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Research Article

Academic Burnout: A Descriptive-Analytical Study of Dimensions and Contributing Factors in Nursing Students

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Abstract

Background: Academic burnout is one of the challenges in nursing education that is particularly important due to the stressful nature of the field. The experience of this phenomenon over the course of the students' education and its persisting effects after graduation lead to poor academic performance, job dissatisfaction, reduced quality of nursing services and even leaving the profession.

Objectives: This study aims to determine the level of academic burnout and examine its contributing factors in nursing students at Qazvin University of Medical Sciences in 2016.

Materials and Methods: The present descriptive-analytical study was conducted on 180 undergraduate nursing students selected through the census method. Data were collected using a personal demographic information form and the Maslach Burnout Inventory-Student Survey (MBI-SS), and the content validity and internal consistency of the tool were confirmed. Data were analyzed using descriptive and analytical statistics in SPSS-16. The level of statistical significance was set at $P<0.05$.

Results: The total academic burnout score obtained was 39.2±14.4, which suggests moderate levels of academic burnout in the students. A total of 67.7% of the students received a moderate academic burnout score. Of all the dimensions of academic burnout, academic inefficacy had the highest mean (16.5±5.91). The academic burnout score had a significant inverse correlation with the variable of GPA ($r=-0.3$, $P<0.001$) and a significant relationship with the type of residence ($P=0.001$).

Conclusion: Moderate and high levels of academic burnout in nursing students contribute to a diminishing performance, especially in terms of learning clinical skills. A greater understanding of the factors causing an increase or reduction in academic burnout can therefore help prevent or minimize the occurrence of this phenomenon. Moreover, nursing education planners should take special account of factors such as academic performance, type of residence and level of interest in the discipline.

Keywords: Burnout; Academic burnout; Nursing students; Nursing education

Introduction

To examine the primary sources of burnout, researchers begin seeking their evidence from the 1970s; a syndrome that is caused by a prolonged exposure to high levels of various stresses in the workplace or academic settings, especially among medical and healthcare personnel, which can ultimately affect people's health [1].

As one of the main factors causing reduced academic performance, academic burnout implies a feeling of exhaustion with the school assignments and anything related to studying and encompasses a poor attitude toward class materials that ultimately leads to non-participation in school and educational activities and eventually creates a feeling of inability to learn the course material [2-6].

Academic burnout is highly important in students of medical sciences, since medical education is inherently more challenging and causes various stresses in the students. Nursing students are no exception to this rule and some of them experience burnout in the course of their education. Academic burnout is distinctly important in nursing students as future nurses, since many freshly-graduated nurses end up experiencing burnout and job dissatisfaction in the clinical settings in which they work due to their previous experience of stress and burnout during their school years, and this phenomenon ultimately results in a reduced quality of nursing services, leaving the nursing profession and eventually the shortage of nurses [7-12].

In general, some of the main factors known to cause academic burnout in nursing students include the full-time programs, entry into clinical settings and encounters with patients and having to perform procedures that may occasionally cause discomfort, fear and distress. Some studies propose personal factors as involved in the experience of burnout or in resistance to it. In one study, Da

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Table 1: The frequency of the demographic variables in nursing students at Qazvin University of Medical Sciences in 2016.

Variable		Number	Percentage	Variable		Number	Percentage
Gender	Female	106	40.7	Academic Semester	Third	41	23
	Male	74	59.3		Fourth	27	14.8
Marital Status	Single	149	83		Fifth	32	17.6
	Married	31	17		Six	31	17.5
Type of Residence	Private	112	62.5		Seventh	24	13.2
	Dormitory	68	37.5		Eighth	25	13.8
History of Nursing Apprenticeship	Yes	58	33	Interest in the Nursing Profession	Little	21	11.5
	No	122	67		Moderate	101	56.5
					Great	57	32
Total		180	100	Total		180	100

Silva et al. (2014) argue that students with strong and determined personalities are less likely to experience academic burnout [13-15]. Backovic et al. (2012) argue that female medical students experience greater amounts of stress than male students during their education; however, the experience of academic burnout is equal between the genders [16].

Research into academic burnout in students is important because it may be a key factor in understanding a wide range of student behaviors exhibited during the school years (for instance, choosing credits and academic performance). Academic burnout can also affect the students' future relationship with their university (for instance, commitment to the school and potential collaboration as alumni). Academic burnout is thus an important aspect of university effectiveness that can even have distinctive policy implications for the Higher Education Organization [17-20].

Several studies have been conducted on academic burnout in nursing students. In Sweden, Rudman followed up on 1702 nursing students during their first year after graduation and found that the students who experience academic burnout during their school years are later less proficient in their job, tend to less use research findings in their relevant fields and are more inclined to leave their job [21]. In a study conducted by Tomaschewski et al. (2014), nursing students had the highest score in the dimension of emotional burnout, especially toward the end of their training when they had to prepare for other classes [1]. Da Silva et al. (2014) also showed high levels of academic burnout in nursing students, especially in the dimension of emotional burnout [14].

Given the role of today's nursing students as future nurses and key members of medical teams in the country, increasing the general understanding of one of the basic problems faced by this group appears essential. The present study was therefore conducted to determine the level of academic burnout and to examine its contributing factors in nursing students at Qazvin University of Medical Sciences in 2016.

Methods

The present descriptive-analytical study was conducted between April and May 2016 on all the undergraduate nursing students (n=180) in the third to eighth semesters of their program selected through the census method. The study inclusion criterion was being an undergraduate nursing student in the third semester or higher; unwillingness to participate in the research or returning incomplete questionnaires meant exclusion from the study. The study setting was the School of Nursing and Midwifery of Qazvin University of Medical Sciences (QUMS) and its affiliated hospitals in accordance with the students' training credits. After obtaining the necessary permissions and an ethical code from the research deputy and the ethics committee of QUMS and ensuring the participants of the confidentiality of their data and obtaining their informed verbal consent, the questionnaires were distributed and a total of 180 were properly completed and returned.

Data were collected using a personal demographic information form and the Maslach Burnout Inventory-Student Survey (MBI-SS). The personal demographic information form inquired about items such as age, gender, academic semester, GPA, type of residence, marital status and level of interest in nursing as a discipline. The MBI-SS assesses three domains of academic burnout, including exhaustion, cynicism and academic inefficacy and consists of 15 items scored based on a 7-point Likert scale from 'never' (given 0 points) to 'always' (given 6 points) [20,21]. Emotional exhaustion is measured with five items ('class material is boring'), cynicism with four items ('I feel I'm not interested in the class material') and academic inefficacy with six items ('I feel I can't handle these subjects'). The total score obtained on this survey varies from o to 90. Higher scores indicate a greater academic burnout. This survey has been examined and confirmed in many studies. The present study also confirmed the validity of this tool by measuring its content validity through a survey of ten faculty members at QUMS. The Cronbach's alpha coefficient of the tool was measured to confirm its reliability and internal consistency (α=0.87).

The students were briefed on how to complete the questionnaires before they received their copies. The completed questionnaires were collected by the researcher. Data were analyzed in SPSS-16 using descriptive (percentage, mean and standard deviation) and inferential (the Chi-square test, the independent t-test and Pearson's correlation coefficient for comparing the variables) statistics. The level of statistical significance was set at $P<0.05$.

Results

The mean age (±SD) of the students was 22.42±3.21 years. The majority of them were female (59.3%) and passing their third semester (23%). A total of 33% had a history of nursing apprenticeship. The students' mean GPA (±SD) was 16.05±1.01, and 56.5% had

Table 2: The absolute and relative frequency of the students by their academic burnout score.

Variable	Level	Number	Percentage	Mean	Standard Deviation
Academic Burnout	Low	46	25.5	39.2	14.4
	Moderate	123	67.7		
	High	11	6.8		
Total		180	100		

Table 3: The mean and standard deviation of the scores of the dimensions of academic burnout in the students.

Variable (Dimension of Academic Burnout)	Mean	Standard Deviation
Emotional Exhaustion	13.32	5.92
Cynicism	9.81	5.34
Academic Inefficacy	16.15	5.91
Total Score of Academic Burnout	39.2	14.4

a moderate interest in nursing as a discipline. Table 1 presents the students' demographic details. The total score of academic burnout was 39.2±14.4 in the students, indicating moderate levels of academic burnout. A total of 67.7% of the students received a moderate academic burnout score (Table 2). Of all the dimensions of academic burnout, academic inefficacy had the highest mean (Table 3).

Of the demographic variables examined, the students' GPA had a significant inverse correlation with academic burnout, so that the students with a higher GPA experienced less academic burnout ($r=-0.3$, $P<0.001$). There was a significant relationship between the type of residence and the academic burnout score, so that the students living in dormitories reported higher levels of academic burnout ($P=0.001$).

Discussion

The present study was conducted to determine the level of academic burnout and to examine its dimensions and contributing factors in nursing students. The results obtained showed that a significant majority of the nursing students (67.7%) experienced moderate levels of academic burnout. This finding suggests that, like the students of many other disciplines, especially medical sciences, nursing students are also faced with the challenge of academic burnout and its complications. According to Sharififard et al., nursing and paramedical students experience moderate levels of academic burnout. In a longitudinal study, Rudman et al. concluded that nursing students experience moderate to moderate-high levels of academic burnout [21]. In two other studies, Barlem and Dyrbye reported moderate and increasing levels of academic burnout in nursing and medical students, in respective order [1,22,23]. Moderate levels of academic burnout have also been reported in non-medical students. Nikodijevie and Kuittine found moderate levels of academic burnout in their studies on management and IT students, respectively [24-26]. The present findings are consistent with the results of the studies discussed; however, some studies have reported less-than-moderate levels of academic burnout, which may have been due to the differences in disciplines and the different and often general burnout tools used.

As for the factors contributing to academic burnout, the results obtained showed that students with a higher GPA experience lower levels of academic burnout. This finding is consistent with the results obtained in many studies [5,24,27,28]. It appears that a student who experiences moderate to high levels of academic burnout becomes disinterested in the subject and educational activities and thus fails to deliver a good performance at school and even afterward in the job market, which is ultimately manifested in the decline in her GPA, academic performance and self-efficacy. In one study, Rahmati argues that academic burnout is inversely correlated with self-efficacy and students with high levels of academic burnout have a poor self-efficacy. There is in fact a two-way relationship between GPA and academic burnout, and students who are interested and actively engaged in their subject at school experience lower levels of academic burnout [13,15,29].

Type of residence was another factor contributing to the students' academic burnout, so that students who lived in dormitories reported higher levels of academic burnout compared to those who lived in private homes. It appears that living in a private home and the presence of the parents or other family members as a source of support are significantly conducive to a good educational environment, while living in the dormitory and the peculiarities of living with peers appear to somehow be conducive to the experience of academic burnout. Sharififard et al. also argue that students who live in dormitories experience higher levels of academic burnout compared to those who live with their parents [5].

As for the other factors examined, students in higher semesters experience higher levels of academic burnout, although the difference is not statistically significant. In fact, the specialized and more difficult subjects and field credits in higher semesters may be said to contribute to academic burnout. Some studies have also identified academic semester as a factor contributing to academic burnout [5,30-32].

Nursing apprenticeship was also one of the factors examined in this study. The present findings showed that students who work as nursing apprentices while at school experience less academic burnout, although the difference was not statistically significant. It appears that since students who work as apprentices use their specialized knowledge in patient care, they end up feeling of use to people and develop a greater self-esteem and are thus less likely to experience academic burnout [5,33].

The level of interest in the nursing profession is another factor that affects academic burnout. When the student is not interested in her chosen academic discipline, the subjects end up boring her and she will not make an effort to truly learn them, and this disinterest then leads to the experience of academic burnout. Interest and motivation improve performance, and since academic performance has a significant inverse correlation with academic burnout, it can be argued that interested and motivated students perform better and are less likely to experience academic burnout [34-36]. Attempts to strengthen this variable can be effective in reducing academic burnout.

No significant differences were observed in the level of academic burnout in the students by gender. This finding is consistent with the results obtained by Marzouqi et al. and Sharififard et al. [5,37]. The lack of a relationship between academic burnout and gender may be due to the similar facilities and environments provided to both male and female students at the university [37]. The present study also found no significant relationships between academic burnout and the variables of age and marital status, which may be due to the small age difference between the majority of the students [5].

Limitation of Study

The limitations of this research include the study of only undergraduate students at the School of Nursing of QUMS. The study is recommended to be repeated in other nursing schools in order to yield a greater generalizability of findings and an in-depth assessment of academic burnout and its contributing factors.

Conclusion

The present study was conducted to determine the level of academic burnout and to examine its contributing factors in nursing students. The participating students reported moderate to high levels of academic burnout. Of all the dimensions of academic burnout examined, academic inefficacy received the highest mean and cynicism the lowest. GPA and type of residence were identified as two factors contributing to academic burnout, as the students with a higher GPA who lived in private homes reported lower levels of academic burnout.

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