Objective: Identify the occurrence of Burnout Syndrome among undergraduate nursing students. Method: Cross-sectional study conducted with 172 undergraduate nursing students from 2 public universities within the Metropolitan Region of Recife, Pernambuco, Brazil. Data were collected by means of a questionnaire, statistically analyzed through the software Microsoft Excel and displayed in tables. The study was approved by the Research Ethics Committee of the University of Pernambuco (UPE), under the Protocol 044/2007. Results: 51.2% of undergraduate students had low/moderate level of emotional exhaustion; 71.5% had high levels of depersonalization; and 91.3% had high level of reduced professional achievement. Conclusion: No significant levels were found regarding the Maslach Burnout Inventory (MBI), however, there was a need for timely preventive actions in relation to low and moderate levels of professional achievement, which already affect undergraduate nursing students. 

Descriptors: Burnout; Professional; Nursing Students; Mental Health.

ABSTRACT

Objective: Identify the occurrence of Burnout Syndrome among undergraduate nursing students. Method: Cross-sectional study conducted with 172 undergraduate nursing students from 2 public universities within the Metropolitan Region of Recife, Pernambuco, Brazil. Data were collected by means of a questionnaire, statistically analyzed through the software Microsoft Excel and displayed in tables. The study was approved by the Research Ethics Committee of the University of Pernambuco (UPE), under the Protocol 044/2007. Results: 51.2% of undergraduate students had low/moderate level of emotional exhaustion; 71.5% had high levels of depersonalization; and 91.3% had high level of reduced professional achievement. Conclusion: No significant levels were found regarding the Maslach Burnout Inventory (MBI), however, there was a need for timely preventive actions in relation to low and moderate levels of professional achievement, which already affect undergraduate nursing students.

Descriptors: Burnout; Professional; Nursing Students; Mental Health.

RESUMO

Objetivo: Identificar a ocorrência da Síndrome de Burnout em acadêmicos de enfermagem. Método: estudo transversal realizado com 172 acadêmicos de Enfermagem de 2 universidades públicas da Região Metropolitana do Recife (PE). Os dados foram coletados por meio de um questionário, analisados estatisticamente com o programa Microsoft Excel e apresentados em tabelas. O estudo foi aprovado pelo Comitê de Ética em Pesquisa da Universidade de Pernambuco (UPE), sob o Protocolo n. 044/2007. Resultados: 51,2% dos acadêmicos apresentaram baixo/moderado nível de exaustão emocional; 71,5% apresentaram altos níveis de despersonalização; e 91,3% apresentaram alto nível de reduzida realização profissional. Conclusão: não foram encontrados índices significativos em relação ao Maslach Burnout Inventory (MBI), porém, constatou-se a necessidade de intervenções preventivas pontuais em relação aos baixos e moderados níveis de realização profissional, que já afetam os acadêmicos de Enfermagem.

Descritores: Esgotamento Profissional; Estudantes de Enfermagem; Saúde Mental.

RESUMEN

Objetivo: Identificar la ocurrencia del Síndrome de Burnout en académicos de enfermería. Método: estudio transversal realizado con 172 académicos de Enfermería de 2 universidades públicas de la Región Metropolitana del Recife (PE). Los datos fueron recogidos por medio de un cuestionario, analizados estadísticamente a través del software Microsoft Excel y se presentan en tablas. El estudio fue aprobado por el Comité de Ética en Investigación de la Universidad de Pernambuco (UPE), bajo el Protocolo n. 044/2007. Resultados: 51,2% de los académicos tenían bajo/moderado nivel de exaustión emocional; 71,5% tenían altos niveles de despersonalización; y 91,3% tenían alto nivel de reducida realización profesional. Conclusión: no se encontraron niveles significativos con relación al Maslach Burnout Inventory (MBI), sin embargo, se constató la necesidad de acciones preventivas oportunas con relación a los niveles bajos y moderados de realización profesional, que ya afectan a los académicos de Enfermería.

Descritores: Esgotamiento Profesional; Estudiantes de Enfermería; Salud Mental.
INTRODUCTION

The teaching-learning process in Nursing has two different aspects: the educational process itself, which aims at training new professionals, and the educational process during care, and there is an inter-relationship between them. During the undergraduate course, prospective professionals deal with extreme situations, often in the beginning (3rd or 4th semesters) and due to the fact that academic education, by itself, does not provide the student with emotional ability to cope with loss and mourning on a daily basis, this lack of training affects both her/his professional and personal life.¹,²

During the teaching-learning process, contact and approach to ethical, personal, and technical issues that are relevant for professional practice may cause burnout, which is a workplace-related syndrome characterized by a process of chronic response to occupational stress, when the coping methods fail or are insufficient, bringing up negative consequences both at the individual and professional, family, and social levels; unlike stress, which emerges as a response to a given situation, this syndrome arises at a certain time sequence.³

The term Burnout was coined in the 1970s, in the USA, by Herbert J. Freudenberger after observing that many volunteers he worked with had a gradual process of distressed mood and/or demotivation that lasted about a year and it was accompanied by physical and psychological symptoms, which denoted a particular state of feeling “exhausted”. Subsequently, the social psychologist Christina Maslach studied the way how people faced emotional stimulation at their workplace, reaching conclusions similar to those by Freudenberger. She was interested in the cognitive strategies named depersonalization. These strategies refer to how health professionals (nurses and doctors) blend compassion with emotional detachment, avoiding involvement with the disease or pathology that the patient has and using “dehumanization as self-defense”, i.e. the process of protecting oneself against stressful situations, answering to patients in a depersonalized manner.³,⁶

Somatic manifestations represent a kind of standard for characterizing Burnout syndrome. A multidimensional definition of Burnout includes three components: emotional exhaustion, depersonalization, and reduced personal and professional achievement. Emotional exhaustion is characterized by a very strong sense of emotional tension that produces a feeling of exhaustion, lack of energy and emotional resources of one’s own to cope with the routines of professional and personal practice. Finally, emotional exhaustion refers to the sense of not having any further energy to do anything. This state usually makes professionals less tolerant, easily irritable, nervous, “bitter” at the workplace and even outside it, towards family and friends. Relations to work and life are experienced with dissatisfaction and pessimism.³,⁵

Depersonalization is the result of negative attitudes and feelings, exacerbated emotional detachment, coldness, indifference before the needs of others, insensitivity. It does not mean that the individual ceased to have a personality, but this underwent and/or has been undergoing changes. At first, it is a protective factor, but it may pose a risk of dehumanization. Contact to people is only tolerated and the overall attitude involves intolerance, irritability, and indifference in relation to what might happen to others. Given such a deteriorated quality of activity, professional and personal achievement become extremely compromised.³,⁵

The lack of personal and professional fulfillment is characterized as a trend that affects interpersonal skills related to professional practice, something which directly influences on the way how care is provided and on the contact to service users, as well as to the organization. The sense of dissatisfaction with professional practice becomes evident, as well as feelings of inadequacy, low self-esteem, professional failure, demotivation, resulting in low effectiveness at work.³,⁵

Emotional exhaustion is the first response to stress at the workplace. Once exhausted, people feel physically and emotionally tired, they feel it is difficult to relax. Exhaustion is the main complaint among individuals who suffer from this syndrome, followed by depersonalization, externalized by a cold attitude to people, and reduced professional fulfillment, with a sense of failure related to the profession.⁵,⁶

Emotional exhaustion represents the dimension of primary tension in Burnout syndrome; depersonalization expresses the interpersonal context where the subject performs her/his work, and the reduced personal achievement represents the individual’s self-assessment on her/his occupational and personal performance.⁵,⁶

The relevance of the theme addressed in this study is justified by bringing up a common problem in health professionals’ everyday life,
to which undergraduate Nursing students may be exposed during their course: the border between stress and Burnout syndrome.

**OBJECTIVES**

- To verify the occurrence of Burnout Syndrome among undergraduate nursing students.
- To evaluate undergraduate Nursing students as for their levels of emotional exhaustion, depersonalization, and personal accomplishment through scores obtained on the test.

**METHOD**

The study relied on the participation of 2 public Higher Education institutions and 2 private institutions in Recife, Pernambuco, Brazil, in 2007, distributed as follows: undergraduate students at the professional cycle (5th, 7th, and 9th semesters) of the School of Nursing “Nossa Senhora das Graças” of the University of Pernambuco (FENSG/UPE) and undergraduate students from the Department of Nursing (5th and 7th semesters) of the Federal University of Pernambuco (UFPE).

The inclusion criteria were: aged over 18 years and being duly enrolled in the colleges participating in the survey. Those who did not accept to participate and those aged under 18 years were excluded.

In order to support data collection, a questionnaire was prepared, consisting of 2 parts, applied to respondents at once: the first with personal information about respondents and activities performed during free time, created by the authors; the second consists of the Maslach Burnout Inventory (MBI). This is a questionnaire that must be answered by means of a 7-point frequency scale ranging from 0 (never) to 6 (always), consisting of 22 questions. This assesses 3 dimensions: emotional exhaustion (EE), with 9 items; depersonalization (DE), with 5 questions; and professional achievement (PA), with 9 items. Burnout is considered when there are high scores on EE and DE and low scores on PA.

Data were organized into tables and statistically analyzed through the software Microsoft Excel.

This study was approved by the Research Ethics Committee of the University of Pernambuco (UPE), under the Protocol 044/2007.

**RESULTS**

- **Respondents’ profile**

  In the group under study, consisting of 172 undergraduate students, 44 respondents were from the Department of Nursing of UFPE and 128 were from FENSG/UPE.

  Analysis on the age group reveals that the undergraduate Nursing students are young, with age ranging from 20 to 31 years, having a mean age of 22.9 years, something which confirms the predominance of young individuals in the profession.

  According to the sociodemographic characteristics, we confirmed the predominance of women (91.3%), corroborating other studies.

  Regarding extracurricular activities, 44.2% report working and/or doing internship. Furthermore, when asked about their free time, 86.63% watch TV and videos, 77.33% use the computer, 75.60% read and study, 69.20% engage in leisure activities, 45.93% do household chores, 21.51% play sports, and 5.23% engage in craft activities.

- **Scores obtained on the Maslach Burnout Inventory**

  In the sample with 172 students, it was observed that 91.3% have a high level of reduced professional accomplishment, while 8.7% have a high level of professional achievement. The sample also revealed that there was a low/moderate level of depersonalization (71.5%) and emotional exhaustion (51.2%).

  Having in mind that Burnout Syndrome is characterized by high levels on EE and DE and low in PA, the results obtained confirm that there was not Burnout in this sample (Table 1).

| Table 1. Distribution by level on MBI. Recife, 2008. |
|---|---|---|
| Levels | EE | DE | PA |
| High | 48.8% | 28.5% | 8.7% |
| Low/moderate | 51.2% | 71.5% | 91.3% |

**Emotional exhaustion**

According to the dimension emotional exhaustion, 48.8% of the study population have high levels of emotional exhaustion and 51.2% have low/moderate level on this dimension, where values ≥ 26 points are regarded as high level of emotional exhaustion (Table 2).
Emotional exhaustion represents the individual’s depletion of emotional resources. It is regarded as the initial trait of the syndrome and primarily derives from overload and personal conflict in interpersonal relationships.

Thus, scholars emphasize that emotional exhaustion is characterized by the absence or lack of energy and a sense of emotional exhaustion, as well as the emergence of a sense of having reached one’s own limit of possibilities, showing similarities to other studies.6,10,13

- **Depersonalization**

In this dimension, 28.5% of undergraduate students showed high levels of depersonalization and 71.5% low/moderate levels (Table 3). We regard as high levels of depersonalization scores ≥ 9 and data are similar to those found in other studies.10-15

- **Professional achievement**

In this study, 91.3% of undergraduate students showed low levels of professional achievement, in turn, 8.7% had high levels. We regard the scores ≥ 43 as a high professional achievement (Table 4).

The lack of personal accomplishment at the workplace constitutes a tendency that these professionals evaluate themselves in a negative way and, particularly, this negative evaluation affects the ability to fulfill work and the relation to people they serve. Workers feel dissatisfied about themselves and dissatisfied about their results at work.17

In the result of 91.3% of subjects under study, professional achievement is compromised, considering that we are investigating students who have not had access to the labor market. This result shows up as similar to other studies where students had low professional achievement, demonstrating a sense of dissatisfaction that may be justified by the fact that the student is faced with something new, either in the classroom, in the laboratory, in the care for an emergency, or in the provision of care where their internship takes place, without due preparation to deal with the situations addressed.10,11,18

Besides, it is also believed that the practical learning of a profession such as nursing, which deals with one of the most explicit demonstrations of human restrictions – disease and death – is, also, experiencing one’s own limitations: it is the meeting of weaknesses between the rational and the emotional. The daily life of this undergraduate student becomes marked by feelings of doubt, disappointment, anxiety, fear, sadness, anger, and anguish, leading her/him to express feelings of pain, sadness, and anxiety due to the suffering of others.

### DISCUSSION

During the undergraduate course, it is of paramount importance that education,
Besides prioritizing scientific knowledge and the improvement of practical skills, seek to get the student closer to market requirements, facilitating her/his transition to the professional world and preparing her/him for the various difficulties to be faced. It is during the undergraduate course that the limitations posed to a professional at a certain workplace may constitute a stressor in her/his daily life, which increases as she/he notices that expectations are not met in her/his practice.18-19

The undergraduate students at the last year of the Nursing course may have observed and experienced stressful situations, behaviors, and attitudes in the classroom and in the fields of internship; anxiety and distress related to academic works, professional prospects (insecurity regarding the labor market and professional training) and these facts may trigger the process of stress, which can be reproduced and exacerbated during her/his insertion into the labor market. Burnout syndrome is investigated in most studies involving health professionals, there are few studies investigating prospective professionals. By analyzing the profile of students enrolled in the Nursing course, a study found that 43.5% of its sample attended a technical course before entering the Nursing course, something which demonstrates that there is a search for the qualification required by a competitive labor market. Among students, we may identify as stress factors an overload of theoretical/practical academic activities, expectations and concerns about the occupational world, relation between work/study, relation between study/family life/housing, and interpersonal interaction.19

The identification of stressors may contribute to the creation of strategies to manage stressful situations that might arise during the undergraduate Nursing course, leading to better academic achievement and preparing undergraduate students to face a labor market with significant challenges as prospective professionals.19

CONCLUSION

Given what has been exposed in this study, there are no cases of Burnout Syndrome among the population under study, since a low/moderate level of EE and DE were observed.

We emphasize that the highest scores of failure to obtain professional achievement were found in the 4th and 5th semesters at the institutions under investigation, undergraduate students who have not accessed the labor market, yet, but notice the major problems of the health field in Brazil, and these findings stress the importance of interventions aimed at younger students and those attending the early semesters. We believe that there is a need to find a more effective way that enables primary prevention of this syndrome in the health field. However, it is possible to think that some of these stressors are already related to student’s practice as a health professional.

Despite we have not found the occurrence of Burnout syndrome, it becomes clear that the study population is at risk for this syndrome, since 48.8% of the sample were characterized as having high level of EE, almost half of the sample, demonstrating both a physical and mental exhaustion, which compromise their daily practice with the patient; and 91.3% of undergraduate students demonstrated reduced personal accomplishment, showing dissatisfaction with their profession even before entering the labor market. Due to these results, it is worth deploying interventions so that it is possible to prevent this syndrome. Faced with it all, suggestions at the individual, group, and organizational levels are exposed.

We may propose as individual strategies: adopting healthy lifestyle habits, such as engaging in enjoyable activities during free time, having at least 6 hours of daily sleep, regular physical exercises, reasonable division of time between work and leisure, eliminating stressors, resorting to relaxation techniques, and seeking professional care in cases related to stress and burnout.

Group strategies consist in seeking to communicate with colleagues, family members, and friends, having a network of friends, in order to share important moments and difficult situations, thus increasing chances of solving problems, or at least the prospect of relief and comfort.

In an organizational domain, there are strategies aimed at improving the institutional climate, such as preparation programs for the professor of clinical training, in order to understand the student and the time she/he is going through in the profession; socialization groups to lessen the reality shock; providing some free time so that students organize their life; stimulating group evaluation works before, during, and after joining clinical teaching, with follow up by a psychologist to approach situations observed in clinical internships.

Providing the student with emotional assistance is a must during her/his education. Relieving anxieties, conflicts, and concerns contributes to her/his growth as a person and
Burnout syndrome among undergraduate nursing students at the university, constitute alternatives that may contribute to reduce the incidence of Burnout syndrome.

REFERENCES
