Association between housework overload and common mental disorders in women

Associação entre sobrecarga doméstica e transtornos mentais comuns em mulheres

Abstract

Introduction: Common mental disorders (CMD) are more frequent in women. Low reward and lack of visibility in performing housework are the determining factors for these psychological illnesses. Objectives: To evaluate the association between housework overload and the occurrence of common mental disorders in women living in the urban zone of the municipality of Feira de Santana, Bahia. Methods: cross-sectional epidemiological study that included 2,057 women aged 15 years or over selected by random sampling in clusters. The housework overload indicator was created from the domestic activities of washing, ironing, cleaning and cooking, weighted according to the number of individuals living in the home. The common mental disorders were assessed using SRQ-20. Results: Women with a high housework overload had a higher prevalence of CMD than women with a low overload (45.6% versus 36.2%). Multiple logistic regression analysis confirmed the association between housework overload and CMD (PR: 1.23; 95% CI: 1.05 - 1.44), adjusted for income, level of schooling and leisure activities. Conclusion: The findings support the hypothesis that high housework overload is associated with mental disorders.

Keywords: Housework. Housework overload. Woman. Common mental disorders. Mental health. SRQ-20.

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Resumo

Introdução: Os Transtornos Mentais Comuns (TMC) acometem mais frequentemente as mulheres. A baixa gratificação e a falta de visibilidade na realização do trabalho doméstico constituem quadro determinante para esse adoecimento psíquico. Objetivos: Avaliar a associação entre sobrecarga doméstica e a ocorrência de transtornos mentais comuns em mulheres da zona urbana do município de Feira de Santana - BA. Metodologia: Estudo epidemiológico de corte transversal incluindo 2.057 mulheres com 15 anos ou mais de idade, selecionadas através de amostragem aleatória por conglomerado. O indicador de sobrecarga doméstica foi criado a partir das atividades domésticas: lavar, passar, limpar e cozinhar, ponderadas pelo número de moradores do domicílio. Os transtornos mentais comuns foram avaliados através do SRO-20. Resultados: Mulheres com alta sobrecarga doméstica apresentaram prevalência de TMC mais elevada do que as mulheres com baixa sobrecarga: 45,6% contra 36,2%. A análise de regressão logística múltipla confirmou associação entre sobrecarga doméstica e TMC (RP: 1,23; IC95%: 1,05 – 1,44), ajustada pelas variáveis renda, escolaridade e atividades de lazer. Conclusão: Os achados sustentam a hipótese de que o trabalho doméstico, em elevada sobrecarga, está associado a transtornos mentais.

Palavras-chave: Trabalho doméstico. Sobrecarga doméstica. Mulher. Transtorno mental comum. Saúde mental. SRQ-20.

Introduction

Studies indicate an increase in psychological morbidity among the most diverse populations. Among all mental disorders, Common Mental Disorders (CMD) have become more noticeable, especially among women. Common Mental Disorders are characterized by symptoms such as fatigue, forgetfulness, insomnia, irritability, difficulty in concentrating, headaches and psychosomatic complaints¹. Such disorders affect people 's regular functioning, by impairing their performance not only in their family, social and personal life, but also at work².

Women have considerably shown more symptoms of psychological distress and depressive disorders than men do^{3,4,5,6}. Women's most frequent nuisances are the ones related to symptoms of anxiety, depressive mood, sleeplessness, anorexia nervosa, and psychophysiological symptoms. Men, on the other hand, have higher rates of behavioral disturbs like being antisocial, using drugs and overusing alcoholic beverages.

Women's inclusion in the job market, unlike men's, is limited by their domestic and family responsibilities, in a way that their job must be adapted to their other roles⁷. Hence, whether they are included or not in the job market, in general, women are housewives and do chores which, despite being essential for everyone's well-being and survival, are socially undervalued and disregarded.

In the 1970s and 1980s, studies to identify chores done in the home environment began to be conducted. Such research aimed to characterize the amount of housework, especially the ones performed by women⁸. During this period of time, the feminist movement, strengthened as a social movement, raised the debate on women's inclusion in the reproduction processes, causing visibility to their social role. Therefore, housework – which until then was considered as "a natural role" – started to be comprehended as something resulting from a qualification process produced

in the private ambience. In this debate, it is questioned the statute of domestic tasks as economic inactivity and as an exclusively female responsibility, representing thus an inevitable overload9. In this sense, the foundations of gender division in the workplace are also debated, through which men's responsibility is productive (paid) work, whereas women's is reproductive work. whose economic function is omitted.

Albeit this was such a heated debate in the 1970s and 1980s, it remained practically absent from the scientific production in the 1990s. In spite of the fact that this issue has been raised again in recent years, it is a little studied subject, especially with regards to the repercussions in the health of women - who keep being mostly responsible for household chores10.

Studies 3,11 are highlighted among the researches on the relationship between domestic and professional work and mental health. In a study comparing maids and housewives, it was possible to observe that distinctive factors led to mental illness and also rewards between these two sorts of occupations, although both groups experimented, on average, similar levels of depressive symptoms¹¹.

Routinization, depreciation and constant interruptions of tasks stood out among the aspects concerning domestic work linked with depressive, anxious or psychosomatic symptoms.

It is also pointed out that life cycle factors like age, marital status and number of children, the head of the household and leisure as well as the heavy non-paid workload carried out by women such as the double shift and the work of looking after the family, associated with emotional components may intensify psychological distress among the female population.

The assessment of mental disorders in women is important for the adequate measurement and understanding of the factors associated with their occurrence, with an emphasis on housework. This present study aimed to examine the association between housework overload and the occurrence of common mental disorders in women living in urban areas of the state of Bahia, in Brazil. The diagnosis originating from the assessment made in this study can provide relevant information to guide mental health intervention policies, thus contributing to the reduction or prevention of such health problems besides giving visibility to factors that, within the household chores, can contribute to women's mental illness.

Materials and Methods

A cross-sectional epidemiological study was conducted in the urban area of the city of Feira de Santana, BA, Brazil, including a representative sample of women, from 15 years old on, selected by random cluster sampling and stratified by sub-district.

According to the IBGE (Brazilian Institute of Geography and Statistics)13, Feira de Santana is subdivided into five sub-districts: each one divided into census tracts which include street clusters. Initially, a survey of population data from each sub-district was conducted, along with a geographical delimitation of each area13. A random census tract selection was subsequently performed in each sub-district. All households on the randomly selected streets were visited and all women at 15 years old or over were considered to be eligible for this study.

In order to calculate the size of the sample it taken into consideration an estimated prevalence of mental disorders of 24% in academic studies¹⁴, sample error of 3%, with reliability level at 95%. Based on such parameters a sample of 774 women was obtained. To correct the study design effect (cluster sampling), the size of the sample was doubled (N=1,548). The sample of 1,857 women was settled, by assuming refusals and losses of nearly 20%. Yet, the sample size was recalculated to observe whether the study could evaluate the association between housework overload and common mental disorders in women since the original sample had not been designed for such goal. The following parameters were used in this calculation: expected CMD frequency of 35.2% in the non-exposed group, CMD frequency of 45.6% in the exposed group, reliability level of 95% and power of 90%, comprising thus, 1,086 women.

A total of 2,057 women have been assessed for the study of domestic overload and mental health. All of them live in the 1,479 houses previously selected for the study of five sub- districts in the urban area of the municipality of Feira de Santana. There was a seventy-two-percent-response rate.

Two instruments have been used at the moment of collecting data: a household record (including general information about the household) and an individual questionnaire (including information about socio-demographic aspects, living conditions, housework, professional work and mental health).

The "Household Overload" (HO) (independent variable) was measured by adding up household chores: washing, ironing, cleaning, cooking) weighed by the number of dwellers, except for the interview itself, through the formula: $HO = (\Sigma \text{ washing+iro ning+cleaning+cooking}) \times (M-1)^{15}$.

For the purpose of analysis, the score of the variable "housework overload" was divided, at first, into three groups: high, average and low overload. Afterwards, the "housework overload" variable was dichotomized into two groups: high housework overload and low housework overload (it included women who did not perform domestic chores or did so moderately).

Mental Common Disorders (MCD) (dependent variable) have been assessed using the Self-Reporting Questionnaire (SRQ-20). The SRQ-20 is an instrument recommended by the World Health Organization (WHO)¹⁶ to be used in developing countries and it has been effective to track and detect common mental disorders.

A validation study of the SRQ-20 has been conducted in the population of this study, finding the cut-off point of best performance for women in 7 or more positive responses, which had a sensitivity of 68.0% and specificity of 70.7% . The area under the

ROC curve showed a value of 0.789 with a standard deviation of 0.48 and the 95% confidence interval ranging from 0.696 to 0.882 indicating, thus, a reasonable level of discrimination between cases and non-cases.

The co-variable which have been analyzed were: socio-demographic characteristics (neighborhood, age, schooling, migration, skin color/ethnicity, marital status), professional work (occupation and working in double shift) and living conditions (income, head of the household, leisure time activities, housing conditions, infrastructure and ownership of durable goods).

The "housing condition" variable was assessed through an indicator that included data on the number of rooms in the house, number of rooms used for sleeping and the number of household residents. The infrastructure was studied taking into consideration access to tap water and electric light as well as "ownership of durable goods" according to the indicator built based on the addition of owning appliances like: stereo system radio, television, fridge and washing machine. Such indicators were grouped into three categories: good, average and poor.

The database was constructed with the statistical software called "Social Package for the Social Sciences – (SPSS)", version 10.0. Epi Info software, version 6.0, and the "R" The R Foundation for Statistical Computing software, version 2.2.1, were also used in data analysis.

Initially, the analysis was done with the characterization of the population studied. Then stratified analysis was performed to identify possible effect modifiers and confounders. When confirmed the existence of confounding, the effect measures were adjusted by the Mantel-Haenszel method.

Multiple logistic regression analysis (MLRA) was subsequently performed to simultaneously evaluate the variables studied. This approach is suitable to find the most appropriate model, parsimonious and biologically reasonable to describe the relationship between a dependent variable and a set of independent variables¹⁷.

The MLRA analysis was conducted

according to the procedures recommended in studies18, and it included the following stages: 1st) Selection of variables based on the study objectives and studies review; 2nd) Verification of model assumptions: 3rd) Pre-selection of variables to be included in the analysis with the verisimilitude ratio test by adopting a p value≤0.25; 4th) Analysis of change in effect, with the introduction of product terms and the use of the maximum verisimilitude test to compare the complete model; 5th) Variables confounding analysis (except for those confirmed as effect modifiers in the main model), comparing measures of association and respective confidence intervals of the complete model resulting from the removal of each potential confounder; 6th) MLRA, per se, using the backward procedure, adopting a significance criterion of p<0.10 for variables to remain in the final model.

Considering the fact that the CMD prevalence in the population studied was high and further away from the estimated odds ratio (OR) parameters, researchers calculated the prevalence ratio (PR) estimates and their respective confidence levels of 95%, using the Delta method procedures (Oliveira et al., 1997).

This research project was submitted to the *Hospital São Rafael* (São Rafael Hospital) Research Ethics Committee in Salvador, BA, being subsequently approved (Research Project no. 17/01).

Results

Among the women studied (N=2,057), there was a prevalence of younger women aged between 15 and 30 years old (44.0%), married or in steady relationships (46.7%), with a low level of education (13.0% were illiterate and 44.2% had only completed their primary education) and low income (18.6% earned up to ½ a minimum wage and 39.2% earned up to one minimum wage). With regards to occupation, 28.9% were housewives, 11.6% were unemployed and approximately 30% reported having paid work. Among these women, 67.6% had an

informal working relationship (thus without any type of social security or labor law).

Approximately 90.0% performed housework every day; A relevant number of women (45.1%) did not have any regular leisure time activities.

Housework overload assessment in women

Heavy housework overload was found in 34.3% of the women studied.

Heavy domestic overload was substantially higher in women who were in the 21-to-30-year-old and in the 31-to-40-year age groups (43.4% and 41.4%, respectively), those who had a primary level of education (41.2%), among the married or in steady relationships (41.6%) and black women (39.5%). Among women who had children, 39.8% had heavy housework overload, compared to 22.4% of those who did not have children. This percentage increased with the rise in the number of children: 35.0% in women with up to two children and 45.8% in those with three or four children.

Housework overload increased with the worsening of housing conditions: among women who reported living in good housing conditions, 56.0% had a low housework overload; and among those who lived in low housing conditions, 17.1% had a low housework overload and 51.5% had a high housework overload. Of all women who lived in homes with average or poor infrastructure, 43.8% reported having a high housework overload, compared to 32.9% of those who had good infrastructure.

Furthermore, there was a linear relation between having an income in the previous month and housework overload: the lower the income, the higher the housework overload. Among those who earned up to ½ a minimum wage, 48.4% had a high housework overload, and this percentage decreased to 21.2% when women received more than one minimum wage per month.

Leisure time activities were inversely associated with housework overload: among women who maintained regular leisure time

Table 1 – Distribution of housework overload according to sociodemographic characteristics and living conditions among women. Feira de Santana, 2002.

Tabela 1 – Distribuição da sobrecarga doméstica segundo características sociodemográficas e condições de vida das mulheres. Feira de Santana, 2002.

	Sobrecarga Doméstica							
Características	Baixa		Mé	édia	Alta			
	N	%	n	%	n	%		
Sobrecarga doméstica	682	33.3	663	32.4	701	34.3		
dade								
Até 20 anos	160	37.1	160	37.1	111	25.8		
21-30 anos	130	27.8	135	28.8	203	43.4		
31-40 anos	89	22.9	139	35.7	161	41.4		
41 anos mais	303	40.0	229	30.2	226	29.8		
Escolaridade								
Analfabeta	101	38.1	73	27.5	91	34.3		
Ensino Fundamental	232	25.9	294	32.8	369	41.2		
Ensino Médio	296	37.2	268	33.7	231	29.1		
Superior	49	66.2	19	25.7	06	8.1		
Situação conjugal								
Solteira	276	37.7	245	33.5	211	28.8		
Casada/União estável	244	25.6	312	32.8	396	41.6		
Viúva/Separada	160	45.2	104	29.4	90	25.4		
Cor da pele/raça								
Branca	203	47.0	125	28.9	104	24.1		
Parda	339	29.8	384	33.8	414	36.4		
Preta	96	27.5	115	33.0	138	39.5		
Amarela/indígena	08	33.3	10	41.7	06	25.0		
Filhos								
Sim	378	27.2	457	32.9	553	39.8		
Não	303	46.4	204	31.2	146	22.4		
Número de filhos	303	10.1	201	31.2	1 10			
Sem filhos	305	46.5	205	31.3	146	22.3		
1-2 filhos	163	25.7	250	39.4	222	35.0		
3-4 filhos	94	24.0	118	30.2	179	45.8		
≥ 5 filhos	120	33.0	90	24.7	154	42.3		
Condições de Moradia	120	33.0	90	24.7	154	72.5		
Boa	14	56.0	09	36.0	02	8.0		
Média	501	47.9	349	33.3	197	18.8		
Precária								
	167	17.1	305	31.3	502	51.5		
nfraestrutura (água e luz)	602	241	F0F	22.1	502	22.0		
Boa	603	34.1	585	33.1	582	32.9		
Média/Precária	77	28.3	77	27.9	119	43.8		
Posse de bens	4.44	240	425	242	201	20.0		
Boa	441	34.8	435	34.3	391	30.9		
Média	203	30.4	196	29.4	268	40.2		
Precária	36	33.3	30	27.8	42	38.9		
Renda própria								
Até ½ salário mínimo*	25	16.3	54	35.3	74	48.4		
De ½ a 1 salário mínimo	126	39.3	97	30.2	98	30.5		
Mais de 1 salário mínimo	161	46.7	111	32.2	73	21.2		
Lazer								
Sim	410	36.6	391	34.9	320	28.5		
Não	271	29.3	272	29.4	381	41.2		

^{*} Salário Mínimo (R\$ 200,00) / * Minimum Wage (R\$ 200.00)

activities, 36.6% had a low housework overload, as opposed to 28.5% of those who did not practice any entertainment activities. The situation was reversed when women without regular leisure time activities were taken into consideration: 29.2% among women with a low housework overload and 41.2% among those with a high housework overload, revealing a decrease in these activities as the level of responsibility for domestic tasks increased.

Association among Housework Overload, and Common Mental Disorders

It was noticed a statistically significant positive linear association between housework overload and common mental disorders (χ^2 =15.909; p<0.0001): the higher the

housework overload, the higher the CMD prevalence.

Sociodemographic characteristics (age, education, migration, skin color, marital status and having children) revealed no statistical interaction with the main association evaluated here (OH and CMD). Nonetheless, some features of living conditions, domestic work and professional work showed statistical interaction.

Among the variables related to living conditions, only the ownership of durable goods was an effect modifier of the main association investigated (TABLE 2).

A few characteristics of household chores stressed the effect upon domestic overload regarding mental disorders: not receiving help to perform domestic tasks and having to do such chores from Monday

Table 2 – Distribution of housework overload according to characteristics of domestic and professional work among women. Feira de Santana, 2002.

Tabela 2 – Distribuição da sobrecarga doméstica segundo características do trabalho doméstico e profissional entre as mulheres. Feira de Santana, 2002.

	Housework overload					
Characteristics of housework	Low		Average		High	
	n	%	n	%	n	%
Cleaning woman						
Yes	165	51.7	93	29.2	61	19.1
No	513	30.0	562	32.9	635	37.1
Help to perform domestic tasks						
Yes	443	31.0	518	36.3	467	32.7
No	141	28.3	131	26.3	227	45.5
Days when housework is performed						
Every day	463	27.9	551	33.2	647	39.0
Mondays through Fridays	18	42.9	11	26.2	13	31.0
Only on weekends	77	45.8	68	40.5	23	13.7
Currently working						
Yes	225	34.7	227	35.0	197	30.4
No	455	32.7	436	31.3	501	36.0
Main occupation						
Paid worker	222	34.2	230	35.4	197	30.4
Housewife	118	20.3	178	30.6	285	49.1
Unemployed	64	27.5	76	32.6	93	39.9
Others*	267	48.9	167	30.6	112	20.5

^{*} estudante, aposentada, afastada por motivo de doença ou vivendo de rendas

^{*} student, retired, not working due to illness or living on income

through Friday or every day, being, thus, effect modifiers of the main association (TABLE 3).

In relation to professional work, the job at the moment of the search was a modifying variable in the association between domestic overload and CMD.

All in all, the factors which showed statistics interaction, in the stratified analysis, were: poor possession of durable goods, having no assistance when doing the chores, performing household activities from 5 up to 7 days a week and the type of occupation.

Thus, after removing the opportunity to interact with the other variables were analyzed for the presence of confounding in the main association. Potential confounders have been confirmed: education, leisure, income, paid domestic work and presence of children. (TABLE 4).

The adjustment for education, leisure, income, paid domestic work and having children, co-variables identified as confounders, did not change the direction of the association under analysis: the association between domestic workload and common mental disorders remained positive at levels statistically significant (TABLE 4).

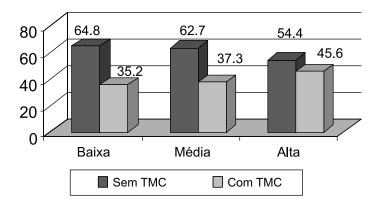
Logistic regression analysis enabled the simultaneous assessment of effect modifiers concerning housework overload and common mental disorders among women. However, the presence statistical association has not confirmed in the modeling: the term-products assessed did not remain in the final model.

In addition to the main independent variable (housework overload), the following covariables remained in the final model: level of education, income and leisure time activities, revealing the relevance of these variables in CMD prevalence, similarly to what was observed with housework overload.

For analysis of confounding, with the removal of each co-variable selected, the effect on the main association investigated has been evaluated. Thus, the variables: schooling, monthly income and leisure were potential confounders for the association between domestic workload and common mental disorders among women. The main association investigated remained at statistically significant levels, even after adjustment by all confounding co-variables (TABLE 4).

Afterwards, the calculation of prevalence ratios (PR) of the model variables was proceeded. At the end, the analysis revealed that women exposed to high domestic workload had a greater prevalence of common mental disorders (1.23 times) than women in situations of low to average domestic workload (TABLE 5).

The measure of association and the level of statistical significance obtained after



Graphic 1 – Prevalence (%) of CMD according to housework overload among women, Feira de Santana, 2002.

Gráfico 1 – Prevalência (%) de TMC segundo sobrecarga doméstica entre as mulheres, Feira de Santana, 2002.

Table 3 – Stratified analysis to assess effect modifiers for the association between housework overload and common mental disorders according to living conditions. Feira de Santana, 2002. **Tabela 3** – Análise estratificada para avaliação de modificadores de efeito para a associação entre sobrecarga doméstica e transtornos mentais comuns segundo condições de vida. Feira de Santana, 2002.

Co-variable	N	PR	CI 95%
Not adjusted	2057	1.26	1.13-1.40
Housing conditions			
Increased#	1076	1.13	0.88-1.69
Basic#	981	1.28	1.11-1.49
Ownership of durable goods*			
Increased	1945	1.30	1.16-1.46
Basic	108	0.79	0.56-1.10
Infrastructure			
Increased	2045	1.26	1.13-1.40
Basic	8	0.83	0.12-5.72
Leisure time activities			
Yes	1129	1.23	1.03-1.47
No	927	1.17	1.02-1.33
Head of the household			
Yes	331	1.26	0.99-1.62
No	1691	1.31	1.16-1.48
Income			
Up to one minimum wage**	476	1.23	1.03-1.48
More than one minimum wage	347	1.30	0.88-1.91

^{*} Interação estatística / * Statistical interaction

Table 4 – Stratified analysis on the association between housework overload and common mental disorders according to characteristics of domestic and professional work. Feira de Santana, 2002.

Tabela 4 – Análise estratificada da associação entre sobrecarga doméstica e transtornos mentais comuns segundo características do trabalho doméstico e trabalho profissional. Feira de Santana, 2002.

Co-variable	N	PR	CI 95%
Not adjusted	2057	1.26	1.13-1.40
Has a cleaning woman			
Yes	319	1.12	0.76-1.66
No	1710	1.25	1.12-1.40
Cares for children			
Yes	936	1.20	1.04-1.40
No	230	1.20	0.85-1.69
Receives help to perform housework			
Yes	1428	1.37	1.20-1.57
No	499	1.05	0.88-1.27
Days when housework is performed			
Only on weekends	168	1.23	1.10-1.38
From five to seven days per week	1703	2.10	1.34-3.29
Occupation			
Works out of the home	649	1.57	1.29-1.93
Others*	1360	1.12	0.98-1.27

^{*} Interação estatística / * Statistical interaction

^{**} salário mínimo U\$ 87,00 / ** minimum wage of US\$87.00

^{*}Ampliada (boa/média)/Básica (precária) / *Expanded (good/average)/Basic (precarious)

Table 5 – Housework overload and common mental disorders according to confounding covariables and adjustments. Feira de Santana, 2002.

Tabela 5 – Sobrecarga doméstica e transtornos mentais comuns segundo co-variáveis confundidoras e seus respectivos ajustamentos. Feira de Santana, 2002.

Co-variables	Healthy	Healthy (no CMD)		Not exposed (low/average overload)		CI (95%)	
	PR	CI (95%)	PR	CI (95%)	_		
Schooling*	1.32	1.18-1.48	1.89	1.61-2.21	1.56	1.41-1.71	
Leisure*	1.36	1.18-1.57	1.54	1.34-1.77	1.45	1.31-1.60	
Income*	1.36	1.13-1.62	1.79	1.41-2.27	1.56	1.34-1.81	
Paid domestic Service*	1.13	1.08-1.19	1.22	1.00-1.49	1.15	1.08-1.23	
Having Children*	1.29	1.19-1.41	1.55	1.31-1.82	1.39	1.28-1.50	
Age	0.98	0.87-1.10	1.42	1.22-1.65			
Marital status	0.76	0.67-0.87	0.86	0.74-1.00			
Looking after children	1.26	1.17-1.35	0.96	0.77-1.19			
Boss	0.51	0.35-0.73	1.28	1.09-1.51			

^{*} Presença de confundimento / * Presence of confounding factor

simultaneous adjustment for all confounding co-variables in logistic regression analysis did not change, substantially, the main findings of the association when compared to the analysis without adjustment.

Once the final model was obtained, their goodness-of-fit to the data was analyzed through the Hosmer and Lemeshow¹⁷ test. ROC curve and analysis of the patterns of the co-variables.

The hypothesis that the model did not provide a good fit to the data was rejected (the Hosmer-Lemeshow test showed a p value=0.497). The area of the ROC curve was 0.697.

In this way, the model provided good fit to the data. Co-variable pattern analysis was

subsequently conducted, assessing whether the extreme observations found were influential. The comparison between the models with and without observations showed little influence, without significant changes in the coefficients obtained. Consequently, the model provided good fit to the data.

Discussion

This investigation revealed high overall prevalence of CMDs among women (approximate ratio of 4 women affected out of 10 women studied), which reveals a serious health problem in the population studied, especially when compared to the estimate of the World Health Organization (2000)

Table 6 – Adjusted prevalence ratios, confidence intervals (95%) and p value for the association between housework overload and common mental disorders (TMC), and for confounding covariables. Feira de Santana, 2002.

Tabela 6 - Razões de prevalência ajustada, intervalos de confiança (95%) e valor p para associação entre sobrecarga doméstica e transtornos mentais comuns (TMC) e para as co-variáveis confundidoras. Feira de Santana, 2002.

Variable	RP	CI 95%	P value
Housework overload	1.23	1.05-1.44	0.028
Level of education	1.58	1.34-1.88	0.000
Leisure time activities	1.53	1.31-1.78	0.000
Income	1.36	1.14-1.62	0.004

which refers to an average prevalence of 24% in the population. Other Brazilian studies also found high prevalence of mental disorders among women ranged from 24.9% to 45.0%^{4,10,19-22}. Likewise, internationally, the prevalence ranged from 27.0% in Santiago (Chile) to 18.0% in Great Bretanha²³. These data indicate that women need special attention with regard to the promotion and protection of their mental health, encouraging discussion about the inclusion in public social and policies in issues related to gender.

After statistical modeling, low education, low income and lack of regular leisure activities were characterized as potential confounders in the association between domestic workload and common mental disorders. It is worth noting in this investigation that the care of children, empirically considered to be a factor that worsens housework overload, did not reveal significant differences.

To explain these findings, an important question emerges: poverty and matters related to it. There is a complex and multidimensional relationship between poverty and mental health. Studies14 discuss this relationship and shows that poverty, along with associated factors, such as: lack of health services, poor education, unemployment and social inequalities can create insurmountable barriers to health care, since the difference of treatment for most mental disorders, which is already high, actually shows really huge for the poorer people. Resources for mental health care are rarely available for the lower walks of life and few professionals are skilled and prepared to receive, recognize and treat such disorders.

Findings of the present study reveal that women with a high housework overload who received up to one minimum wage per month had a higher prevalence of CMD, when compared to those who received more than one minimum wage. Low-income individuals have more financial concerns than those with a higher per capita income, which leads to anxiety and depression. Lack of money can lead to stress and insecurity;

monthly income²² provides different living conditions, which can be exemplified by the ownership of durable goods such as a fridge, washing machine, freezer, dish washer and telephone.

According to other studies²⁴, income has several meanings for individuals: family support, debt payment and a source for the realization of projects, dreams and fantasies31. Several studies on mental health emphasize the theory that the living conditions of the poorer classes would be determinants in the onset of mental disorders. In this way, the inverse relationship between mental disorders and socioeconomic class has been one of the most consistent results in population epidemiological studies.

Low level of education is also an important factor of exposure to be associated in the analysis, due to its relationship with socioeconomic conditions. Access to school has a direct effect in psychological health, as it increases possible life choices and influences self-esteem and the likelihood of an increase in household income, resulting in an improvement in personal and family quality of life⁶. The main consequence of this condition has been the lack of opportunity for individuals in these situations, causing their levels of social, cultural and economic exclusion to rise.

Common mental disorders were associated with the lack of leisure time activities. The negative health effects resulting from the constraints of time for rest and leisure activities directed toward the realization of pleasurable activities that promote physical and mental health, have been poorly described in studies.

Participating in leisure time activities contributes to the reduction in stress, anguish and depression; yet, leisure cannot be isolated, it must lie in the social context involving pleasure, desire, freedom and creativity as an activity that only has meaning and reason in the available time, unlike professional, religious, domestic and social25 commitments.

Summing up, findings of the present study show a positive association between high housework overload and mental disorders.

Housework is an essential activity for human existence, thus revealing the need to rethink it as a social practice and a type of work which is key in the production/reproduction process, seeking healthier and more egalitarian forms to perform it. This is the same as including the relationship between the production and reproduction spheres in the analysis of female work, because women's life experience implies the coexistence of these two spheres that was observed in this study, whether based on harmonious relationships or conflicting/overlapping roles⁸.

Therefore, it is of utmost relevance to make housework evident detaching it from its naturalization and social invisibility.

In this sense, it becomes evident that

investing in public and social policies aimed at the creation of a support network for the population is important, in terms of housework and its repercussions in mental health. The reason for this is that the findings in the present study point to the need to discuss gender roles and relationships, emphasizing the importance of cultural changes that modify the gender division of housework itself, redefining the concepts of female work, productive work and economic inactivity.

The present study aimed to contribute to the reflection on work performed in the domestic environment, so that a new view of studies on health and professional work and housework, included in women's routine, is taken into consideration. The purpose here is that this reality can be discussed, reconsidered and rebuilt.

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