Common mental disorders in nursing students of the professionalizing cycle

Transtornos mentais comuns em acadêmicos de enfermagem do ciclo profissionalizante

Trastornos mentales comunes en académicos de enfermería del ciclo profesional

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ABSTRACT
Objectives: to verify the suspicion of common mental disorders in nursing students of the professionalizing cycle and the association with sociodemographic features. **Method:** cross-sectional study with a sample of 85 students from a public university in the state of Rio de Janeiro (RJ) who responded to the Self-Report Questionnaire-20 and sociodemographic questions. **Results:** the suspicion prevalence of common mental disorders (CMD) in the sample was 55.3% and it was identified the association with the consumption of alcohol. Of the most frequent SRQ-20 complaints, 95.3% reported "feeling nervous, tense or worried", 72.9% "having difficulty making decisions", 60% "sleeping poorly" and 37.6% "having lost interest by things ". **Conclusion:** high prevalence of CMD in the sample and the association with the consumption of alcohol requires preventive and therapeutic actions among the students that minimize the possibility of severe mental disorders related to the consumption of alcohol and other drugs.
Descriptors: Nursing; Students; Mental Disorders; Mental Health; Prevention.

RESUMO
Objetivos: verificar a suspeição de transtornos mentais comuns em acadêmicos de enfermagem no ciclo profissionalizante e a associação com as características sociodemográficas. **Método:** estudo transversal com uma amostra de 85 acadêmicos de uma universidade pública do estado do Rio de Janeiro (RJ) que responderam ao *Self Report Questtionaire*-20 e questões sociodemográficas. **Resultados:** a prevalência de suspeição de transtornos mentais comuns (TMC) na amostra foi de 55,3%, sendo identificada a associação com o consumo de bebidas alcoólicas. Das queixas do SRQ-20 mais frequentes 95,3% afirmaram "se sentir nervosos, tenso ou preocupado", 72,9% "ter dificuldades em tomar decisões", 60% "dormir mal" e 37,6 "ter perdido o interesse pelas coisas". **Conclusão:** a alta prevalência de TMC na amostra e a associação com o consumo de bebidas alcóolicas exige ações de cunho preventivo e terapêutico junto aos acadêmicos que, minimizem a possibilidade de transtornos mentais severos relacionados ao consumo de álcool e outras drogas.
Descritores: Enfermagem; Estudantes; Transtornos Mentais; Saúde Mental; Prevenção.

RESUMEN
Objetivos: verificar la sospecha de trastornos mentales comunes en académicos de enfermería en el ciclo profesional y la asociación con las características sociodemográficas. **Método:** estudio transversal con una muestra de 85 académicos de una universidad pública del estado de Río de Janeiro (RJ) que respondieron al *Self-Report Questionnaire*-20 y cuestiones sociodemográficas. **Resultados:** la prevalencia de sospecha de trastornos mentales comunes (TMC) en la muestra fue del 55,3%, siendo identificada la asociación con el consumo de bebidas alcohólicas. De las quejas del SRQ-20 más frecuentes el 95,3% afirmó "sentirse nervioso, tenso o preocupado", el 72,9% "tiene dificultad en tomar decisiones", el 60% "duerme mal" y el 37,6% "perdió el interés por las cosas". **Conclusión:** la alta prevalencia de TMC en la muestra y la asociación con el consumo de bebidas alcohólicas requiere acciones de carácter preventivo y terapéutico junto a los académicos, para minimizar la posibilidad de trastornos mentales severos relacionados con el consumo de drogas.
Descriptores: Enfermería; Estudiantes; Trastornos Mentales; Salud Mental; Prevención.

INTRODUCTION

National and international studies among university students prove that since entering educational institutions, students are faced with an environment permeated by rules and obligations very different from high school. So stress is intensified due to the need to socialize with new colleagues and professors, the rules and the learning contents that require greater autonomy and responsibility. In addition, the demands arising from the conclusion of the course and the expectations regarding the professional future and insertion in the job market. In the health area, suffering is intensified due to the stages and other activities that put the student in the face of illness, death, and the suffering of patients and their families[1].

In Nursing, the activities of the professional cycle are characterized as professional practice for giving the opportunity to exchange experiences and learning, contributing to the acquisition of knowledge and development of technical and relational skills. It enables the student's interaction with health institutions, professionals, patients and their families, which knowledge favors the insertion of the future professional in the health system. However, apprehending the competencies and skills of care, relationship and management, is a great challenge for undergraduates for being young, untrained and with no acquired adaptive mechanisms in the face of occupational stressors[2].

At this stage of education, although the students work in health institutions under the supervision of the professor, they interact daily with several organizational problems such as high exigency and low control in face of the psychosocial risks involved. These include: high working hours, critical and life-threatening patients care, low decision-making power and inexperience to cope with unpredictable situations. Such risks cause changes in sleep patterns, fatigue, anxiety, unpleasant sensations in the stomach and headache, showing signs and symptoms that are predictors of common mental disorders (CMD)[3].

A study about the suspicion of CMD in nursing students who sought to verify the association of these disorders with alcohol and tobacco consumption proved that, 46.1% of the sample have prevalent signs and symptoms of anxious depressive mood, somatization and decrease of vital energy; and the association with the consumption of these substances is not established. These data are relevant because they help to prevent the development of a psychopathological clinical picture, also enabling the implementation of preventive institutional programs for the consumption of alcohol and other drugs in the group[4].

The CMD concept developed in the 70's through research on mental illness in primary health care and refers to a set of symptoms such as: insomnia, fatigue, irritability, forgetfulness, concentration difficulty, somatic complaints and others. These disorders may be associated with decreased of ability to work and to the sickness absenteeism; and it is a major public health problem[5].

International studies prove the prevalence of CMD between 24.6% and 45.3% in the general population, being that in the samples of Brazilian municipalities the rates range from 17 to 35%[6]. Although CMDs do not constitute a specific clinical body described in nosological manuals, they constitute a dimension of these psychopathological phenomena expressed at the collective level and result from genetic, behavioral and environmental determinants that are associated with factors such as gender, age group, marital status, living conditions and work[7-8].

According to the World Health Organization (WHO), there is a high percentage of CMD in professionals from different areas, including health area, as a consequence of new production processes. Therefore, it is relevant to investigate the suspicion of CMD in Nursing because it is a category whose work features are based on interdependent actions of other professionals and users of the services; and usually developed under high pressure due to the several requirements of assistance and management[9].

Aiming to fund the study on CMD in Nursing, it was carried out a survey of the state of the art in the Virtual Health Library (VHL), integrated with the Brazilian Nursing Database (BDENF), Latin American and Caribbean Health Sciences Literature (LILACS) Medical Literature Analysis and Retrieval System Online (MEDLINE) and Cumulative Index to Nursing and Allied Health Literature (CINAHL). It was selected articles published mainly in the country and between 2013 to 2017, being observed the incipience of research involving nursing workers and students.

OBJECTIVE

To verify the suspicion of common mental disorders in nursing students of the professionalizing cycle and the association with sociodemographic features.

METHOD

Ethical aspects

The study met ethical standards in research involving human being, and was approved by the Research Ethics Committee of the Hospital Universitário Pedro Ernesto (CEP/HUPE). After the invitation, the explanations about the research and scheduling, the data were collected in groups of a maximum of eight students in the own institution, in a private place, after signing the Informed Consent (IC). Although the collection was done in groups, the instruments were filled individually, and there was no discussion about the response options before, during and after completion. It was ensured anonymity and corroborated that participants could withdraw consent at any stage. It was clarified the importance of the student participation, considering the incipience of studies of this nature and the benefits in terms of institutional support to those with a suspicion of CMD.

Design, study location and period

Cross-sectional study with a quantitative approach carried out at a public university located in the city of Rio de Janeiro from March to December of 2016.

Population and sample: inclusion criteria

Of the 92 students enrolled and regularly attending the professionalizing cycle of the course, the sample for convenience was composed of 85 subtends of the professionalizing cycle. The losses occurred due to the absence at the time of collection, and there were no denials. We adopted as inclusion criteria those who were

regularly enrolled and attending the last two periods and who were performing theoretical and practical activities in the hospital.

Study variables

The study included the following variables: gender; age; marital status; employment relationship; if the students lived with their parents; medical leave in the last twelve months; consumption of medicine, alcohol and tobacco; practice of physical activity; hours of sleep; and common mental disorders, according to the Self-Report Questionnaire 20 (SRQ-20).

Study protocol

The suspicion of CMD was verified by the SRQ-20 validated for the Brazilian context[10] in 1986 and later in 2008[11]. It is a psychiatric screening instrument originally composed of 30 questions, being the Brazilian version consisted of 20 items for the screening of non-psychotic mental disorders with alternatives of dichotomous answers like "yes" or "no". The score is obtained by counting the affirmative answers, ranging from zero, which indicates a minimum probability of CMD, to 20, which corresponds to the maximum probability. The cut-off point used for the suspicion of CMD was at least eight positive answers for females and six for males due to gender issues and cultural context. It is a tool for tracking psychic suffering, and for the diagnosis, the standardized psychiatric interview must be performed[5,11].

For the analysis of the data, it was used the program Statistical Package for the Social Science (SPSS®) version 9.0 for Windows and was adopted the significance level of 5% was adopted, determining the suspicion of CMD and the association with sociodemographic variables by means of logistic regression using the Chi-Square-Pearson test and Fisher's exact test. In the individual analysis were added the affirmative answers of the items that composed the factors related to the suspicion of CMD in order to obtain the score of each participant. In the group analysis, it was observed the number of affirmative answers for each factor in order to discuss the prevalence of signs and symptoms by factor in the sample. The results were discussed according to the studies that address CMD among nursing and medical students, residents of the health area, nursing workers and correlates to worker's health.

RESULTS

Characteristics of the studies' participants

Table 1 presents data regarding the sociodemographic characteristics of the sample and the association with the suspicion of CMD.

The study was composed by the total of students of the professionalizing cycle number (n=92) and the sample had 85 (92.3%) participants based on the established inclusion criteria, whose characteristics showed that it was a young group, mostly female, unmarried, who do not work or live with their parents.

On the state of health and other life habits, it was identified that a part of the students moved away from the training to address some health problem, uses medicines regularly, sleeps less than 8 hours a day, consumes alcohol eventually and practices some physical activity. According to the cutoff points established for the male and

female sex, the overall suspicion of CMD in the sample was 55.3%, with a positive association for the consumption of alcohol (p <0.05).

Table 1 - Sociodemographic characteristics and association with the suspicion of common mental disorders in the sample, Rio de Janeiro, Brazil, 2016

Variable	Sociodemographic characteristics		Suspicion of CMD		p value
	n	%	n	%	
Gender					0.151*
Female	77	90.6	44	93.6	
Male	08	9.4	03	6.4	
Age group					0.500**
20 to 25	75	88.2	42	89.3	
> 25	10	8.5	05	6.4	
Marital status					0.262*
Single	79	93	44	93.6	
Married/common-law marriage	06	7.0	03	6.4	
Live with parents					0.271*
Yes	61	71.7	37	78.7	
No	24	29.3	10	21.3	
Employment relationship					0.271*
Yes	10	11.8	37	78.7	
No	75	88.2	10	21.3	
Medical leave in the last 12 months					0.213*
Yes	13	15.3	9	19.4	
No	72	84.7	38	80.6	
Use of medicines					0.299*
Yes	37	43.5	20	42.5	
No	48	56.5	27	57.5	
Practice of physical activity					0.085*
Yes	33	38.8	16	34	
No	52	61.2	31	66	
Sleep hours					0.627**
<8h	82	96.5	45	95.7	
>8h	3	3.5	2	4.3	
Alcohol consumption					0.041*
Yes	39	45.9	28	59.5	
No	46	54.1	19	40.5	
Tobacco use					0.366*
Yes	1	1.12	1	1.2	
No	84	98.8	46	100	

*Note: *Chi-Square-Pearson test; **Fisher's exact test; CMD - common mental disorders.*

Predictive signs and symptoms of common mental disorders in the sample

Table 2 presents an overview of the answers to the SQR-20 questions, in order to check the most prevalent signs and symptoms of CMD in the sample.

In the statistical analysis of the prevalent factors of CMD suspicion, the following affirmative answers were found: factor 1 - prevalence of answers for the questions "feel nervous, tense or worried" and "feeling sad lately". Factor II - prevalence for "difficulty making decisions", "getting tired easily" and "feeling tired all the time". Factor III - prevalence for "sleeping poorly", "feeling discomfort in the stomach" and "frequent headaches". Factor IV - Prevalence to "lose interest in things" and "feel unable to play a useful role in your life". The positive answer for "have had an idea of ending your life", pointed out. As the data were collected

Table 2 - Answers to the Self-Report Questionnaire (n=85), Rio de Janeiro, Brazil, 2016

SQR-20 Factors	Yes		No	
	n	%	n	%
Factor 1 - Anxious depressive mood				
Do you feel nervous, tense, or worried?	81	95.3	4	4.7
Are you scared easily?	42	49.4	43	50.6
Are you feeling sad lately?	46	54.1	39	45.9
Do you cry more than usual?	33	38.9	52	61.1
Factor II - Decrease in vital energy				
Do you feel tired easily?	56	65.9	29	34.1
Do you have difficulty making decisions?	62	72.9	23	27.1
Do you have difficulty being satisfied with your tasks?	37	43.5	48	56.5
Do you have difficulty thinking clearly?	44	51.8	41	48.2
Does your work cause you suffering?	15	17.6	70	82.4
Feeling tired all the time	55	64.8	30	35.2
Factor III - Somatic Symptoms				
Do you have stomach discomfort?	39	45.8	46	54.2
Do you have lack of appetite?	13	15.3	72	84.7
Do you have headache often?	35	41.2	50	58.8
Do you sleep badly?	51	60.0	34	40.0
Do you have poor digestion?	28	32.9	57	67.1
Do you have hand tremors?	13	15.2	72	84.8
Factor IV - Depressive thoughts				
Have you lost interest on things?	32	37.6	53	62.4
Are you unable to play a useful role in your life?	15	17.6	70	82.4
Do you feel worthless in your life?	8	9.4	77	90.6
Have you had an idea of ending your life?	1	1.2	84	98.8

in groups of a maximum of eight students, at the end the instruments were checked for completeness, and it was offered mental health support to those with a suspicion of CMD.

DISCUSSION

As identified in the study, there was a prevalence of young, female and single participants and who live with their parents. These data are in agreement with other findings in the literature that point to the positive association of CMD in young, single and female individuals[12]. To live with parents can be a protective factor of CMD, because the family is an important network of psychosocial support in affective and material terms. The prevalence of female sex is characteristic of Nursing and the nature of work, although there is an increase in the number of men entering the profession[13].

The suspicion of CMD in 55.3% of the sample is a concern because it is well over national studies and also in Nursing[14]. In a survey conducted with students from the last periods of the undergraduate nursing course, the prevalence of CMD was 33.7%, in which 46.1% said they "felt nervous, tense or worried" and 28.9% "feeling sad lately"[4].

Considering the association of alcohol consumption and the suspicion of CMD in the sample, confirms the importance of strategies to prevent consumption in the group and support in mental health, considering the burden of problems of this nature that may influence the attitudes in relation to care for one's own health and implications for training[15]. The professionalizing cycle is a moment of transition marked by the conviviality of the undergraduate with the cycle of life and death, the demands of training and the concern with the insertion in the job market. These factors make students vulnerable to problems of mental health and the consumption of alcohol and other drugs, as a coping and/or socialization strategy[16].

Students are vulnerable to occupational stressors due to inexperience and because it is a young group, factors that may favor CMD according to the demands of health work. In this type of exposure, there are twice as many chances of the individual suffering from this disorder as compared to those not exposed[8]. In addition, there is an incipience of studies on CMD in Nursing and students, which points out the need to verify this disorder with a view to the prevention of mental health problems and the referral for specific mental health care[9].

Although the logistic regression analysis did not associate CMD with the female sex and the age group, attention should be paid to these variables and their influence on the onset of the disorder. Students of the biology, physiotherapy and psychology courses, whose sociodemographic characteristics are close to the study, have higher predisposition to CMD in the first year, but Physiotherapy and Nursing are the careers where the prevalence is 25% in comparison with the other areas. Another variable to be considered is the risk of suicide among students when analyzing the prevalence of depressive symptoms, and among them, the positive answer for the question "have had an idea of ending your life"[17].

A study involving nursing, medical and odontology students from the last three semesters identified the suspicion of CMD in 33.7% of the sample and the association with the following variables: female sex, the fact that the course is not a source of pleasure and the student that was emotionally tense. The likelihood of developing CMD in the group was higher among students who did not have emotional support, those who were unhappy, and those who did not have positive expectations about the future[14].

Canadian research on psychic suffering in nursing students has shown symptomatology of stress and anxiety associated with clinical practice, the resulting imbalance between the demands of training and personal life, and the use of ineffective coping strategies. It was suggested the planning of the curriculum in order to provide free time for leisure, coexistence with peers and family; and self-care. Students' expectations for pre-university training and access to mental health services should be worked out[18].

Regarding the predictive signs and symptoms of CMD in the sample, it was evidenced the prevalence of anxious depressive mood in the question of "feeling nervous, tense or worried" and "feeling sad lately". Among the residents of the health area (Nursing, Nutrition, Medicine and Collective Health), the most frequent complaints were: "feeling nervous, tense or worried", "sleeping poorly" and "getting tired easily". Among women, 73.8% stated "feeling nervous, tense or worried" and 76.8% of men said "sleeping poorly". "getting tired easily" and "having unpleasant sensations in the stomach" were the complaints most often reported by women compared to men[9].

In relation to the decrease in vital energy, the participants affirmed "difficulty in making decisions", "getting tired easily" and "feeling tired all the time"; Similar results were found in a study with nursing students in which 32.9% of the participants stated "difficulty in making decisions" and 26.3% "getting tired easily"[4]. Decreased in vital energy may be in line with the requirements

of training in the professional cycle in view of the few hours of sleep, travel to the fields of practice, the monograph and the wearing resulting from activities in the practice fields[3].

Findings about somatic symptoms revealed problems with sleep, discomfort in the stomach and frequent headaches. These data are similar to the study with nursing students, in which 31.6% had positive answers to "frequent headaches" and 25% to "unpleasant sensations in the stomach"[4]. Poor sleep quality was a factor associated with the 3.3 times higher chance of CMD in medical students from the first and last semesters, compared to those with good sleep quality[19].

Poor sleep pattern and headache are symptoms that negatively influence the attention required in care and contribute to incidents that compromise patient and worker safety. These aspects have been little valued in the assessments of adverse events that occur in Nursing, whose activities, despite providing opportunities for learning, decision making and autonomy, have been pointed as sources of tension and wearing[7].

About depressive symptoms, there was prevalence for the questions "lose interest in things" and "feel unable to play a useful role in your life". A study on the suspicion of depression in medical students (n=384), using the Beck Depression Inventory (BDI), showed signs indicating depression and somatic reactions accompanied by anxiety, difficulty to sleep and chronic diseases. Such disturbances were associated with years of schooling, restraint of leisure time and relaxation with colleagues, and the fact that the students take care of patients with many diseases[20].

Neurotransmitter changes, personality features, genetic vulnerability and situational events are factors intrinsic to the individual and when associated with external factors can trigger depressive reactions. In Nursing, external factors may be related to the physical and social environment of work, such as: practice sectors, shift –especially at night–, conflicting interpersonal relationships, work overload, lack of autonomy, conflict of interests, care provided to patients at risks of complication and death, poor social support; and ineffective coping strategies in the management of situations considered as anxiogenic[21].

Depression reaches larger-scale younger groups in Nursing compared to older ones whose cognitive and emotional maturity bring safety for problem solving and adversity coping. The youth's vulnerability would be linked to the lack of experience in dealing with everyday work situations such as: insecurity, lack of autonomy, work overload and difficult interpersonal relationships. Such factors are important for changes in mental health and depressive disorder production, with a positive correlation for the risk of suicide among those with low self-esteem and absence of professional achievement[17].

Study limitations

The results presented should be analyzed based on some methodological limitations, since this is a cross-sectional study that evaluates only association between the variables, without defining or establishing causal link. The sample, although representative of the universe of students in the professionalizing cycle, was restricted to a single higher education institution, which may have contributed to the high prevalence of students with a suspicion of CMD and the association with alcohol consumption alone. Such limitations may foster interest in other studies of this nature so that one can not only estimate the prevalence of CMD suspicion, but also the relation with variables of the participants and their influence on the students' mental health. The incipience of CMD studies in nursing students was another limiting factor in terms of comparison and discussion of the findings.

Contributions to the Nursing

The high percentage of suspicion of CMD in students of the professionalizing cycle in the study should be discussed and analyzed by professors and institutions due to the risk of developing severe mental disorders, with negative repercussions for the training, care process and personal and social quality of life. There is a need for preventive and therapeutic actions with undergraduates in order to minimize psychic suffering, prevent alcohol consumption and other drugs use, and improve the quality of life to face challenges imposed by the professionalizing cycle. Such actions may also contribute to patient safety under the care of students.

CONCLUSION

The high percentage of suspicion of CMD in nursing students in the professionalizing cycle, whose sample consisted mainly of young, single and female people, is well over the prevalence found in other studies with nursing students and other health professionals. Although it was proved the association of CMDs with the consumption of alcohol in the sample, it is not ruled out that other variables may influence the suspicion of this disorder in the group such as the few hours of sleep, the use of medications and the removal of the training environment for the treatment of health problems.

Considering the specificity of the act of caring for the human being in their different life cycles, Nursing and training institutions should join efforts in order to promote preventive and therapeutic actions among students that minimize the possibility of severe mental disorders and consumption of alcohol and other drugs.

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