


## PREVALENCE OF BURNOUT SYNDROME IN PHYSIOTHERAPY STUDENTS IN THE EARLY AND FINAL YEARS

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### ABSTRACT

**Introduction:** Burnout Syndrome (BS) is an emotional disorder caused by extreme stress at work and characterized by exhaustion, depersonalization, and feelings of incompetence. BS is increasingly observed in higher education academics, especially in the health area, due to the high curricular requirements and contact with patients. **Objective:** To analyze the prevalence of Burnout Syndrome among students in the initial and final years of the Physical Therapy course at the State University of Northern Paraná. **Methods:** A cross-sectional study was carried out in which 102 students from the 2nd to the 8th period of the Physical Therapy course were recruited. Using the Maslach Burnout Inventory Student Survey (MBI-SS), the suggestion to the syndrome among students was analyzed. **Results:** Burnout Syndrome was more evident among the initial years of the course, and the Emotional Exhaustion (EE) dimension was the most prevalent among students of all years. The highest response rate occurred between the initial years, and most of the volunteers were female. **Final considerations:** It was possible to observe that students in the early years were more suggestive of Burnout Syndrome when compared to the final years. However, the results show the need to pay attention to the mental health of students, from the first years of the course.

**Keywords:** Student Health. Psychological Exhaustion. Physical Therapy.

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## INTRODUCTION

Burnout Syndrome (BS) is an emotional disorder that manifests itself through symptoms of extreme exhaustion, stress, and physical exhaustion resulting from exhausting work situations, which demand a lot of competitiveness or responsibility. The syndrome encompasses three dimensions: emotional exhaustion, depersonalization, and lack of personal fulfillment. Emotional exhaustion refers to extreme fatigue caused by the work environment; depersonalization is the propensity to treat patients with indifference; and the lack of personal fulfillment is defined as a feeling of incompetence (MEDEIROS *et al.*, 2021; OLMOS-BRAVO *et al.*, 2014).

According to the National Association of Occupational Medicine (Anamt), Burnout Syndrome affects about 30% of Brazilian workers. Several studies point to moderate to high levels of burnout among health professionals, including nurses, doctors, psychologists, and physiotherapists. However, the presence of BS in higher education students, especially those who belong to the health area, which encompasses Physical Therapy, is increasingly evident and studied, which can be explained by the high demands of the curriculum and specific factors such as the interaction with patients seen during clinical practices and internships (OLMOS-BRAVO *et al.*, 2014; MARCH-AMENGUAL *et al.*, 2022).

Higher education courses in the health area, in general, have an extensive curriculum and can become a stressful environment for some. Academics in the initial years are usually younger than other students, which can mean a lack of experience to deal with the high demands of the course. On the other hand, students in the last years of graduation are involved with internships and other curricular practices, the stress in this case may be related to frustration in the face of attendance, or even because they are already inserted in a work environment (MESQUITA, PRAXEDES, NASCIMENTO, 2021).

However, in the physiotherapy course, the practical curricular components are distributed throughout the course, so from the beginning, the student begins to develop the therapist-patient relationship. During the last few years, students are subjected to supervised curricular internships, bringing them closer to professional practice (ROSSI, PINTO, 2022).

In this sense, the present study aimed to analyze the prevalence of Burnout Syndrome in students of the Physical Therapy course, through a comparison of classes in the initial and final years.

## METHODOLOGY

This was a cross-sectional study, approved by the Ethics Committee under opinion: 6,027,475. Through face-to-face collection, 102 volunteer students were recruited, these students from the 2nd to the 8th period of the physiotherapy course at the State University of Northern Paraná (UENP). The students in the initial years belonged to the 2nd and 4th period, while the students in the final years were composed of the 6th and 8th period. Among the requirements for inclusion, volunteers had to be students of the physiotherapy course at UENP and agree to sign the Informed Consent Form (ICF).

The Maslach Burnout Inventory Student Survey (MBI-SS) questionnaire was used, which is validated to investigate the risk of Burnout Syndrome in students. The questionnaire consists of 15 topics that assess three dimensions: Emotional Exhaustion (EE) (5 items); Disbelief (DE) (4 items) and Professional Effectiveness (PE) (6 items). Each question has 7 answer options on a Likert-type scale where zero (0) means never, and six (6) every day. The dimensions are individually graded, with EE (low = 0-9; moderate = 10-14; high > 14; ED (low = 0-1; moderate = 2-6; high = > 6) and SE (low <23; moderate = 23-27; high > 27). Suggestion to BS can be defined based on two criteria: two-dimensional criterion (high score for emotional exhaustion and high score for disbelief), and three-dimensional criterion (high score for emotional exhaustion, high score for disbelief, and low value for professional effectiveness). Both criteria were used to compare the prevalence of propensity for Burnout Syndrome in the initial and final years of the Physical Therapy course (SILVA *et al.*, 2022).

## RESULTS

Of the 102 students, 60 (58%) belonged to the initial years and 42 (42%) were students in the final years. The highest response rate was among students in the 2nd period of the course, representing 31.3% of the volunteers. Females represented 72.5% of the interviewees (Table 1).

**Table 1** - Characterization of the sample.

Variables	N (%)				
	TOTAL	2nd period	4th Period	6th period	8th period
	102 (100)	32 (31)	28 (27)	19 (19)	23 ( 23)
<b>Sex</b>					
Female	74 (73)	24 (32)	22 (30)	11 (15)	17 (23)
Male	28 (27)	8 (29)	6 (21)	8 (29)	6 (21)

#### Marital status

Married	2 (2)	1 (3)	1 (4)	0	0
Single	100 (98)	31 (97)	27 (96)	19 (100)	23 (100)
Widower	0	0	0	0	0
Other	0	0	0	0	0

#### Offspring

Yes	1 (1)	0	0	1 (5)	0
No	101 (99)	32 (100)	28 (100)	18 (95)	23 (100)

#### Higher education

Yes	2 (2)	1 (3)	0	0	1 (4)
No	100 (98)	31 (97)	28 (100)	19 (100)	22 (96)

	Mean (SD)				
Age	20 (2,44)	19,5 (2,90)	20 (1,63)	21,4 (2,89)	21,6 (1,52)

Based on the two-dimensional criterion, 31 (52%) students in the initial years were suggestive of Burnout Syndrome, against 19 (45%) students in the final years. Based on the three-dimensional criterion, the suggestion to the syndrome appeared in only 6% of the students in the 2nd and 4th periods, and in 4.7% between the 6th and 8th periods. The participating students who belonged to the initial years were younger when compared to the final years, with a mean age of 19 years ( $\pm 2.38$ ).

As for the dimensions alone, Emotional Exhaustion was the most prevalent, with high values in 80% of the students in the initial years and 78.5% in the last years. Professional Effectiveness, on the other hand, showed a slight dominance of 11.9% among the final years, against 11.6% in the initial years, as shown in Table 2.

**Table 2** - Dimensions of Burnout Syndrome in the initial and final years.

	N(%)	
	Early years	Final Years
Emotional Exhaustion	48(80%)	33(78,5%)
Disbelief	34(56,6%)	20(47,6%)
Professional Effectiveness	7(11,9%)	5(11,6%)

## DISCUSSION

Among all the academics evaluated, the female gender stood out, which is explained by MESQUITA, PRAXEDES, NASCIMENTO (2021) due to the predominance of women in health courses.

In addition, MARCH-AMENGUAL *et al.*, 2022, who also investigated academic exhaustion and the presence of Burnout Syndrome in first-year students, explains that high levels of burnout can be due to the high workload and tend to increase over the years of the course, which was not found in the results of the present study, given that the last few years have presented a lower number of suggestions to the SB.

CAMPOS, 2015 identified a higher level of Disbelief in academics in recent years, that is, those who are closer to graduating, which also contrasts with the findings of the present study, since the initial years presented a higher level for this dimension.

According to the three-dimensional criterion, used to analyze the presence of Burnout Syndrome, the findings of SILVA *et al.*, 2022 also showed the prevalence of BS in the minority of students, with values close to 6%. This study also found high values for Disbelief (35.3%), while the results of the study by GONZÁLEZ *et al.*, 2016 showed a medium-high value for professional effectiveness, corroborating the present study.

Emotional Exhaustion as the most prevalent dimension was also found in the findings of MESQUITA, PRAXEDES, NASCIMENTO (2021), who also found a higher level of Burnout Syndrome in younger students, corroborating the results of this research. This data can be explained, according to MESQUITA, PRAXEDES, NASCIMENTO (2021), by the lack of maturity on the part of students in the early years in the face of the great demands that the higher education course may present, and as the periods progress, students end up acquiring greater security in their tasks, which makes them less susceptible to stress.

According to SILVA *et al.*, 2022, the three-dimensional criterion expresses greater reliability during the analysis of Burnout Syndrome, since it analyzes the three dimensions associated with the detection of the syndrome, which may explain the high level of BS in students when the two-dimensional criterion is used, since it analyzes only two of the dimensions, which may make the evaluation more limited.



## FINAL CONSIDERATIONS

The results point to a high suggestion to Burnout Syndrome, which was more prevalent among the initial years of the physiotherapy course, which highlights the need to look at students as a whole, from the beginning of their academic training, since they have a large curriculum and are, most of the time, having their first contact with academic life. which can generate problems related mainly to the student's mental health.

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