

Stress and coping among workers at psychosocial care centers in the interior of the state of Sao Paulo

Estresse e enfrentamento de trabalhadores de centro de atenção psicossocial em uma cidade do interior do Estado de São Paulo

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ABSTRACT | Background: Psychosocial Care Centers (CAPS) are community-based facilities designed as a substitutive model to break with asylum-based care and aligned to the principles underlying the Unified Health System (Sistema Único de Saúde-SUS); thus they promote patient-centered care. **Objective:** To establish the prevalence of stress and its association with biosocial characteristics and coping strategies within the work process of healthcare providers at CAPS in a city in the interior of the state of Sao Paulo, Brazil. **Method:** Cross-sectional quantitative study involving administration of three questionnaires: biosocial, Work Stress Scale and a checklist of coping strategies. The sample comprised 193 healthcare providers from 11 different CAPS. **Results:** Most participants were female, with average age 35 years old, single and without children. The levels of stress were rated high, with prevalence of 50.2%. The main associations found concern the participants' subjective appraisal of their job, particularly personal recognition and satisfaction. The coping strategies most frequently cited were problem-solving and social support. **Conclusion:** We found high levels of stress in the analyzed population and association of stress mainly with biosocial characteristics.

Keywords | health personnel; mental health; mental health services; burnout, professional.

RESUMO | Introdução: Os Centros de Atenção Psicossocial (CAPS) são serviços comunitários que foram concebidos como modelo substitutivo que rompe com o modelo de atenção manicomial, alinhado aos princípios do Sistema Único de Saúde (SUS), promovendo uma clínica centrada no sujeito. **Objetivo:** Identificar a prevalência de estresse e suas associações com as características biosociais e as estratégias de enfrentamento relacionadas ao processo de trabalho dos profissionais da saúde que trabalham nos CAPS de uma cidade do interior de São Paulo. **Método:** Estudo transversal quantitativo utilizando três questionários de autoperenchimento: um biossocial, a Escala de Estresse no Trabalho (EET) e um com estratégias de enfrentamento do estresse (coping). A investigação foi desenvolvida com 193 profissionais de saúde de 11 CAPS. **Resultados:** Houve predominância de sexo feminino, 35 anos, sem filhos e solteiros. O estresse foi considerado alto, com 50,2% de prevalência. As principais associações dizem respeito às questões subjetivas relacionadas à forma como o trabalhador avalia e sente seu trabalho. As estratégias de enfrentamento mais utilizadas foram resolução de problemas e suporte social. **Conclusão:** Observou-se elevado grau de estresse na população estudada e, principalmente, suas associações com características biosociais.

Palavras-chave | pessoal de saúde; saúde mental; Centros de Atenção Psicossocial; esgotamento profissional.

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INTRODUCTION

Psychosocial Care Centers (Centros de Atenção Psicossocial–CAPS) are regional, community-based outpatient facilities which play the role of springs within the healthcare network. By representing the interface between collective and mental health, CAPS are a setting for interdisciplinary knowledge and practices. The care model intended for CAPS breaks with the asylum-based approach. Aligned to the principles underlying the Unified Health System (Sistema Único de Saúde – SUS) CAPS promote broader scoped patient-centered care¹.

Everyday work in mental health care involves many problems and challenges, including large demand, effectively or subjectively urgent situations, teamwork issues, intersubjective labor relations, flaws in continuing and permanent education and the intrinsic weakness of the healthcare network².

The goal of CAPS is not only to provide clinical care, but also to contribute to psychosocial rehabilitation and to the organization of the local mental health network³.

Mental health is a field under continuous development. Advances notwithstanding, (de)construction still occurs and challenges are posed constantly⁴. In consequence, reflecting on the work process for the involved professionals, the specific aspects of the institutional context and mental health care is necessary.

Care provision demands profound engagement of both service users and professionals, a situation which makes the therapist-client relationship rather intense. Owing to the nature and chronicity of disease, contact with clients is frequent, invasive and boundless, with the corresponding impact on the professionals^{5,6}. Continuous exposure to mental and social suffering expose care providers to vulnerabilities and weaknesses and might trigger anguish, stress and work-related mental diseases.

The organization of work and the physical space at CAPS might be considered as hindrances, since all actions are permanently visible to all and there is no place for the professionals to withdraw, reflect, protect themselves and recover⁶.

Occupational stress might develop when there is conflict between the expectations of committed professionals and barriers to satisfactory performance of their job, derived from organizational and psychosocial factors. Care providers

might fall ill when stress exceeds the levels needed for adaptation in the absence of individual and collective strategies to cope with mental suffering⁷⁻⁹.

The present study is justified by the fact that detecting and divulging occupational stress and the coping strategies developed by mental care providers afford grounds for reflection and promote the formulation of occupational health programs at mental health institutions, in addition to fomenting debate on these subjects.

Our aim was to measure the prevalence of stress and analyze its association with biosocial characteristics and coping strategies relative to the work process for mental healthcare providers at CAPS in a city in the interior of the state of Sao Paulo, Brazil.

METHOD

STUDY DESIGN AND SETTING

The present cross-sectional, exploratory and descriptive study with quantitative approach was conducted in all the CAPS included in the mental health network of a municipality in the interior of the state of Sao Paulo to a total of 11. All types of municipal CAPS were included, being 6 CAPS for adults, 3 for alcohol and drug users and 2 for children and adolescents.

The participants were selected by means of non-probabilistic convenience sampling, i.e. the individuals available at the facilities at the time of data collection. The study population included all the categories of employees: physicians, nurses, nursing technicians and assistants, psychologists, coordinators, occupational therapists, social workers, monitors, pharmacists, pharmacy technicians, physical educators and speech therapists.

Inclusion criteria were: having worked at the institution for at least 6 months; being present at CAPS at the time of data collection; having signed an informed consent form; and having responded and returned the administered questionnaires.

The principal investigator individually contacted the CAPS employees who met the inclusion criteria in the workplace to inform them on the study aims and invite them to participate. The questionnaires with accompanying instructions were delivered inside sealed and

encoded envelopes. The participants were free to choose whether to respond the questionnaire in the workplace or elsewhere.

Of a total of 395 CAPS employees, 70 were excluded for having less than 6 months of experience, 5 who returned incompletely responded questionnaires and 15 away from work or on maternity leave. A total of 305 CAPS were thus eligible to participate in the study. Losses included employees who refused participation (36.7%; n=112) and those who failed to return the questionnaires after five attempts. Therefore, the final sample comprised 193 participants.

Fieldwork extended from November 2014 to October 2015. Data collection was performed in the morning, afternoon or evening, until all the CAPS employees were contacted. The principal investigator personally delivered the questionnaires to each participant and then gathered the returned envelopes.

STUDY PROTOCOL AND INSTRUMENTS

We administered three self-report instruments: a biosocial questionnaire designed based on previous studies¹⁰⁻¹², the Work Stress Scale (WSS)¹³ and the version of the Ways of Coping Checklist¹⁴ validated for the Portuguese language¹⁵.

The biosocial questionnaire was designed to investigate several aspects of the study population. It is a self-report instrument developed based on the theoretical framework adopted^{8,9,12}. The following characteristics were considered: sex, age, marital status, having children, time since graduation, length in the profession, educational level, length of work at CAPS, employment relationship, work regime, number of healthcare jobs, working hours, sick leave in the past two years and health problems in the past 2 years allegedly related to work at CAPS.

WSS, already validated⁶, comprises 23 items which describe a stressor and a reaction, this format being relevant for our choice of instruments. Each item is responded on a 5-point scale ranging from "Strongly disagree" to "Strongly agree."

WSS exhibited satisfactory psychometric properties and good reliability on the validation study ($\alpha=0.85$); it provides a global score of stress¹³. The level of stress of respondents is obtained by adding the scores on all the items; the higher the score, the higher the level of stress.

The global score ranges from 23 to 115. In the present study, we stratified the results per tercile, as recommended by the instrument developers¹³.

The questionnaire on ways of coping comprises 66 items representing thoughts and actions to cope with the internal or external demands of a definite stressful event¹⁵. Items correspond to eight different "factors" (confrontive coping, distancing, self-controlling, escape-avoidance, seeking social support, accepting responsibility, planful problem solving and positive reappraisal). Each item is responded on a 4-point scale ranging from zero ("not used") to 3 ("used a great deal").

STATISTICAL ANALYSIS

Quantitative data were subjected to descriptive statistical analysis and are presented in tables. This part of analysis was performed using software *R version 3.5.0 (R Foundation for Statistical Computing)*. Categorical variables were described as ratios and proportions. The significance level was set to $p < 0.05$ with confidence interval (IC) of 95%.

Associations were tested by means of simple and multiple logistic regression analysis using R package *glm*. Multivariate analysis was performed by means of logistic regression. Logistic regression models were fitted for each variable separately to identify those significant ($p < 0.20$) for inclusion in the multiple model. Association was analyzed by calculating odd ratios (OR) with the corresponding 95% CI.

The present study was approved by the research ethics committee of Universidade Estadual de Campinas (UNICAMP), ruling no. 939,080) and complied with all the formal requirements in national and international regulatory standards for research involving human beings.

RESULTS

In compliance with the inclusion criteria, the sample comprised 193 participants. Most participants were female (74.0%), single (50.5%) and did not have children (58.3%). The average age of the sample was 35.2 years old, varying from 20 to 59. Average experience in health care was 10 years, varying from 6 months to 38 years. Average length of work at CAPS was 4.9 years, varying

from 6 months to 23 years. The average working time was 42.9 hours/week.

Distribution per occupational category was as follows: nursing technicians (27.6%), psychologists (21.2%), nurses (19.3%), pharmacists, pharmacy assistants and monitors (11.4%), coordinators (4.1%), psychiatrists (4.7%) and social workers and physical therapists (1.6%).

Most participants (59.9%) had full-time jobs and rated them good or excellent (78.6%). About 52.6% of the participants reported they did not intend to stop working at CAPS, while 17.1% did.

Most of the participants (60.1%) rated their interpersonal relationship with coworkers good and 5.7% poor. About 30.5% of the sample had two jobs and 65.0% worked exclusively at CAPS.

About 20.7% of the participants reported having been on sick leave in the past year, however, most (57.5%) admitted having gone to work even when ill — the main reason being their responsibility and commitment toward service users and avoid overloading coworkers (43.0%).

The prevalence of stress on WSS was categorized following the source developers' recommendations⁶. On these grounds, 50.3% of the participants were categorized as with high level of stress, 25.9% medium and 23.8% low.

The coping strategy most frequently cited was “problem-solving” (34.2%), followed by “social support” (26.8%) and “escape-avoidance” (19.4%). “Positive reappraisal” (7.8%), “self-controlling” (7.3%) and “accepting responsibility” (4.2%) were the least used, while “confrontive coping” and “distancing” were not mentioned by any participant.

Table 1 describes the association between biosocial variables and stress and coping scores. Correlation was found for seven biosocial variables and two categories of coping. These results are individually analyzed in the Discussion section. Tests were performed to investigate the relationship of each biosocial variable with the response variable (stress).

Table 2 describes the final predictive model for high vs. medium + low stress levels. Adjusted analysis of the relationship of stress with biosocial variables and coping showed that the odds to develop high levels of stress vs. medium + low levels were higher for the participants who reported low job satisfaction (OR=1.7), to go to work even when ill (OR=1.26) or rated interpersonal relationships in the workplace poor (OR=1.69).

DISCUSSION

The biosocial profile of the sample agrees with that found in another study conducted with employees at a CAPS in the interior of the state of Sao Paulo¹⁶. Also in that study the analyzed population was predominantly of women, without children and of young adults.

While most participants rated interpersonal relations in the workplace good, mental distress manifested indirectly in the sick absenteeism (20.7%) and presenteeism (57.5%) rates for the previous year. The reasons adduced for going

Table 1. Significance of simple associations between biosocial characteristics and stress among mental healthcare providers on a generalized linear regression model (GLM), Campinas, 2015 (n=193).

Variables	Significance
Age	0.0487*
Job satisfaction	<0.0001*
Salary perceived as insufficient	0.0381*
Feelings of recognition	0.0232*
Going to work even when ill	<0.0001*
Intention to quit the job at the Psychosocial Care Center	0.0064*
Perception of interpersonal relationships	0.0006*
Using coping strategy “escape-avoidance”	0.0071*
Using coping strategy “problem-solving”	0.0124*

*generalized linear regression model (GLM).

Table 2. Final predictive model for high vs. medium + low stress levels, Campinas, 2015 (n=193).

Variables	P	OR (95%CI)
Low job satisfaction	0.023*	1.71 (1.08-2.70)
Going to work even when ill	0.002*	1.26 (1.09-1.45)
Poor interpersonal relationships	0.006*	1.69 (1.17-2.43)

*Bivariate logistic regression; OR: odds ratio; CI: confidence interval.

to work even when ill were not to overload coworkers and not to compromise the care of service users.

We could not locate any study that analyzed presenteeism among mental health workers. One study on presenteeism in the hospital setting¹⁷ found that nursing professionals were aware that missing work days would overload coworkers and hinder care delivery. Despite the differences in the profile of the analyzed institutions, the participants in both expressed similar feelings in regard to their commitment to service users and coworkers.

Another relevant aspect evidenced in the results concerns the accumulated weekly working hours, since 30.5% of the participants had a second job in addition to that at CAPS. Excessive working hours, with the consequent exhaustion, hinder the quality of care provision, favor the occurrence of work accidents and impair the quality of life of workers¹⁸.

There was association between high levels of stress and younger age, which points to a relationship between age and professional experience. As shown in another study¹⁶, younger mental healthcare providers might be more likely to feel overworked and to distance themselves from the job and coworkers. As a function of their lesser experience, younger workers have not yet developed efficacious strategies to cope with stress or trust- and cooperation-based bonds in their interpersonal relationships, which conditions might favor the occurrence of stress.

We found association between high levels of stress and four among the analyzed variables: low or very low job satisfaction; lack of recognition by peers, supervisors and service users; salary insufficient to meet needs; and intention to quit the job at CAPS.

Also the variables included in the final predictive model of stress are noteworthy, in particular “low job satisfaction” (OR=1.7) and “going to work even when ill” (OR=1.2). These findings indicate high odds of developing high levels of stress in the workplace.

The tested associations and the results of the final predictive model point to the side of stress as a subjective perception related to the meaning work has for each individual worker, under which circumstances job dissatisfaction has considerable weight.

Job dissatisfaction might lead to resignation (an intention reported by 17.1% of the sample) with consequent high turnover in the medium and long term. Such situation is

counterproductive within the context of community-based mental health care as a function of the crucial role reference care providers play and the development and maintenance of bonds between professionals and service users.

Structurally unfavorable working conditions are common at CAPS and might contribute to cause suffering among employees. The authors of a study performed at a CAPS in Rio de Janeiro¹⁹ emphasized that personnel shortage, delayed salaries and high turnover were mentioned as causes of negative feelings toward work, such as anger, nonconformity, lack of motivation, frustration, sadness and permanent tiredness and exhaustion.

Another study that analyzed stress among professionals at a CAPS for adults reported on the relevance of the mediating role of service managers in regard to the employees' feelings of overload and emotional stress. The participants were, indeed, aware that the working conditions made them susceptible to illness in association with occupational stress²⁰.

The work process as such elicits feelings of stress and suffering. Work at mental health care services exposes professionals to experiences which trigger a gradual invasion of feelings. Under these circumstances, considerable emotional resilience is needed to continue providing care to service users²⁰.

Therefore, in regard to this particular context, one might infer that stress is a direct consequence of the interaction of psychosocial factors and the organization of work, leading to the appearance of signs of physical and mental suffering.

Stress demands excessive energy expenditure. The affected individuals have resource to defensive strategies in the attempt to restore the balance lost and avoid illness⁷. The coping strategies most frequently used by the participants in the present study were “problem-solving,” “social support” and “escape-avoidance.”

“Problem-solving” was the coping strategy most frequently mentioned. It is considered efficacious and active, as the involved individual strives to actively change the stressful situation to which they are exposed. This is to say, they act in a way to change the problem situation between them and the environment⁷. Our findings corroborate the results of other studies with healthcare providers, which also found that “problem-solving” was the strategy most frequently used and resulted in satisfactory coping with stressors^{8,9}.

Other authors emphasize the relevance of healthcare providers adopting functional coping strategies to avoid the occurrence of symptoms and chronification of stress²¹.

The second most frequently cited strategy was “social support,” which fact attests to the relevance of group formation and of the quality of the affective bonds developed between coworkers within the context of the work process at CAPS.

It should be observed that the odds for high levels of stress were high (OR=1.69) among the participants who rated their relationship with coworkers poor or very poor. This finding reinforces the relevance of dialogue and support among coworkers and interpersonal relationships as protective factors against stress. Similarly, also another study¹⁹ found that teamwork is crucial to help CAPS employees protect themselves from the feeling of powerlessness vis-à-vis the difficulties they meet in the workplace.

The high level of stress reported by half of the participants point to the relevance of psychosocial factors on the development and maintenance of stress in this population of workers, including lack of support from coworkers and supervisors, high pressures and job demands, lack of recognition, insufficient salary and low control over tasks. Our findings are similar to those reported in other studies, according to which psychosocial factors and the organization of work are the reasons for the development of signs of stress and mental suffering among mental health care providers^{1,16,19}.

One of the limitations of the present study is the low potential for generalization of the results to other healthcare settings, mainly as a function of the peculiar characteristics of professionals and service users at CAPS. Then, many employees did not return the questionnaires or refused participation, with the consequent risk of over- or underestimation of the results.

CONCLUSION

In the present study with healthcare providers at CAPS, the sample was predominantly composed of women, with average age 35 years old, single and without children. Most of the participants belonged to the nursing staff, followed by psychologists, and rated their job and interpersonal relationships in the workplace satisfactory. The level of stress was high in the analyzed population, with a prevalence of 50.2%.

The main associations found concern the participants' subjective appraisal of their job, particularly recognition and personal satisfaction. The coping strategy most frequently cited was “problem-solving,” followed by “social support.” We also found association between high levels of stress and poorly efficacious coping strategies.

As to its contributions, the present study improves the visibility of the analyzed subject, involving mental healthcare providers, to raise the awareness on and broaden the approach to suffering among this population of workers.

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