## RESEARCH

# PREVALENCE OF CASES OF DEPRESSION IN NURSING STUDENTS IN AN INSTITUTION OF HIGHER EDUCATION IN BRASILIA

PREVALÊNCIA DE CASOS DE DEPRESSÃO EM ACADÊMICOS DE ENFERMAGEM EM UMA INSTITUIÇÃO DE ENSINO DE BRASÍLIA

EL PREDOMINIO DE CASOS DE DEPRESIÓN ENTRE ESTUDIANTES DE ENFERMERÍA DE UNA INSTITUCIÓN EDUCATIVA DE BRASÍLIA

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## ABSTRACT

**Objective:** To identify cases of depression and prevalence levels in nursing students in an institution of higher education in Brasilia, Brazil. **Methods:** This work is an exploratory, descriptive study, carried out from October 2010 to October 2011, with a probabilistic sample of 91 individuals, representing 30% of the students enrolled in the nursing course. A questionnaire was applied, using the Beck Depression Inventory (BDI). The BDI consists of 21 items, including symptoms and activities at four degrees of intensity. **Results:** All of the studied individuals presented symptoms of depression, of which 62.6% showed minimal levels of depression, 25.2% presented mild to moderate depression, 10.9% reported moderate to severe depression, and 1.1% manifested severe depression. **Conclusion:** The results contribute to advances in scientific knowledge and serve as an incentive for further research. This study showed a higher prevalence of depression in students from 17 to 23 years of age, representing 70 (72.5%) participants of the sample. Of the survey participants, 85 (93.4%) were female, revealing the prevalence of women in the nursing course. It can therefore be concluded that this institution of higher education needs to implement a psychological support program for its students.

Keywords: Depression; Students, Nursing.

## RESUMO

**Objetivo:** identificar os casos de depressão e os níveis de prevalência em acadêmicos de Enfermagem em uma instituição de ensino de Brasília. **Métodos:** estudo de caráter exploratório descritivo, que compreendeu o período de outubro de 2010 a outubro de 2011, com amostra probabilística de 91 indivíduos, representando percentual de 30% dos alunos matriculados no curso. Foi aplicado um questionário, utilizando-se o Inventário de Depressão de Beck (IDB). O IDB é composto de 21 itens, incluindo sintomas e atividades em quatro graus de intensidade. **Resultados:** a totalidade dos indivíduos pesquisados apresenta sintomas de depressão, sendo que 57 (62,6%) apresentaram níveis de depressão mínima; 23 (25,2%) situamse na faixa de depressão leve a moderada; 10 (10,9%) relataram depressão moderada a grave e um (1,1%) manifestou quadro de depressão grave. **Conclusão:** os resultados obtidos contribuem para o avanço do conhecimento científico e como incentivo para a realização de novas pesquisas. Nesta pesquisa houve mais prevalência de depressão em acadêmicos na faixa etária de 17 a 23 anos, representando 70 (72,5%) participantes da amostra. Dos participantes da pesquisa, 85 (93,4%) eram do sexo feminino, revelando a prevalência feminina no curso de Enfermagem. Considerase, assim, oportuno que a instituição de ensino coloque em prática um programa de suporte psicológico destinado aos acadêmicos. **Palavras-chave:** Depressão; Estudantes de Enfermagem.

## RESUMEN

**Objetivo**: Identificar los casos de depresión y sus niveles de prevalencia en estudiantes de enfermería de una institución educativa de Brasilia. **Métodos**: Entre octubre de 2010 y octubre de 2011 se llevó a cabo un estudio exploratorio descriptivo que contó con una muestra aleatoria de 91 individuos representando el 30% de los alumnos inscritos en el curso. Se aplicó un cuestionario mediante el Inventario de Depresión de Beck (BDI). El BDI consta de 21 artículos que incluyen los síntomas y actividades de los cuatro grados de intensidad. **Resultados**: Todos los individuos objeto de estudio presentaban síntomas de depresión. El 62.6% (57 alumnos) mostró un nivel mínimo de depresión, el 25,2% (23 alumnos) estaba en el rango de depresión leve a moderada, un 10,9% (10) de depresión moderada a grave y 1.1% (1) de depresión severa. **Conclusión:** Los resultados contribuyen al avance del conocimiento científico y sirven como incentivo para realizar nuevas investigaciones. En este estudio se observó una mayor prevalencia de depresión en estudiantes entre 17 y 23 años, lo cual representa un 72,5% de la muestra. De los encuestados 85 (93,4%) eran mujeres, revelando la prevalencia femenina en el curso de enfermería. Se sugiere que las institucione

Palabras clave: Depresión; Estudiantes de Enfermería.

## **INTRODUCTION**

Depression has been recognized as one of the problems that most commonly inflicts suffering in people, reaching a high percentage of the population, with no clear distinction of gender, age, or socioeconomic level, and has become one of the main reasons to schedule medical appointments.<sup>1</sup>

Genetic and interpsychosocial factors act as triggers to depression that, in a broad sense, can be defined as a mood disorder, characterized by sluggishness in psychological processes, depressive and/or irritable mood, loss of energy (discouragement, tiring easily), partial or total incapacity to feel happy and/ or pleasure, disinterestedness, apathy or psychomotor agitation, difficulty to concentrate, negative thoughts, with the loss of the capacity to plan the future and amend the judgment of reality.<sup>2</sup>

Taking into account the growing number of individuals affected by depression, at a higher or lower degree of intensity, this illness is currently considered a health issue that has become as common as diabetes and hypertension. As regards its frequency, it is estimated that 15% to 25% of the general population suffers from this disturbance, that is, one in every four people will undergo treatment for depression at least once during their lifetime. Specifically in Brazil, approximately 24 to 30 million people present, have presented, or will present at least one episode of depression in their life.<sup>3</sup>

The illness itself, or at least some if its depressive symptoms, affects both males and females, regardless of race, ethnicity, age, and social condition. Women are the most vulnerable to this disturbance, in the proportion of two to three women per man.<sup>4</sup>

In general, this illness consists of a universal mental disorder, whose main disturbance is fluctuations in mood or emotions. It is also important to emphasize that mood swings have overall repercussions in the activities performed by the affected individual.<sup>5</sup>

Regardless of the manner in which the concept of depression is presented, one common point is relevant to mood swings, with slightly broader repercussions. In this sense, depression must be understood as a syndrome characterized by a group of symptoms, such as fluctuations in mood (sadness, guilt), in behavior (isolation), and in thought patterns and personal perceptions (less concentration, low self-esteem), as well as physical complaints (drowsiness, hunger, sex) and with a high risk of suicide.<sup>6</sup> Individuals who suffer from depression generally lose interest in daily activities; do not sleep well; suffer from a loss of appetite; present fatigue, backaches, or headaches; commonly present terrible thoughts, feelings of guilt, uselessness, despair; and in some more severe cases, can even lead to suicide.<sup>7</sup>

As regards etiology, this illness has yet to be fully clarified; however, the symptoms of the illness are quite evident, as they cause changes in four dimensions of an individual's behavior: affection, behavior, cognition, and physiology.<sup>8</sup>

Depression can arise as a response to a real situation, when the individual is exposed to unpleasant and upsetting facts, as well as a response to some form of frustration or loss. Under these circumstances, depression is more of a response to intimate conflicts caused by real life experiences, in which certain perspectives, anxieties, and reasons for life are represented in a negative intrapsychic manner.<sup>4</sup>

This illness affects both men and women, in any age range or social class. Studies have revealed that depression is more frequent during one's adolescence and at the beginning of adulthood and, due to hormone changes, presents a higher incidence in women.<sup>5</sup>

In the context of nursing professionals who work nights, studies report that the night shift raises possible risks for the development and/or worsening of depression, in turn compromising the professional's performance, subsequently affecting the medical services offered to the patient.<sup>9</sup>

Depression is often confused with discouragement, laziness, stress, and bad moods. However, psychological factors, such as anxiety, anguish, and fear, are, in the majority of cases, consequences and not the cause of depression. Therefore, depression is much more than mere sadness; it affects the way people think about their future and can change basic attitudes about themselves.<sup>7</sup>

In light of these considerations, the present study aims to analyze the prevalence of depression among nursing students in an institution of higher education in Brasilia, Brazil.

## **METHODS**

The present work was a descriptive, exploratory, and qualitative study carried out with undergraduate nursing students at an institution of higher education in Brasilia, DF, Brazil. Data collection took place from October 2010 to October 2011, using the Beck Depression Inventory (BDI). This instrument (Table 1) was created 50 years ago at the University of Pennsylvania, and has been translated and validated for different countries, including Bazil.<sup>10</sup>

The BDI consists of 21 items, including symptoms and attitudes at four degrees of intensity: sadness, pessimism, sense of failure, self-dissatisfaction, guilt, punishment, self-dislike, selfaccusations, suicidal ideas, crying, irritability, social withdrawal, indecisiveness, body image change, work difficulty, insomnia, fatigability, loss of appetite, weight loss, somatic preoccupation, loss of libido. Each item has four answers (0, 1, 2, or 3). More than one answer is possible for each question, taking the choice with the highest value into consideration.<sup>10</sup>

### Table 1 - Beck Depression Inventory

Name:			
ge: Marital Status:			
Profession:	Education Level:		
Date of Application: / /	Score:		
Instructions:			
On this questionnaire are groups of statements. Please read each group carefully. T THE LAST WEEK, INCLUDING TODAY. Circle the number beside the chosen state you read all the statements in each group before making your choice.	hen choose the statement in each group that best describes how you felt OVER ment. If you choose more than one statement in a group, circle each choice. Be sure		
1. 0 I do not feel sad. 1 I feel sad. 2 I feel sad all the time and can't snap out of it. 3 I am so sad and unhappy that I can't stand it.	10. 0 I don't cry more than usual. 1 I cry more now than I used to. 2 Today, I cry all the time. 3 I used to be able to cry, but now I can't, even if I wanted to.		
<ol> <li>2.</li> <li>0 I am not particularly discouraged about the future.</li> <li>1 I feel discouraged about the future.</li> <li>2 I feel that I have nothing to look forward to.</li> <li>3 I feel that the future is hopeless and that things cannot improve.</li> </ol>	<ul> <li>11.</li> <li>0 I don't get irritated more than I used to.</li> <li>1 I get upset or irritated more easily than I used to.</li> <li>2 Today, I constantly feel irritated.</li> <li>3 I can't even get irritated anymore with the things that used to irritate me.</li> </ul>		
<ul> <li>3.</li> <li>0 I don't feel like a failure.</li> <li>1 I feel I have failed more than the average person.</li> <li>2 When I look back on my life, all I see is a lot of failures.</li> <li>3 I feel like I'm a complete failure.</li> </ul>	<ul><li>12.</li><li>0 I have not lost interest in other people.</li><li>1 I am less interested in other people than I used to be.</li><li>2 I have lost a good part of my interest in other people.</li><li>3 I have completely lost interest in other people.</li></ul>		
<ul> <li>4.</li> <li>0 I enjoy things as much as before.</li> <li>1 I don't enjoy things like I used to.</li> <li>2 I don't get satisfaction out of anything.</li> <li>3 I am dissatisfied or bored with everything.</li> </ul>	<ul> <li>13.</li> <li>0 I make decisions like I used to.</li> <li>1 I put off making decision more than I used to.</li> <li>2 I have more difficulty in making decisions now than before.</li> <li>3 I can't make any decisions anymore.</li> </ul>		
<ul><li>5.</li><li>0 I don't feel particularly guilty.</li><li>1 I feel guilty a good part of the time</li><li>2 I feel really guilty most of the time.</li><li>3 I feel guilty all the time.</li></ul>	<ul> <li>14.</li> <li>0 I don't feel that my appearance is worse than it used to be.</li> <li>1 I'm worried about looking old or unattractive.</li> <li>2 I feel that there have been permanent changes in my appearance that make me unattractive.</li> <li>3 I think I'm ugly.</li> </ul>		
<ul> <li>6.</li> <li>0 I don't feel like I am going to be punished.</li> <li>1 I feel like I could be punished.</li> <li>2 I feel like I deserve to be punished.</li> <li>3 I feel like I am about to be punished.</li> </ul>	15. 0 I am not able to work I as well as before. 1 I need to make an extra effort to start anything. 2 I have to force myself to do anything. 3 I can't do anything.		
<ul> <li>7.</li> <li>0 I don't feel discouraged in myself.</li> <li>1 I am discouraged in myself.</li> <li>2 I am disgusted with myself.</li> <li>3 I hate myself.</li> </ul>	<ul> <li>16.</li> <li>0 I sleep as well as ever.</li> <li>1 I don't sleep as well as I used to.</li> <li>2 I wake up 1 or 2 hours before normal and have difficulty getting back to sleep.</li> <li>3 I wake up many times earlier than I used to and cannot get back to sleep.</li> </ul>		
<ul> <li>8.</li> <li>0 I don't feel like I am worse than anyone else.</li> <li>1 I criticize myself for my failures or errors.</li> <li>2 I blame myself constantly for my failures.</li> <li>3 I blame myself for everything bad that happens to me.</li> </ul>	<ul><li>17.</li><li>0 I don't get more tired than I used to.</li><li>1 It's harder for me to get tired today than before.</li><li>2 I get tired from doing almost anything.</li><li>3 I am too tired to do anything.</li></ul>		
9. 0 I don't have any thoughts about killing myself. 1 I have thoughts about killing myself, but I am unable to do it. 2 I would like to kill myself. 3 I would kill myself if I had the opportunity.	<ul> <li>18.</li> <li>0 My appetite is the same as it always was.</li> <li>1 I don't have as much of an appetite as I used to.</li> <li>2 My appetite today is much worse.</li> <li>3 I have completely lost my appetite.</li> </ul>		

Contunues...

... continued

#### Table 1 - Beck Depression Inventory

Name:		
Age:	Marital Status:	
Profession:	Education Level:	
Date of Application: / /	Score:	

#### Instructions:

On this questionnaire are groups of statements. Please read each group carefully. Then choose the statement in each group that best describes how you felt OVER THE LAST WEEK, INCLUDING TODAY. Circle the number beside the chosen statement. If you choose more than one statement in a group, circle each choice. Be sure you read all the statements in each group before making your choice.

<ul> <li>19.</li> <li>01 have not lost much weight if I have lost any recently.</li> <li>11 lost more than 2.5 kg.</li> <li>21 lost more than 5 kg.</li> <li>31 lost more than 7.5 kg.</li> <li>I am trying hard to lose weight, eating less.</li> <li>Yes No</li> </ul>	21. 0 I haven't seen any recent change in my sex drive. 1 I'm less interested in my sex life than I used to be.
<ul> <li>20.</li> <li>0 My current health does not worry me more than usual.</li> <li>1 I am worried about physical problems, such as pain and suffering, stomachaches, or constipation.</li> <li>2 I am very worried about physical problems and it's hard to think about anything else.</li> <li>3 I am so worried about my physical problems that I can't think about anything else.</li> </ul>	2 Today, I feel much less interested in my sex life. 3 I have completely lost interest in my sex life.
Total:	

In 2010, the Nursing Course at the Catholic University of Brasilia (UCB) had a total of 321 enrolled students. To define this sample, 91 questionnaires were applied, representing 30% of the total number of students enrolled in the course. Accessibility was the main inclusion criterion used in this study, which was dependent upon the availability of the student to participate in the study, whereas students' non-availability was used as the exclusion criterion. In an attempt to assure the physical integrity of the participants, any indication of risk or harm to an individual's health was defined as a criterion to suspend or end the study.

The questionnaires were typed in an Excel-type spreadsheet (Windows) and applied to individuals who had not previously been diagnosed with depression. According to the BDI, the following point scale was adopted: less than 10: minimal depression; 10 to 18: mild to moderate depression; 19 to 29: moderate to severe depression; and 30 to 63: severe depression.

## ETHICAL CONSIDERATIONS

This study was submitted to the UCB Research Ethics Committee, meeting all requirements set forth under Resolution 196/96, and was approved under protocol number 206/2010.

## RESULTS

Initially, this study was meant to include 200 students, but only 91 agreed to participate. These 91 students, from the second to the seventh semester of the nursing course, were interviewed. As regards the characterization by age range, it should be noted that, during the period studied, there was a slight predominance of individuals between 17 and 20 years of age, represented by 35 (34.4%) students of the sample, followed by 31 (34.0%) students between 21 and 23 years of age. What also stood out was a group of 10 (10.9%) students who were between 34 and 40 years of age. The study revealed that there was a significant predominance of female individuals, represented by 85 (93.4%) students of the sample versus 06 (6.6%) male nursing students. In this sample, 71 (78.5) were single and 20 (21.9%) were married. As regards the number of semesters the student had been studying in the nursing course before beginning this survey, the results showed that 10 (10.9%) were in their second semester; 20 (21.9%) were in their third semester; 13 (14.2%) were in their fourth semester; 35 (38.4%), representing the largest portion of the sample, were in their fifth semester; 11 (120%) were in their sixth semester, and 02 (2.2%) were in their seventh semester.

	Population			
Characteristics		%		
Age Range				
17 – 20	35	38,4		
21 – 23	31	34,0		
24 – 26	7	7,6		
27 – 30	6	6,5		
31 – 33	2	2,2		
34 – 40	10	10,9		
Gender				
Male	6	6,5		
Female	85	93,4		
Marital Status				
Married	20	21,9		
Single	71	78,0		
Semester				
Second	10	10,9		
Third	20	21,9		
Fourth	13	14,2		
Fifth	35	38,4		
Sixth	11	12,0		
Seventh	2	2,2		

#### Table 2 - Sociodemografic Characteristics

Table 3 presents the total number of cases of depression identified and classified by levels, according to that proposed by the BDI, that is, mild, mild to moderate, moderate to severe, and severe depression.

Table 3 - Levels of depression in undergraduate nursing students

Levels	N	%
Mild depression	57	62,6
Mild to moderate depression	23	25,2
Moderate to severe depression	10	10,9
Severe depression	1	1,1
Total	91	100

It could be observed that it was possible to identify a minimal depression in the majority of studied subjects, that is, 62.6%, whereas 25.2% presented symptoms that indicated mild to moderate depression; 10.9% indicated moderate to severe depression, and 1.1% indicated severe depression. These data were obtained from the results of the analysis of the interviews performed using the BDI. Although the interviewed subjects did not feel depressed, upon analyzing the answers given, according to the BDI, many of these individuals proved to be passing through different levels of depression.

## **DISCUSSION**

In the present study, the prevalence of minimal depression was observed in 57 (62.6%) of the investigated cases, while the prevalence of cases of mild to moderate depression could be found in 23 (25.2%) of the cases. Although the studied population represents a relatively small sample, with a greater number of female participants, the importance of the obtained results should not be discarded, given that, during the period of the study, depression was also a condition found in the moderate to severe stage in 10 (10.9%) of the participants, while severe depression was found in one (1.1%).

The prevalence of depression among nursing professionals warrants attention, since, in their daily routine, this professional comes in contact with psychological suffering, frequently marked by uncertainties and anxieties that must be carefully analyzed, considering that, once experienced, they unveil one's own inner feelings as well as the difficulty in dealing with them.<sup>11</sup>

Thus, this professional is inclined to suffer a wide range of fluctuations in moods and relationships, which are characteristic symptoms of the disease and which stem from one's own professional activity. These diverse experiences in the work environment can contribute to the development and attenuation of depression. In this manner, aimed at the appropriate development of professional activities and the development of a nurse's quality of life, the negative effects arising from the professional practice that lead to depression should be observed, analyzed, and, when possible, mitigated.

In the case of nursing students, depression is associated with the unleashing of feelings during the hands-on teaching-learning process, that is, when they are face-to-face with the patient. On these occasions, students experience feelings, such as insecurity and fear, as they need to act as a professional, when in fact they are not.<sup>4</sup>

These feelings are associated with the difficulty of interaction and with the understanding of patient-student communication, whose greatest concern is the sense of harm that one can inflict upon a patient, due to their own limited skills and practical knowledge.<sup>3</sup> Nevertheless, the presence of symptoms of depression in nursing students and professionals must not be seen as a factor of discrimination, but rather as a need to care for an individual who, though suffering, continues to take care of individuals who are also suffering.<sup>12</sup>

## FINAL CONSIDERATIONS

In today's world, depression has become a troubling condition both for undergraduate students and professionals who already work in the field of nursing. Specifically in the cases investigated in this work, it is known that the intensity with which these feelings of fear and insecurity arise in the beginning of the course tend to diminish over time, especially during one's internship, when the students begin to perform procedures that will be incorporated into their daily routine.

In this sense, when performing procedures adopted from previous experiences, the medical condition of depression tends to change, at which time the student passes through a process of adjustments and adaptations to their professional routine and, over time and with emotional maturity, the moments of conflict will become less frequent and the symptoms of depression will be handled more effectively by the individual.

Therefore, this study confirms the fact that depression does significantly affect one's self-esteem, thus representing an aspect that needs to be taken into consideration when caring for an individual who presents a state of depression. Moreover, one aspect that should be taken into account in the care of individuals presenting a depressive state is the search for measures that can raise their self-esteem.

It would therefore be advisable for this institution of higher education to implement a program of psychological support geared toward nursing students as an added benefit to nursing professionals' work, as well as to the students' psychological education, so that they will be better prepared to confront career and future job challenges in their field.

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