel V, Kirkwood BR, Pednekar S, et al. Risk factors for common mental disorders in women. Population-based longitudinal study. *Br J Psychiatry.* 2006;189:547-55.
6. Goldberg DP, Gater R, Sartorius N, et al. The validity of two version of the GHQ in the WHO study of mental illness in general health care. *Psychol Med.* 1997;27:191-7.
7. Harpham T, Sinoxell S, Grant E, et al. Common mental disorders in young urban population in Colombia. *Br J Psychiatry.* 2005;187:161-7.
8. Puerta G, Ríos C, Del Valle H. Prevalencia de trastornos mentales comunes en barrios marginales urbanos con población desplazada en Colombia. *Rev Panam Salud Publica.* 2006;20:324-30.
9. Marín-León L, Oliveria HB, Barros MB, et al. Social inequality and common mental disorders. *Rev Bras Psiquiatr.* 2007;29:250-3.
10. Bobak M, Pikhart H, Pajak A, et al. Depressive symptoms in urban population samples in Russia, Poland and Czech Republic. *Br J Psychiatry.* 2006;188:359-65.
11. Pirkola SP, Poikolainen K, Lönnqvist JK. Currently active and remitted alcohol dependence in a nationwide adult general population—Results from the Finnish Health 2000 study. *Alcohol Alcohol.* 2006;41:315-20.
12. Araya R, Gaete J, Rojas G, et al. Smoking and mental common disorders: A population-based survey in Santiago, Chile. *Soc Psychiatry Psychiatr Epidemiol.* 2007;42:874-80.
13. Leibenluft E, Fiero PL, Bartko JJ, et al. Depressive symptoms and the self-reported use of alcohol, caffeine, and carbohydrates in normal volunteers and four groups of psychiatric outpatients. *Am J Psychiatry.* 1993;150:294-301.

14. Patel V, Pereira J, Mann AH. Somatic and psychological models of common mental disorders in India. *Psychol Med.* 1998;28:135-43.
15. Hughes JR, Oliveto AH, MacLaughlin M. Is dependence on one drug associated with dependence on other drugs? The cases of alcohol, caffeine and nicotine. *Am J Addict.* 2000;9:196-201.

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