

Academic Burn Out and its Contributing Factors Among Undergraduate Nursing Students

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Abstract

Background of the study: Academic burnout is particularly important for nursing students because they will become nurses in the future. Many newly graduated nurses eventually experience burnout and job dissatisfaction in the clinical settings in which they work because of their prior experiences with stress and burnout during their school years. This situation ultimately results in poor-quality nursing services, leaving the nursing profession, and eventually the shortage of nurses. The purpose of the study was to evaluate academic burnout among undergraduate nursing students and the factors that contribute to it. **Objectives:** To determine the level of academic burnout and its contributing factors among undergraduate nursing students. **Materials and methods:** To examine academic burnout and the factors that contribute to it among undergraduate nursing students, a descriptive survey approach was used. Based on inclusion criteria, 120 undergraduate nursing students were chosen using a stratified random sample technique. Academic burnout and its causes were assessed using the Maslach Burnout Inventory Scale and Questionnaire on contributing factors. Karl Pearson correlation coefficient was adopted to examine the relation between the academic burnout and contributing factors. Chi square test was used to assess the association between academic burnout and its contributing factors with selected demographic variables. **Result:** The three domains used to assess academic burnout revealed the following results: professional efficacy 23.45 (26.05%), emotional weariness 12.37 (13.74%), and cynicism 9.48 (10.53%). The average academic burnout score for all undergraduate nursing students was 45.3 (50.3%), which suggested a moderate level of burnout. Academic burnout was attributed to factors such as the institution's use of teaching methodologies ($r=-.22$, $p=.010.05$), the year of study ($r=-.62$, $p=0.000.05$), and the frequency of exposure to clinical settings ($r=.60$, $p=.000.05$). **Conclusion:** The study found that undergraduate nursing students experienced a moderate level of academic burnout and characteristics like the institution's teaching methods, the academic year, and the frequency of exposure to clinical settings all contributed to academic burnout among undergraduate nursing students.

Keywords: Academic burnout, contributing factors, undergraduate nursing students

1. Introduction

A certain amount of stress is necessary for leading a creative and productive life, but constant stress can be detrimental to one's performance. By the year 2020, stress-related diseases will rank among the top causes of disability, according to the World Health Organization (WHO).¹ Stress is a significant phenomenon since it can interfere with students' ability to learn and be productive². According to reports, pressures related to academics, clinicals, finances, family expectations, and career choices have an impact on student nurses. Exams, extensive study sessions, assignments, a lack of free time, a delay in receiving feedback on one's performance, unique components of the academic programs, such as planning and execution of workshops, are all examples of academic stressors. Taking care of patients, doubting one's clinical abilities, dealing with resistant patients, interpersonal conflicts with peers, job overload, standing for long periods of time, and worry of finishing clinical obligations are all clinical sources of stress³.

Both theoretical and clinical education in nursing program are currently complex. Because they have direct and immediate interaction with this process,

students who receive educational services are the best source for recognizing educational issues. While many students enjoy their time at the university, some may develop academic burnout as a result of their studies and responsibilities. Academic fatigue will undoubtedly have a detrimental impact on students' emotional, psychological, and physical health⁴. According to the current studies, student nurses face higher levels of stress than students in other academic fields; however the stress varies depending on the nursing program and level of education. Basically, the following are common causes of stress for nursing students:

- Concerns pertaining to education, such as workload, knowledge gaps, test-taking strategies, and instructional methods.
- Clinical practice issues like incompetence, caring for the dying and the dead, shifting, supervision, and evaluation.
- Interactions with other individuals (clients, peers, teachers or other health care professionals)
- Individual characteristics like age, gender, environment, family structure, and financial burdens⁵.

Academic burnout in nursing students has been the subject of numerous researches. Rudman followed up with 1702 nursing students in Sweden during the

first year after graduation and discovered that those who had academic burnout in school were less skilled in their careers, tended to employ research findings less frequently in their fields, and were more likely to quit their jobs⁶.

Academic burnout is a key area of study for a number of reasons, including its impact on academic performance, faculty members' dedication to carrying out their educational responsibilities, and students' desire in pursuing further education⁷. Increasing the general understanding of one of the fundamental issues encountered by today's students, who will eventually work as nurses and be integral members of multidisciplinary teams, seems vital. Therefore, the goal of the current study was to assess the extent of academic burnout among undergraduate nursing students as well as its underlying causes.

2. Materials and Methods

Research design: A descriptive survey research design was adopted for the study.

Sample: The sample of the present study was undergraduate nursing students

Sample size: A total 120 undergraduate students of selected nursing college at Mangaluru, who met the inclusion criteria, were selected as the sample.

Sampling technique: In this study the participants were selected by using stratified simple random sampling technique.

Settings: Selected nursing college at Mangaluru

Data collection instruments: Demographic proforma, Questionnaire on contributing factors of academic burnout and Maslach Burnout Inventory Student Survey were used for data collection.

Maslach Burnout Inventory Student Survey is a rating scale with 15 items in which the respondents will be asked to reflect on their current feelings. Burnout is measured through seven-point Likert scale from 'every day- score 6' to 'never-score-0'. The total score is 90. The domains of burnout scale are emotional exhaustion (score= 0-30, 33.3%), Cynicism (score=0-24, 26.7%) and professional efficacy

(score= 0-36, 40%).

Questionnaire on contributing factors of academic burnout consists of 16 items on contributing factors of academic burnout such as course, year, expectation, exam pattern, performance and guidance of teachers, pattern of teaching strategies adopted in the institution, clinical requirements, support system, clinical exposure and accommodation.

Data Collection: Written permission was taken from respective Nursing College prior to the data collection. The investigator assured the confidentiality to the participants and written consent was obtained from them before the data collection. Instructions were given and data collection tools were administered to second, third and fourth year nursing students.

Data analysis: The collected data was analysed by using descriptive and inferential statistics. Karl Pearson correlation coefficient was adopted to assess the relation between academic burnout and its contributing factors. Chi-square test was used to find out the association between academic burn out and selected demographic variables.

Ethical clearance: Approval was obtained from Institutional Ethics Committee of Yenepoya (deemed to be University) to conduct the study. Formal permission was obtained from the principals of Nursing Colleges and individual consent was also obtained prior to the data collection.

3. Results

Distribution of demographic attributes in terms of frequency and percentage

Majority of the students (95%) belonged to age group of 19-21 years, 2.5% of them belonged to both 16-18 years and 22-24 years. Among them, majority (95.9%) were females and only 4.1% were males. Majority of the students (76.6%) have family income of Rs. 10,000 to 20,000. Majority of them joined for the course by their self-decision (85.8%), 7.5% joined by parents' compulsion and 6.6% were joined by other reasons.

Table 1: Academic burnout among undergraduate students in terms of frequency and percentage N=120

| Sl. No | | | | | | | Never (0) |
|-----------------------|--|-----------|------------|-----------|------------|------------|-----------|
| f (%) | | | | | | | |
| Emotional exhaustion | | | | | | | |
| 1. | Feel emotionally drained | | | | | 111 (92.5) | 9 (7.5) |
| 2. | Feel used up at the end of a day | | | | | 106 (88.3) | 14 (11.6) |
| 3. | Feel tired getting up in the morning | 16 (13.3) | 104 (86.6) | | | | |
| 4. | Studying or attending a class is strain | | | 22 (18.4) | 98 (81.6) | | |
| 5. | Burned out from studies | | 4 (3.3) | 21 (17.6) | 95 (79.1) | | |
| Cynicism | | | | | | | |
| 6. | Less interested in studies | | 12 (10) | 80 (66.6) | 28 (23.4) | | |
| 7. | | | 20 (16.7) | 26 (21.6) | 74 (61.7) | | |
| 8. | More cynical about usefulness of studies | | 54 (45) | 66 (55) | | | |
| 9. | Doubt the significance of studies | | | | | 74 (61.6) | 46 (38.3) |
| Professional Efficacy | | | | | | | |
| 10 | | | | | 100 (83.3) | | 20 (16.6) |
| 11 | Make effective contribution to classes | | 20 (16.6) | 86 (71.6) | 14 (11.6) | | |
| 12 | Feel I am a good student | 120 (100) | | | | | |
| 13 | Feel stimulated achieving study goals | | 12 (10) | 102 (85) | 6(5) | | |
| 14 | | | 6 (5) | 40 (33.3) | 48 (40) | 26 (21.6) | |
| 15 | Confident of effectiveness during class | | 36 (30) | 84 (70) | | | |

Table 2: Distribution of domains of academic burnout in terms of mean and standard deviation N=120

| Sl.No. | Domains | Maximum Score | Minimum Score | Mean±SD |
|--------|-----------------------|---------------|---------------|------------|
| 1. | Emotional exhaustion | 11 | 15 | 12.37±0.87 |
| 2. | Cynicism | 7 | 12 | 9.48±1.12 |
| 3. | Professional efficacy | 21 | 27 | 23.45±1.17 |
| 4. | Overall | 39 | 54 | 45.3±3.16 |

SD-standard deviation, [Domains of Maslach Burnout Inventory Student Survey: Emotional exhaustion=(0-30), 33.3% ; cynicism=(0-24), 26.7%; professional efficacy=(0-36), 40%]

The table 1 & 2 revealed that percentage, mean and standard deviation of domains of burnout. Scores showed that moderate level of emotional exhaustion, it indicated that students had moderate level of moderate burnout. Mean ± SD of cynicism and percentage [9.48±1.12; 10.53%] indicated that lesser level of cynicism. Mean ± SD and percent of professional efficacy scores

[23.45±1.17; 26.05%], indicated greater professional efficacy and less burnout. Total mean score is 45.3 ±3.16; 50.3%] revealed that students have moderate level of burnout.

Distribution of contributing factors in relation to academic burnout

Table 3: Emotional exhaustion in relation to contributing factors of academic burnout N=120

| Sl. No: | Contributing factors | Mean+SD | r value | p value |
|---------|--|-----------|---------|---------|
| 1 | Year of studying | 3.00+0.81 | -0.01 | 0.89 |
| 2 | Initially expected about the course | 4.15+0.36 | 0.08 | 0.38 |
| 3 | Performance of teachers | 2.05+0.21 | -0.09 | 0.29 |
| 4 | Thought about giving up the course | 1.04+0.20 | -0.04 | 0.66 |
| 5 | Teaching strategies adopted by the institution | 3.94+0.23 | -0.22* | 0.01* |
| 6 | Frequency of exposure to clinical settings | 2.33+0.47 | -0.01 | 0.88 |

r- Karl Pearson correlation coefficient, *moderate/low degree correlation (+.20 to +0.49), p<0.05 level of significance.

There was a negative correlation between teaching strategies adopted by the institution

and emotional exhaustion, r = -0.22 (+0.20 to +0.49); p=0.01 (p<0.05).

| Sl. No. | Contributing factors | Mean+SD | r value | p value |
|---------|--|-----------|---------|---------|
| 1 | Year of studying | 3.00+0.81 | .05 | 0.55 |
| 2 | Initially expected about the course | 4.15+0.36 | .16 | 0.08 |
| 3 | Performance of teachers | 2.05+0.21 | .03 | 0.68 |
| 4 | Thought about giving up the course | 1.04+0.20 | -.12 | 0.16 |
| 5 | Teaching strategies adopted by the institution | 3.94+0.23 | .13 | 0.12 |
| 6 | Frequency of exposure to clinical settings | 2.33+0.47 | .01 | 0.90 |

Table 4 showed the relationship between cynicism and contributing factors of burnout, and the results showed that there was no correlation between

cynicism and contributing factors of academic burnout.

Table 5: Professional efficacy in relation to contributing factors of academic burnout N=120

| Sl. No. | Contributing factors | Mean±SD | r value | p value |
|---------|--|------------|---------|---------|
| 1 | Year of studying | 3.00± 0.81 | -.62** | 0.00** |
| 2 | Initially expected about the course | 4.15+0.36 | -.22 | 0.01 |
| 3 | Performance of teachers | 2.05+0.21 | .07 | 0.41 |
| 4 | Thought about giving up the course | 1.04+0.20 | .02 | 0.77 |
| 5 | Teaching strategies adopted by the institution | 3.94+0.23 | .09 | 0.29 |
| 6 | Frequency of exposure to clinical settings | 2.33+0.47 | .60** | 0.00** |

**high degree correlation (+.50 to +1), significant correlation (p<0.05)

There was a high degree negative correlation between year of studying r= -.62, p=0.00 (i.e. +0.50 to +1) and high degree of positive

correlation between frequency of exposure to clinical settings and professional efficacy r= 0.60 (i.e. +0.50 to +1), p= 0.00; (p<0.05).

Table 8: Association between professional efficacy and baseline variables N=120

| Sl. No. | Baseline variables | ≤Median | >Median | χ^2 |
|---------|-----------------------------------|---------|---------|----------|
| 1 | Age in years | | | .002* |
| | 16-18 | 0 | 2 | |
| | 19-21 | 61 | 18 | |
| 2 | 22-24 | 2 | 0 | .006* |
| | Gender | | | |
| | Male | 1 | 3 | |
| 3 | Female | 62 | 17 | .25 |
| | Religion | | | |
| | Hindu | 9 | 5 | |
| 4 | Christian | 52 | 13 | .38 |
| | Muslim | 2 | 2 | |
| | Monthly income in rupees | | | |
| 6 | 10,001-20,000 | 62 | 19 | .23 |
| | 20,001-40,000 | 1 | 1 | |
| | ≥ 40,001 | 45 | 15 | |
| 7 | Occupation of father | | | .55 |
| | Self employed | 39 | 16 | |
| | Government | 1 | 1 | |
| | Private | 21 | 3 | |
| 8 | Business | 2 | 0 | .18 |
| | Educational status of father | | | |
| | No formal education | 55 | 17 | |
| 9 | 10 th standard | 0 | 0 | .00 |
| | PUC | 41 | 15 | |
| | Graduation and above | 19 | 4 | |
| | Educational status of mother | 3 | 0 | |
| 10 | 10 th standard | | | .16 |
| | PUC | 52 | 16 | |
| | Graduation and above | 10 | 2 | |
| | Reason for joining nursing course | 1 | 2 | |
| 11 | Self-decision | | | .46 |
| | Parents compulsion | 53 | 16 | |
| | Other reason | 7 | 2 | |
| | | 3 | 2 | |

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4. Discussion

Majority of the students (95%) belonged to the age group of 19-21 years, 2.5% under the age group of 16-18 and 2.5% were under the age group of 22-24 years. Among them, majority were females (95.9%) and 4.1% were males. Majority of the students (76.6%) have family income of Rs. 10,000 to 20,000, 19.1% of them had income of Rs.20,001 to 40,000 and 4.1% had more than Rs.40,000. A supportive study was done on burnout among nursing students to assess the predictors and association with empathy and self-efficacy in Brazil by Lopes AR and Nihei OK. The majority of the sample were female students (90.1%), between 18 and 24 years old (77.5%), with family income less than or equal to 3 minimum wages (56.0%)⁸.

Moderate level of emotional exhaustion (i.e. mean score of 12.37, 13.74%), lesser level of cynicism

(mean score 9.48, 10.53%) and higher level of professional efficacy (mean score 23.45, 26.05%) were found in this study. Total mean score of academic burnout was 45.3 (50.3%), it indicated moderate level of academic burnout. A similar study was conducted to determine the level of academic burnout and to examine its dimensions and contributing factors in nursing students by Hoseinabadi-farahani MJ, Kasirlou L and Inanlou . The results showed that a significant majority of the nursing students (67.7%) experienced moderate levels of academic burnout⁶.

In present study, relation of contributing factors with academic burnout were analysed by using Karl Pearson Correlation Coefficient. The results found that there was a significant correlation between teaching strategies adopted by the institution ($r = -0.22$, $p = 0.01$ i.e. $p < 0.05$) and emotional exhaustion. Also result showed that there was a correlation

between year of studying ($r = -0.62$, $p = 0.00$ i.e. $p < 0.05$) and frequency of exposure to clinical settings ($r = 0.60$, $p = 0.00$ i.e. $p < 0.05$) with professional efficacy. A similar study was conducted in Romania to assess the burnout syndrome among nursing students by Magdalena, Diana and Tudor. The result showed that there was a correlation between emotional exhaustion with alexithymia ($r = 0.234$, $p = 0.045$), payment – promotion ($r = -0.309$, $p = 0.012$), management – interpersonal relationships ($r = -0.350$, $p = 0.004$) and organization – communication ($r = -0.513$, $p = 0.000$)⁹.

There was a significant association found between age ($\chi^2 = .002$, $p < 0.05$) and gender ($\chi^2 = .006$, $p < 0.05$) with professional efficacy in burnout scale and there was no association found with demographic variables with cynicism and emotional exhaustion. A similar study was conducted on academic burnout and some related factors among medical students in Islamic Azad University of Mashhad by Zahra et.al, The study result showed that there was no significant association found between selected demographic variables with scores of dimensions of burnout ($p > 0.05$)⁷.

5. Limitation of the study

Present study is only limited to

- undergraduate nursing students who are studying in 2nd, 3rd and 4th year B.Sc. Nursing
- a selected college as a study setting
- small sample size, 120

6. Conclusion

The study results showed that there was a moderate level of academic burnout among undergraduate nursing students and there was a positive correlation between academic burnout and contributing factors and professional efficacy. There was significant association between professional efficacy, one of the domains of academic burnout with selected demographic variables such as age and gender.

7. Recommendation

Similar study can be conducted with a large sample size and different settings in order to yield a greater generalizability of findings and it helps in in-depth understanding of correlation between academic burnout and its contributing factors.

8. Acknowledgement

We thank all the undergraduate nursing students who participated in this study.

Funding

Nil

Conflicts of Interest

Nil

Ethical approval

Institutional Ethics Committee approval was

obtained from Yenenpoya (deemed to be University), and informed written consent was also obtained from study participants.

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