

DEPRESSION AMONG NURSING STUDENTS ASSOCIATED TO THEIR SELF-ESTEEM, HEALTH PERCEPTION AND INTEREST IN MENTAL HEALTH¹

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This study aimed to identify the presence of depression among nursing students in relation to their self-esteem, perception of physical health and interest in mental health. Methodology: the research was carried out in class among 224 nursing students. The Depression Knowledge and Points of View questionnaire was used, as well as Beck's inventory, the Self-esteem scale and information about health and quality of life. Sociodemographic and clinical data were investigated, as well as the students' interest in mental health. The project was approved by the Ethics Committee. Results: depression is present among nursing students at levels expected for the population. The statistically assessed results evidenced a correlation between physical health perception (bad and medium), interest and attendance to courses in the field, concluding that there are greater chances of depression among nursing students.

DESCRIPTORS: nursing; depression; mental health; students

LA DEPRESIÓN ENTRE ESTUDIANTES DE ENFERMERÍA RELACIONADA A LA AUTOESTIMA, A LA PERCEPCIÓN DE SU SALUD Y AL INTERÉS POR LA SALUD MENTAL

El objetivo de este estudio fue identificar la relación de la presencia de la depresión, entre estudiantes de enfermería, con su autoestima, su percepción de la salud física y con el interés por su salud mental. Metodología: la investigación fue realizada en sala de clases entre 224 estudiantes de enfermería. Se utilizó un cuestionario denominado Conocimiento y Puntos de Vista sobre la depresión, Inventario de Beck, la Escala de Autoestima e informaciones sobre salud y Calidad de vida. Se investigaron datos socio demográficos, clínicos y el interés del alumno por la salud mental. El Proyecto fue aprobado por el Comité de Ética. Resultados: la depresión está presente entre los estudiantes de enfermería en niveles esperados para la población. Los resultados, evaluados estadísticamente, evidenciaron una correlación entre la percepción de la salud física (mala y promedio), el interés y la asistencia a cursos en esa área; se concluyó que hay mayores posibilidades de que aparezca la depresión entre los estudiantes de enfermería con esas características.

DESCRIPTORES: enfermería; depresión; salud mental; estudiantes

DEPRESSÃO ENTRE ESTUDANTES DE ENFERMAGEM RELACIONADA À AUTO-ESTIMA, À PERCEPÇÃO DA SUA SAÚDE E INTERESSE POR SAÚDE MENTAL

Objetivou-se identificar a relação da presença de depressão entre acadêmicos de enfermagem com sua auto-estima, percepção da saúde física e interesse por saúde mental. Metodologia: pesquisa realizada em sala de aula, entre 224 estudantes de enfermagem. Utilizou-se questionário de Conhecimento e Pontos de Vista sobre depressão, Inventario de Beck, Escala de Auto-estima e informações sobre saúde e Qualidade de vida. Investigou-se dados sociodemográficos, clínicos e interesse do aluno pela saúde mental. O projeto foi aprovado por Comitê de Ética. Resultados: a depressão está presente entre estudantes de enfermagem em níveis esperados para a população. Os resultados, avaliados estatisticamente, evidenciaram correlação entre percepção da saúde física (ruim e média), interesse e frequência a cursos na área, concluindo-se que há maiores chances de presença de depressão entre esses estudantes de enfermagem.

DESCRITORES: enfermagem; depressão; saúde mental; estudantes

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INTRODUCTION

Depression is a universal mental disorder, whose main problem is the change in mood. Mood changes have a global repercussion on the activity of the affected person⁽¹⁾.

Depressive episodes are disabling, tend to be recurrent and, less often, are chronic without symptom remission. Every year, 17 million Americans are affected by depression, causing great suffering to patients, family members and people living amongst them. It is estimated that, by 2020, depression will be the main cause of disability in developing countries⁽²⁻³⁾.

A study looked at psychiatric hospitalizations in Ribeirão Preto, through the Single Health System (SHS), and showed that mood disorders were the second cause of hospitalizations from 1998 to 2002⁽⁴⁾.

Depression is a syndrome characterized by a group of symptoms with changes in one's mood (sadness, guilt), behavior (isolation), thought and perception patterns (less concentration, less self-esteem), with physical complaints (sleep, hunger, sex) and high risk of suicide.

Depression occurs with people of both genders, any age or social class. However, the first episode usually occurs during adolescence and early adulthood, and it is more common among women, especially due to hormone changes⁽¹⁻²⁾. Recent studies have addressed genetics, molecular biology, as well as image, hormone and metabolism research with a view to finding etiologic explanations for this pathology^(2,5).

The depressive state disturbs the way people evaluate and see themselves. It changes the perception they have of others and the world⁽²⁾, and affects their personal esteem. Self-esteem levels are personality constructs that result from intra and interpersonal relationships. They affect people's attitudes in their school activities, at work and in every other daily activity⁽⁶⁻⁷⁾.

The scientific community's interest in mood disorders has increased, due to their growing prevalence, associated with improved diagnosis, larger medication offer and knowledge on advancements in neurobiology research.

Health professionals' mental health, especially that of nurses, is subject to strong and controversial feelings. It has been the object of studies due to occupational stress, the ambiguities of the profession,

and the importance of these professionals' biopsychological integrity, as they deal with human suffering⁽⁸⁻¹⁰⁾. Nursing students begin to experience these ambiguities and demands as undergraduates^(7,11).

Knowing that depression can be more common among women living stressful situations in the first years of their adult life, that most nursing professionals are women, and that working in the health area is relatively stressful, since it means dealing with suffering lives, the concern about nursing students having depression is fundamental^(7,11).

Depression studies by nursing researchers have aroused the interest of researchers at the Center for Studies on Nursing Interpersonal Relationships (CSNIR), due to the importance of the topic for health in general, as well as for nursing care in terms of the early detection and management of depression cases, and due to the Center's commitment to nursing human resource development.

OBJECTIVE

To identify depression among nursing students and its relationship with the students' self-esteem, their perception of physical health, and their interest in mental health.

METHODOLOGY

This research was performed by the Center for Studies on Nursing Interpersonal Relationships (CSNIR), through a CNPq (Brazilian Scientific and Technological Development Council) project. This study adopted a descriptive quantitative approach, using psychometric resources, which includes tests, inventories, questionnaires and scales.

Location and subjects

This study was performed with first, second, and third-year nursing student of the Bachelor's Degree Course at the University of São Paulo at Ribeirão Preto College of Nursing. The classes have up to 80 students per year, and this figure in the following years varies depending on the students' performance. The 224 subjects in this study represent the universe of students present in the classroom on

the day chosen to administer the instruments. Some students were absent and two did not want to participate in the study.

Study instruments

Inventory on Knowledge about Depression, the Scale for Opinion about Depression, Beck Inventory, Self-esteem Scale and a Quality of Life Scale.

- *Inventory on Knowledge about Depression*: contains 12 situations that assess one's knowledge about the disease and its treatments, with five answer choices for each statement⁽¹²⁾.

- *Scale for Opinion about Depression*: consists of ten statements ranging from 0 (disagree) to 9 (agree). It looks at the meaning of depression, the interest in this topic and professional conduct⁽¹²⁾.

- *Beck's Inventory*: it was designed in 1960 and translated and validated to be used in Brazil in 1998⁽¹³⁻¹⁴⁾. It consists of 21 statements that identify the intensity of depression signs.

- *Self-esteem Scale*: designed by Janis & Field, it contains 23 items to determine self-esteem levels. It has been translated and adapted to the Portuguese language⁽¹⁵⁾.

Physical health self-evaluation, using a clinical perception question from the header of the Quality of Life Assessment Scale - WHOQOL-BREF.

These instruments, identified by codes, also contained sociodemographic data (gender, age, ethnics, marital status), clinical data (physical and mental health perception) and the nursing students' reports on their interest in the mental health area as well as their course attendance.

Data collection

Performed in the classroom where students met for school activities. The students received explanations about the study objectives, their right to decline participation and how to complete the forms. It was also clarified that cases with depression signs would be contacted and forwarded.

Ethics

The project was approved by the EERP/USP Ethics Committee (Review number 0335/2003.6). All participants provided written consent.

Data Analysis

The results were grouped in calculation tables and subject to statistical analysis with STATA. Fisher's exact test was applied in case there were associations between the variables (bivariate analysis).

For the joint analysis of the possible effect of independent variables on depression, multivariate analysis was applied. The chosen technique was backwards stepwise regression. The model initiates with all present variables and at each step the variable that contributes less to the explanation of the model is eliminated. Those that are significant at 5% are maintained.

The Odds-Ratio was chosen as the element for comparison. For every test, the probability of a primary error (Alpha) was fixed at 5%.

The results were discussed based on literature on the theme.

RESULTS AND DISCUSSION

Participants were 224 students from the first three years of the Nursing Bachelor's course (73, 75 and 76, respectively), with the following profile: most students were women (95%); ages ranged between 17 and 44 years, with a majority between 20 and 25 years (79%); almost all were single (95%), 4.5% were married, and 0.4% were separated (Table 1).

Table 1 - Distribution of sociodemographic variables of nursing students, according to the course year at the time of the research

Variables	1st Year (n=73)		2nd Year (n=75)		3rd Year (n=76)		Total (n=224)	
	num.	%	num.	%	num.	%	num.	%
Gender								
Male	3	4.1	3	4.0	5	6.6	11	4.9
Female	70	95.9	72	96.0	71	93.4	213	95.1
Age group								
< 20	27	37.0	6	8.0	1	1.3	34	15.2
20 to 25	40	54.8	66	88.0	71	93.4	177	79.0
> 25	6	8.2	3	4.0	4	5.3	13	5.8
Marital Status								
Single	71	97.3	73	97.3	69	90.8	213	95.1
Married	2	2.7	2	2.7	6	7.9	10	4.5
Separated	0	0.0	0	0.0	1	1.3	1	0.4

It is remarkable that 5.8% were older than 25 years, 4.9% were men, and 4.9% were not single, similar to a recent study with another group of

students⁽¹¹⁾. Furthermore, only 15.2% were younger than 20 years and the largest group (79%) was between 20 and 25 years old. It is observed that more men and older people, either married or not, have enrolled in the nursing course.

When observing these data in the three groups of students, it is verified that, in the first year, 8.2% of the students are 25 years or older, with 37% younger than 20 years, against 1.3% younger than 20 years in the third year. What is emphasized here is the 8.2% older than 25 years in the first year. This group was the most heterogeneous in terms of age.

COMPARING DEPRESSION WITH PERCEPTIONS OF PHYSICAL HEALTH, SELF-ESTEEM, KNOWLEDGE AND INTEREST IN MENTAL HEALTH

Based on the data obtained through the various instruments used, and due to their multiplicity, the authors have published, in another study, part of the results of this same research, focused on the analysis between depression and self-esteem⁽⁷⁾.

Regarding the identification of depression among the 224 students, there was one case of serious depression, 14 moderate depression, 28 mild depression, and 181 (80.8%) without signs of depression.

Since the study sample was neither clinical nor suspect, scores < 15 were used to determine cases without depression, 15 to 20 for dysphoria/mild depression, 20 to 30 for moderate depression, and > 30 for serious depression, as recommended to assess the general population^(12-13,16-18).

It is worth emphasizing that the rates found in the study sample for mild (12.5%) and moderate and serious (6.9%) depression are close to those found in the general population. The identified cases (6.9%) were contacted, welcomed, instructed and appropriately forwarded.

When analyzing the statements on the Beck Inventory, which addressed depression signs, it was observed that 19.2% (43) of subjects presented some degree of depression, 12.5% (28) of whom presented dysphoria, 6.3% (14) moderate depression, and one (0.4%) presented serious depression.

As to the nursing students' self-esteem, it was observed that 17% had high levels and most (63.4%) presented medium levels of personal esteem.

As to the association between self-esteem levels and depression, it was observed that none of those with high self-esteem levels presented any depression signs and, inversely, that all participants with signs of moderate or serious depression had medium self-esteem levels⁽⁷⁾.

Although this study did not aim to discuss quality of life indicators, included in the WHOQOL Quality of Life Scale, a positive correlation was observed between the students' self-evaluation of their physical and mental health and the presence of depression (Table 2).

Table 2 - Bivariate analysis results of the students' perception of physical and mental health according to their condition of having depression or not

Independent Variable	Dependent Variables		P (Fisher's test) (* significant for p<0.005)
	Without Depression	With Depression	
Physical Health			
Terrible	100.0	0.0	
Bad	28.6	71.4	
Average	54.1	45.9	
Good	85.1	14.9	
Very good	94.9	5.1	0.000*
Mental Health			
Terrible	0.0	100.0	
Bad	8.0	92.0	
Average	66.0	34.0	
Good	95.1	4.9	
Very good	100.0	0.0	0.000*

In the bivariate analysis of health (physical and mental) perception associated to depression, it is observed that students with depression consider that their mental health is not good, but especially consider their physical health as bad or average. In this sense, it is remarkable that two students without depression consider their physical health terrible, while one student with depression considers it very good, both with average self-esteem.

Naturally, depressed individuals perceive their emotional condition. In fact, they also find it easier to recognize their sleep, eating, and sex difficulties. However, these people do not associate the somatic symptoms with their depressive state. Therefore, they seek formal or alternative health services or turn to self-medication or isolation due to these difficulties^(1-3,5,17-18).

Regarding the Knowledge Scale about depression, it was observed that the students, in general, have good knowledge about depression. They know it is a common disease that can cause personal as well as social complications. This has also been observed in previous studies⁽¹⁷⁻¹⁸⁾.

According to studies with the same subjects⁽⁷⁾ and studies with other students and nurses⁽¹⁷⁻¹⁸⁾, a lack of precise information is observed about the criteria used to identify depression, pharmacological effects and interactions, as well as about other therapeutic resources.

The scale for assessing the students' opinion about depression classified the scores as low (0 to 2.9), average (3 to 6) and high (6.1 to 9). The results show that 85.3%, 93.7% and 31.3%, respectively, have points of view that agree with the test, that is, they know how to identify depressed patients; Furthermore, they agree that nurses can be the first element in detecting and managing depression cases.

This opinion test also identified the students' interest in mental health and their participation in extracurricular courses in that field. Previous studies have shown lack of interest and participation in courses among nurses⁽¹⁷⁾, against strong interest among bachelor's students⁽¹⁸⁾.

As previously assessed, a certain association is observed between time since graduation and interest in mental health. Until recently, the mental patient was an issue and a competence of that specialty and institutionalization in closed psychiatric hospitals; therefore, other health professionals were not concerned with improving or updating the knowledge they acquired in their professional development.

However, there have been changes in this situation due to the psychiatric reform movement, and because of the reorganization in the Brazilian health system (SHS), offering primary health care with Family Health Programs and the BHU (Basic Health Units), secondary services (outpatient care, psychosocial care groups and centers) and hospitalization services (emergency, hospitals and clinics) and psychosocial rehabilitation.

Considering the current health care scenario and the data found in the present study, an attempt was made to establish correlations between some significant variables and the presence of depression, through bivariate analysis, as observed in Table 3.

It is observed that some variables showed significant results when compared to the presence of depression.

The relationship between depression and self-esteem had already been evidenced in a previous study⁽⁷⁾ and is confirmed through bivariate analysis with $p < 0.005$ (Table 3).

Table 3 - Distribution of bivariate analysis results according to the presence of depression among nursing students

Independent Variable	Dependent Variable		P (Fisher's test) (* significant for $p < 0.005$)
	Without Depression	With Depression	
Interest			
Little	81.6	18.4	0.056
Strong	71.6	28.4	
Course in Mental Health			
No	83.1	16.9	0.004*
Yes	65.7	34.3	
Gender			
Male	77.5	22.5	0.539
Female	81.8	18.2	
Knowledge			
Low and average	79.9	20.1	0.174
High	73.3	26.7	
Points of view			
Low and average	76.8	23.2	0.397
High	79.4	20.6	
Age			
≤21 years	78.5	21.5	0.431
>21 years	76.6	23.4	
Self-Esteem			
Low	28.6	71.4	0.000*
Average	74.3	25.7	
High	100.0	0.0	

For a joint appreciation of the effects each variable exerts on the dependent variable "depression" in the presence of the other variables, multivariate analysis was performed, using logistic regression. This analysis, with adjusted odds ratio and respective confidence intervals, permit to assess the associations between the variables "perception of physical health", "reporting interest in mental health", "attending courses in this field" with the presence of depression. Table 4 lists the variables that were maintained in the model, with the respective odds ratio and P values.

Table 4 - Logistic regression results: *Adjusted odds ratio* with the respective confidence intervals

Variables	Adjusted odds ratio	P	CI 95 %	Variable category associated to depression
Perception of physical health	0.11	0.00	0.05-0.26	Bad health
Interest in Mental Health	2.22	0.04	1.02-4.81	High interest
Courses in the field	2.34	0.03	1.08-5.09	Attended course

N = 196
Pseudo R2 = 0.19
Chi-square = 0.000

From these results, it is observed that: having average or bad physical health increases the risk for depression by 1/0.11; the high level of interest in

mental health increases the chance of being depressed/having depression by 2.22; having attended a course in the field (psychiatry/ mental health) increased the chance of being depressed/having depression 2.34 times.

These findings are revealing and of great interest.

A narrow relation between depression and physical state was observed.

Individuals report on depression in every human aspect (psychiatric, physical and social). They tend to associate physical perceptions of depression, such as fatigue after minimum effort, sleep pattern changes, loss of appetite, reduced or increased psychomotor speed, weight changes and loss of libido with some physical problem or another clinical condition not associated with the mental state. This fact is reinforced when depressed persons assess their physical condition as bad. Depressed individuals are not often aware of this condition. In general, they consult different or alternative health professionals. Some live in conformity with their poor quality of life, and hence increase their isolation, interest in bad news, tragedies. They also learn to accept the terrible conditions of their physical health (sleeping badly, changes in weight and appearance, and having no interest in sex)^(1-2,12).

Although the students report their interest in mental health, and although those participants who most attended courses were part of the group with depression signs, the authors believe that there is no relationship between the cause and effect of participating in courses and having depression. However, it is suggested that, in their silent suffering, they search for answers to their symptoms in these courses.

Many depressed people seek the help of clinical physicians, priests or religious mentors. In general, patients get in touch with various health care

professionals. They ask indirect, diffused, incomplete questions, testing these professions' point of view. They search for information on the internet, books, take courses or choose nursing, psychology, or social work professions when they wish to find answers to their hidden anxiety.

Since depressed people do not ask straightforward questions, they never find effective answers, so they continue searching when they do not find the appropriate pathway to overcome their problem.

The present study results offer important contributions, in line with the World Federation for Mental Health's proposal for the 2006 World Mental Health Day, which addressed awareness about risks of developing mental illnesses and suicide⁽¹⁹⁾.

CONCLUSIONS

Depression is present among nursing students at the same levels as expected for the non-diagnosed population. Having depression implies associated medium levels of self-esteem. In addition to the characterized emotional state of depression, depressed students notice physical health problems, although they do not associate them with this condition.

There was a tendency towards greater interest in the theme and a greater search for mental health courses among students with some sign of depression.

The identified cases were contacted, instructed and/or forwarded.

Finally, special attention should be given to the changes in the depressive state among nursing students and their search for frequent clinical services and extra-class activity in the field should be observed.

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