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#### TRANSTORNO MENTAL COMUM ENTRE ESTUDANTES DE ENFERMAGEM E FATORES ENVOLVIDOS

#### COMMON MENTAL DISORDERS BETWEEN NURSING STUDENTS AND RELATED FACTORS

## TRANSTORNO MENTAL COMÚN ENTRE ESTUDIANTES DE ENFERMERÍA Y FACTORES ENVOLVIDOS

Pérola Liciane Baptista Cruz e Silva<sup>1</sup>, Beatriz Francine Fernandes Silva<sup>2</sup>, Keite Kelli Aparecida Conceição Rocha Chagas<sup>3</sup>, Michele Beatriz Alves Tortola<sup>4</sup>, Renata Lourdes Rodrigues Caldeira<sup>5</sup>.

#### **RESUMO**

**Objetivo**: Investigar a ocorrência de sintomas indicativos de Transtornos Mentais Comuns entre estudantes de enfermagem e discutir possíveis fatores envolvidos. **Métodos**: Estudo descritivo, transversal, quantitativo do qual participaram 88 estudantes, com aplicação de questionário autoaplicável sobre questões diárias, seguido do *Self-Reporting Questionnaire* (SRQ-20). **Resultados**: A prevalência geral de TMC foi de 41%. Com relação a outras variáveis, foi constatado que a maioria dos estudantes possui atividade profissional, sendo essa geralmente integral na semana. Foi relatado entre os participantes 12,5% de acompanhamento em saúde mental e uso de medicação psicoativa próxima dos 15%, o que pode sugerir automedicação. **Conclusão**: Os dados aproximam-se de demais pesquisas com metodologias semelhantes e demonstram a importância de se discutir o problema e pensar estratégias que apoiem esses estudantes para melhora geral em seu estado de saúde e rendimento estudantil.

Descritores: Estudantes de Enfermagem; Transtornos Mentais; Saúde Mental; Saúde do Estudante.

## **ABSTRACT**

Objective: The purpose of this study is to evaluate the occurrence of symptoms that can indicate Common Mental Disorders among Nursing students and discuss possible related factors. Methods: A descriptive, cross-sectional, and quantitative study was carried out. Nearly 88 students participated, using the Self-Reporting Questionnaire (SRQ-20) to track CMD (Common Mental Disorders). Results: The overall prevalence was 41%. Regarding other variables, it was found that the majority of the students have professional activity, which is usually full time in the week. It was reported that 12.5% of the students follow up on their mental health, and nearly 15% use psychoactive medication, which might suggest self-medication. Conclusion: The data shown is comparable with other studies following similar methodologies. This study demonstrates the urgent need for discussing the problem and how to support students to increase their life quality as well as better academic results.

Descriptors: Students; Nursing; Mental Disorders; Mental Health; Student Health.

#### **RESUMEN**

**Objetivo**: Se objetivó investigar la ocurrencia de síntomas indicativos de Trastornos Mentales Comunes entre estudiantes de enfermería. **Métodos**: Estudio descriptivo, transversal, cuantitativo. Participaron 88 estudiantes, con aplicación de cuestionario sobre cuestiones diarias, seguido del *Self-Reporting Questionnaire* (SRQ-20). **Resultados**: La prevalencia general de TMC fue del 41%. Se encontró que la mayoría de los estudiantes tienen actividad profesional, siendo generalmente integral en la semana. Se ha reportado entre los participantes, 12,5% de seguimiento en salud mental, y uso de medicación psicoactiva cerca del 15%, lo que puede sugerir automedicación. **Conclusión**: Los datos se aproximan a otras investigaciones con metodologías similares y demuestran la importancia de discutir el problema y pensar estrategias que apoyen a estos estudiantes para una mejora general en el estado de salud y rendimiento estudiantil.

Descriptores: Estudiantes de Enfermería; Trastornos Mentales; Salud Mental; Salud del Estudiante.

<sup>1</sup>Enfermeira com Residência em Saúde da Família e Comunidade (UFSCar), Mestre em Gestão da Clínica (UFSCar), Docente do curso de enfermagem das Faculdades Integradas de Jaú. <sup>2</sup>Graduanda do curso de Enfermagem, Faculdades Integradas de Jaú. <sup>3</sup>Graduanda do curso de Enfermagem, Faculdades Integradas de Jaú. <sup>5</sup>Graduanda do curso de Enfermagem, Faculdades Integradas de Jaú. <sup>5</sup>Graduanda do curso de Enfermagem, Faculdades Integradas de Jaú.

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## **INTRODUCTION**

Epidemiological studies have shown that the onset of adult life in general is the time when the first symptoms of various mental disorders appear. Allied to this fact, everyday life and pressures related to the life of a higher education student are stressful factors, which add to risk factors for the development of suffering of this population<sup>(1)</sup>.

Among some of the main events and characteristics related to the increase in the prevalence of mental disorders, are, the separation of parents from their previous network of acquaintances, as well as difficulties of social insertion, associated to the pressure in the studies for better use<sup>(1)</sup>.

In a study carried out with university students from Unicamp, the authors demonstrated a high dominance of self-reported mental disorders in all areas of knowledge, in a 40% share of students interviewed, with the highest rates in females, notably the population that seeking support from monitoring services<sup>(1)</sup>.

In similar research, with medical students, 37% of the participants were found to approach common mental disorders, again with high rates among women. Other factors, where the rates found were higher, refer to dissatisfaction with course choice, insufficient performance, lower family income, and lack of leisure activities at the desired frequency<sup>(2)</sup>.

Still, among medical students, a portion of 32.3% of the students with scores that indicate possible cases of Common Mental Disorders (CMD) were found in Jequié-Ba. It was associated with losses in the quality of life of the students and to physical and psychological protection factors, such as the practice of sufficient physical activity and leisure<sup>(3)</sup>.

CMDs, also known as Minor Psychiatric Disorders, refer to less severe conditions that do not constitute classic disorders described in Diagnostic and Statistical Manual of Mental Disorders (DSM), such as depression, anxiety, bipolar disorder, but they have a significant impact on the subjects' lives<sup>(2)</sup>.

The described symptoms include memory difficulties, concentration and decision making; insomnia, irritability and fatigue, as well as somatic complaints (headache, lack of appetite, tremors, gastrointestinal symptoms, among others), with the exception of psychotic disorders, use of psychoactive substances or personality disorders. They compromise the

professional and personal income of the affected individuals, without necessarily gaining a formal diagnosis of psychiatric illness<sup>(2)</sup>.

Among nursing undergraduates at an institution in the State of Minas Gerais, the difficulties of adapting to the university as a risk factor for CMD were evident, with a general predominance of 43.5% among students. They bring the discussion about the accompaniment of this process of transition from academic and social life to the stimulus to health promotion practices aiming at the protection of their mental health (4).

Specifically, still in relation to nursing students, the authors make, in review about estrangement before the new, in theory and in practice, stressful aspects that, without proper psychological preparation, may lead to the development of the disorder. They bring responses to stress related to habits, such as alcohol, tobacco and overeating, which contributes negatively to the course and personal and professional development<sup>(5)</sup>.

Still, among the mentioned manifestations, changes such as agitation, memory and sleep impairments and emotional tension mentioned. Somatic also symptoms are highlighted, such as changes in blood pressure and heart rate, anxiety, palpitations, increased sweating, muscle stiffness, headache and fatigue. This condition is also associated with other disorders, such as burnout syndrome, with low personal fulfillment and high depersonalization<sup>(5)</sup>.

Thus, the objective was to investigate the occurrence of symptoms indicative of Common Mental Disorders among students of the Nursing course, in the city college of the interior of São Paulo, as well as discuss the possible factors associated with them.

# **METHODS**

An observational, cross-sectional, descriptive and quantitative study, its main purpose being the description of the characteristics of a given phenomenon and the establishment of relations between variables<sup>(6)</sup>. A survey technique was used, its importance being recognized by the possibility of knowledge of a direct reality to its subjects involved, economy, speed and capacity of quantification<sup>(7)</sup>.

The instrument used for data collection was a self-administered and anonymous questionnaire, elaborated by the authors, addressing questions of satisfaction with the course, use, follow-up with a

mental health professional and the use of psychoactive medication. Participants are students enrolled in the Nursing course of a college in the interior of São Paulo, from the 3rd semester.

For the identification of possible CMD the questionnaire Self-Reporting frames, Questionnaire (SRQ-20), a tool recommended by the World Health Organization, created to track psychiatric disorders, in primary care services (8) and validated in Brazil<sup>(9)</sup>. The questionnaire has 20 questions with "yes" or "no" answers and evaluates the presence of symptoms in the last 30 days. The cut-off point is different between men and better, with six or more "yes" answers for men and eight or more "yes" answers for women, considered to be suspected cases of CMD.

The inclusion criteria refer to subjects over 18 years old, regularly enrolled, as of the 3rd semester of the Nursing course of the institution where the research is being applied. They were willing to participate and the prerequisite was that they were present at the time of data collection that occurred during the class period. It was decided not to include in this research, the students of the first two semesters of the course because they did not experience the experience of academic life in higher education for a considerable time.

The sample size was calculated, estimating the prevalence rate of CMD for the population of university students in the health area, around 40% <sup>(3-4)</sup>, with a variation of 2% and using a confidence interval of 95.5%. For the calculation,

a possible loss of approximately 20% was  $predicted^{(10)}$ .

The project was submitted to the Research Ethics Committee of the Integrated Faculties of Jahu and, only after approval - opinion no. 2,571,896 - and signing of the Free and Informed Consent Term, data collection was started. Participants were approached in the classroom, clarified about the objectives of the research, and their information was kept anonymous and confidential throughout the course of the evaluation.

After data collection and tabulation, the descriptive analysis was applied as a way of presenting the findings, estimating prevalence and other factors involved<sup>(10)</sup>.

## **RESULTS AND DISCUSSION**

For the total number of students enrolled, from the 3rd semester of the Nursing course of the educational institution, from 114 the minimum sample of 67 participants was calculated. This institution has the Nursing course, over ten semesters, excluding the first semester because the time of living in the academic life of higher education is still insufficient to compose the sample. There are no classes in the "pairs" semesters, considering the data collection season, April 2018.

Eighty-eight individuals participated in this study, of which 88.6% were female (78). The classes were represented by: 23% belonging to the 2nd year of the course, 32% of the 3rd year, 21% of the 4th year and 24% belonging to the 5th year of the Nursing course. The participants' characterization and results are presented in Table 1.

Table 1 - Nursing course undergraduates by sex, semester of the course and number of responses above the cut-off point for the CMD scan of a municipality in the interior of São Paulo, 2018.

Semester of the course	Sex	N. participants	Number of responses "yes" ≥ to the cut-off point	Prevalence of CMD.
3rd semester	fem	17	9	55%
	male	3	2	
5th semester	fem	27	7	25%
	male	1	0	
7th semester	fem	17	10	52.6%
	male	2	0	
9th semester	fem	17	8	38%
	male	4	0	

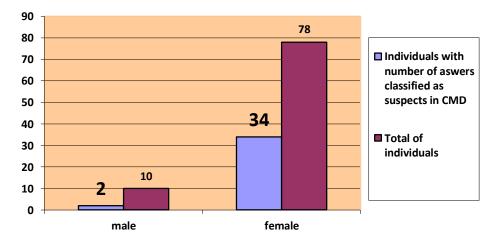
Source: Data prepared by the authors of this paper.

When the semester of the current course was separated by a semester, there was a great variation in the results, with higher prevalence in the 3rd semester (2nd year) and 7th semester (4th year), which may indicate relation to the

grade, specific requirements of each period or other unrelated related factor.

The overall prevalence of CMD among students was 41% (36), being that among the women this index was 43.5% (34) and among the males, 20% (2), according to FIGURE 1.

Figure 1 - Prevalence of Common Mental Disorders among nursing students, municipality of interior of São Paulo, Brazil, 2018.



Source: Data prepared by the authors of this paper.

With respect to the other variables addressed, in the present research, they are described in Table 2.

Table 2 - Variables investigated in nursing students of a municipality in the interior of São Paulo, in the year 2018.

Investigated Factors	Variables	(N. individuals) %	
Average grades in the last two months	0 to 2.5	(1) 0%	
	2.6 to 5.0	(1) 1%	
	5.1 to 7.5	(39) 44.3%	
	7.6 to 10	(46) 52.2%	
	Did not reply	(2) 2.2%	
Satisfaction with course	Yes	(71) 80.6%	
	No	(14)15.9%	
	Did not reply	(3) 3.4%	
Do you have a job?	Sim	(73)83%	
	No	(15) 17%	
Number of hours per week per working day	Up to 30h/week	(17) 19.3%	
	Up to 44h/week	(45) 51%	
	Up to 60h/week	(10) 11.3%	
Do you follow up on a mental health service or	Yes	(11)12 5%	Psychologist (7) 7.9%
professional? If so, which professional?			Psychiatrist (7) 7.9%
			Nurse ( 1) 1.1%
	No	(77) 87.5%	
Use of psychotropic medication	Yes	(13) 14.7%	
	No	(75) 85.2%	

Source: Data prepared by the authors of this paper.

Regarding the medications mentioned as being of regular use, we found, mainly, the antidepressants, present in 61% of those who declared to make use of psychotropic medications. Among the medications mentioned are Fluoxetine (2), Amitriptyline (2), Sertraline (3), Bupropion (1), Escitalopram (1), Paroxetine (1),

Trazodone (1) and Venlafaxine (1). Benzodiazepines were then indicated, with 28% being Clonazepan (4) and Alprazolan (1). Other drugs accounted for 11%, including Depakene (1) and Lithium (1).

Similar data to those that are close to the current research was also found in a research

project in the municipality of Jequié-Ba, with undergraduate medical students. The prevalence of common mental disorders was 32.2%, using a lower cutoff (> 6), to classify suspected cases with the same instrument (SRG-20). In this study, a higher prevalence was found among students of the sixth female, which is close to the current one determined<sup>(11)</sup>.

The authors discuss the difficulties, to a greater extent, for female undergraduates in reconciling academic activities, often with domestic activities and work. Other possible causes of this increased risk would be the interactions between hormonal influences, sexual differences linked to neuronal aspects involved with mood and anxiety, stressors related to gender roles and the importance attributed to women's social support<sup>(11)</sup>.

In another study, even among medical students, the prevalence of CMD was found to be 58.8%, but using another screening tool, the General Health Questionnaire (GHQ-12), which also aims to detect mental disorders common, which justifies, in part, the greatest difference in the result found<sup>(12)</sup>.

In a study carried out with health researchers, seeking to establish an association between the prevalence of CMD and the practice of physical activity, a positive classification for CMD was detected in 43.2% of the general sample.

There was a higher percentage of inactive patients with CMD (67.4%) than active patients (32.6%). Although this variable was not explored in this study, this data shows the importance and possible paths for the care strategies<sup>(13)</sup>.

Regarding the satisfaction with the course and average grades, in the present research, it was observed, in general, as good, not presenting as a problem of high relevance pointed out by the students.

The presence of professional activity, in the great majority of respondents and, in a good part of the total workload in the week (44 hours or more), may lead to an overloaded routine, with the detriment of rest and leisure activities. A fact that is already known as impairment in quality of life and mental health.

Although the high incidence of CMD was small, the proportion reported to be in follow-up with a mental health professional. Allied to this fact, a greater report of the use of medications is observed when compared to the follow-up, which

may suggest to be present, in some cases, the practice of self-medication.

This act of self-medication among health students may be related to the knowledge acquired about the substances during the courses<sup>(14)</sup>. Self-medication can make it difficult to diagnose mental disorders, mask symptoms and worsen the clinical picture, leading to a general worsening of quality of life <sup>(14)</sup>. There are also risks related to intoxications, risk of dependence, hypersensitivity reactions, inadequate dosage, digestive bleeding and iatrogenic diseases and, in extreme cases, deaths<sup>(15)</sup>.

It is necessary to think of strategies, such as the practice of physical activities and leisure, so that the impact of suffering, linked to this situation, is not a depressant of the general health of students and thus harming their quality of life. Health education, by itself, is seen as a factor related to mental suffering and injury in the general quality of life, among other factors, due to its extensive workload, approximation to human suffering and responsibilities of the profession (111).

Health behaviors, such as quantity and regularity of sleep and the practice of physical activities, are also brought as predictors of well-being and, thus, protectors for the various mental sufferings of the subject inserted in higher education<sup>(16)</sup>.

Academic support services are present in some higher education institutions, but most of them are free-demand services, according to self-perceived need, which can sometimes be searched late or even valued by the academic, faced with pressures for responsibilities and productivity<sup>(17-18)</sup>.

Another aspect reported, avoidance in higher education has also been related to the difficulties of individual confrontations and lack of institutional support for undergraduates. There are reported experiences in vocational issues, leaving the gap still large between the student needs of global support. The importance of individualized initiatives to each institution is highlighted, according to the profile of its student<sup>(19)</sup>.

As a possibility of support, there are reports of Community Therapy (CT), as a space that allows to face the anguish and suffering experienced in academic life, through the sharing of experiences with other participants. From listening to other life stories and ways of dealing

with problems, sufferings can be (re) signified and best worked on individually<sup>(20)</sup>.

Recent university experience, in the state of Minas Gerais, considers actions in several areas, aiming at student support from care, reception of freshmen, support service in mental health, talk wheels, community therapy, artistic activities and have improved the academic experience of the student, aiming at personal development beyond the exercise of the profession<sup>(21)</sup>.

It is understood that educational institutions should recognize this scenario and think coping strategies, including by encouraging new research that better traces factors and situations of vulnerability, as well as care with positive results.

The mental health of students in the health area, in general, should be the object of work and research, aiming at the direct impact to this population and, consequently, to the health system as a whole, as it reflects in the provided care and relationship with the users of the various services<sup>(12)</sup>.

## CONCLUSION

The prevalence of Common Mental Disorder, found in the present study, was close to the current literature and shows a worrying picture which impacts on the quality of life and the training of health professionals, which will be linked to care practices and the health-disease process, which demands emotional balance and subjective well-being for adequate development.

Although already established some factors associated to the occurrence, in other studies in the area, there are few reports of support experience and coping strategies. Individual searches for help are perceived, discontinued and sometimes late, which does not prevent the occurrence of losses in personal and student life.

Strategies related to the promotion of healthy habits of life, physical activity practice, quality of sleep, Community Therapy and related to the development of other skills, such as arts and social activities, have been shown to be important and necessary for the good progress of the student experience. In several works, the inefficiency of valorization and development of specific competences related to the chosen profession is stressed.

It is also recognized the importance of observational and longitudinal studies throughout the academic life to better explore the phenomenon and practices that can positively and negatively impact it.

The limitations of the present research refer to the non-investigation of associated factors, life habits and services / aid practices already sought by the participating scholars. Because it was a transversal cut, it was also not possible to discuss the evolution of possible CMDs during the academic experience in higher education.

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#### Mailing address:

Perola LB Cruz e Silva

Street Árvores - nº 750 Primavera 2. ZIP CODE: 17206-602 − Jaú/SP - Brazil E-mail: perolacruz@yahoo.com.br