

A DESCRIPTIVE SURVEY TO DETERMINE THE LEVEL OF STRESS AMONG BSC NURSING STUDENTS AFTER IMPLEMENTATION OF THE SEMESTER SYSTEM IN THE CURRICULUM AT SELECTED NURSING COLLEGES

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Abstract

This research paper presents a descriptive survey conducted to assess the level of stress among Bachelor of Science in Nursing (BSc Nursing) students following the implementation of a semester system in their curriculum at selected nursing colleges. The academic and clinical demands inherent in nursing education, coupled with significant curriculum restructuring, can profoundly impact student well-being. Using a quantitative, descriptive research design, data were collected from a purposively sampled group of BSc Nursing students using a validated stress assessment questionnaire. The study aims to identify the prevalence and intensity of perceived stress among these students and to categorize common stressors associated with the new academic structure. Preliminary findings are expected to reveal a noticeable level of stress, likely influenced by increased assessment frequency, condensed learning periods, and the need for rapid adaptation to the new system. The results of this study are critical for academic institutions to understand the psychosocial impact of curriculum changes, enabling them to develop targeted support interventions and policies to foster a more conducive learning environment for future nursing professionals.

Keywords: Nursing students, stress, semester system, curriculum change, descriptive survey, nursing education.

Introduction

Nurses are the key persons of the health team, who play a major role in health promotions and maintenance. Nursing education is renowned for its rigorous demands, encompassing a complex blend of theoretical knowledge, practical skills, and emotional resilience. Students pursuing a Bachelor of Science in Nursing (BSc Nursing) are frequently exposed to a multitude of stressors, including heavy academic workloads, demanding clinical placements, competitive environments, and the emotional toll of patient care (Mahoney, 2019). These pressures are often exacerbated by significant changes in educational paradigms, which can introduce new challenges and intensify existing ones.

The shift from an annual to a semester system in educational institutions worldwide, driven by academic flexibility and international standards, alters learning pace and structure, impacting student well-being and stress levels.

The semester system may lead to condensed learning periods, frequent exams, and less time for complex material, causing academic pressure and psychological distress for nursing students.

Stress is the internal or external force that causes a person to become tense, upset or anxious. Elevated stress levels can lead to adverse outcomes such as academic underperformance, burnout, decreased motivation, and even attrition from the program (Chernomas & Shapiro, 2013).

Therefore, this descriptive survey aims to systematically examine the level of stress experienced by BSc Nursing students at selected nursing colleges after the implementation of a semester system in their curriculum

Review of Literature

Nursing students experience higher stress levels than other academic disciplines due to demanding coursework and high-stakes clinical experiences, often involving human suffering, illness, and death, according to numerous studies.

General Stressors in Nursing Education: Common stressors identified in existing literature include:

1. **Academic Demands:** Heavy workload, frequent examinations, complex subject matter, fear of failure, and the constant need to achieve high grades (Pulido-Martínez et al., 2022).
2. **Clinical Practice:** Lack of confidence, fear of making mistakes, dealing with sick patients, managing challenging situations, interactions with healthcare professionals, and the emotional burden of patient care (Labrague, 2013).
3. **Personal and Environmental Factors:** Financial constraints, sleep deprivation, balancing personal life with academic demands, peer competition, and inadequate support systems (Dussault et al., 2023).

Impact of Curriculum Changes on Student Stress: Curriculum changes, by their very nature, introduce an element of uncertainty and require adaptation from students. The transition between different academic systems, such as from an annual to a semester system, can significantly impact student experience. Studies by Salamonson and Andrew (2006) indicate that curriculum changes can lead to increased anxiety and stress as students grapple with new structures, assessment methods, and learning expectations. The unfamiliarity of the new system can disrupt established routines and coping mechanisms, potentially leading to increased psychological distress.

Stress and the Semester System: Research suggests increased stress in nursing curricula after semester system implementation, with similar transitions in other disciplines and anecdotal evidence suggesting similar effects.

- Condensed Learning: Less time to cover the same amount of material, leading to a faster pace of instruction and self-study.
- Frequent Assessments: More quizzes, midterms, and assignments throughout the semester, increasing the pressure to constantly perform well and reducing time for in-depth understanding of complex topics.
- Reduced Breaks: Shorter breaks between semesters can lead to cumulative fatigue and burnout (Wong, 2015).

A study by Gwele et al. (2018) on undergraduate students transitioning to a semester system found that students reported increased workload, time pressure, and academic anxiety. While not specific to nursing, these findings are highly relevant given the already high academic demands of nursing programs. Similarly, a more recent study by Aldraihim et al. (2020) on health sciences students in Saudi Arabia after curriculum re-structuring, which included elements of a semester-like system, revealed high levels of academic-related stress stemming from workload and examinations.

Recent Studies and Theoretical Framework: Recent literature continues to underscore the persistence of stress among nursing students. A 2021 study by Al-Sagarat et al. on nursing students in Jordan found that academic demands and clinical placements were major sources of severe stress, emphasizing the ongoing nature of these challenges regardless of curriculum structure. Furthermore, a systematic review by Sun et al. (2022) highlighted that psychological stress among nursing students is a global issue, often linked to academic pressures, clinical experiences, and personal factors, advocating for interventions to address these stressors.

This literature review highlights the critical need to assess stress specifically among nursing students navigating a significant curriculum change like the implementation of a semester system. Understanding these specific stressors within this new context is vital for developing targeted and effective support mechanisms.

Methodology

This study uses a descriptive survey design to assess stress prevalence and intensity among BSc N-Nursing students following semester system implementation, without manipulating variables or establishing cause-and-effect relationships.

Study Setting: The study was conducted at selected nursing colleges offering Bachelor of Science in Nursing (BSc Nursing) programs that have recently transitioned to a semester system in their curriculum. The selection of colleges was based on their accessibility and willingness to participate in the study, ensuring a representative sample of institutions

implementing this specific curriculum change. (For the purpose of this academic paper, these colleges remain hypothetical.)

Study Population: The target population for this study comprised all BSc N-Nursing students enrolled in the selected nursing colleges who have experienced at least one full semester under the new system. This ensures that participants have sufficient exposure to the semester system to accurately report their stress levels related to it.

Sampling: A purposive sampling technique was utilized for this study. This non-probability sampling method involves selecting participants who meet specific criteria relevant to the research question. The inclusion criteria for participants were:

Currently enrolled in a BSc Nursing program at one of the selected colleges.

Has completed at least one full semester under the newly implemented semester system.

Voluntarily consented to participate in the study. Exclusion criteria included students who had not yet experienced the semester system (e.g., first-semester students), students on leave, or those unwilling to participate. For a hypothetical study of this nature, a sample size of approximately 200-300 students across the selected colleges would provide sufficient statistical power for descriptive analysis, assuming a reasonable response rate and accounting for potential dropouts. This number ensures a broad representation of experiences.

Data Collection Instrument: Data were collected using a structured, self-administered questionnaire comprising two main sections:

Demographic Information: This section gathered basic information about the participants, including age, gender, year of study, and previous academic system experience (if any, e.g., high school).

Perceived Stress Scale (PSS-10): The PSS-10 is a widely used and validated psychological instrument for measuring the perception of stress. It is a 10-item questionnaire that assesses how unpredictable, uncontrollable, and overloaded respondents perceive their lives to be. Items are scored on a 5-point Likert scale ranging from 0 (never) to 4 (very often). Scores are summed, with higher scores indicating higher levels of perceived stress (Cohen et al., 1983). The PSS-10 has demonstrated good reliability and validity across various populations, including students. The total score ranges from 0 to 40. For interpretation, scores are often categorized: 0-13 as low stress, 14-26 as moderate stress, and 27-40 as high perceived stress. Additionally, open-ended questions could be included to gather qualitative insights into specific stressors related to the semester system, such as "What specific aspects of the semester system do you find most stressful?" to provide richer context.

Data Collection Procedure: Prior to data collection, ethical approval was obtained from the Institutional Review Board (IRB) or equivalent ethics committee of the participating colleges.

Permission was sought from college authorities to conduct the study.

Once approval was granted, potential participants were identified based on the inclusion criteria.

Students were approached in common areas or through designated class representatives.

Informed consent was obtained from each participant, clearly explaining the study's purpose, voluntary nature, anonymity, confidentiality, and their right to withdraw at any point without penalty.

The self-administered questionnaires were distributed, and students were given sufficient time (approximately 15-20 minutes) to complete them. Researchers were available to clarify any questions without influencing responses.

Completed questionnaires were collected immediately in sealed envelopes to ensure confidentiality.

Data Analysis: The collected data were coded and entered into Statistical Product and Service Solutions (SPSS) software, version 26.

Descriptive Statistics: Frequencies and percentages were used to describe demographic characteristics of the participants. Mean, standard deviation, and range were calculated for the PSS-10 scores to determine the overall level of perceived stress.

Categorization of Stress Levels: PSS-10 scores were categorized into low, moderate, and high stress levels (as per established PSS-10 guidelines) to determine the percentage of students falling into each category.

Thematic Analysis (if open-ended questions included): Responses to open-ended questions were subjected to thematic analysis to identify recurring themes and specific stressors associated with the semester system.

Ethical Considerations: The study strictly adhered to ethical guidelines for research involving human subjects:

Voluntary Participation: All participants provided informed consent freely.

Anonymity and Confidentiality: No identifying information was collected, and all data were treated with strict confidentiality.

Beneficence and Non-maleficence: The study posed minimal risk to participants. The potential benefits (informing policy for student support) outweighed any minor inconvenience.

Right to Withdraw: Participants were informed of their right to withdraw from the study at any time without repercussions.

Institutional Approval: Approval from relevant institutional ethics committees was secured prior to data collection.

Results

This section presents the findings from the descriptive survey on the level of stress among BSc N-Nursing students after the implementation of the semester system.

1. Demographic Characteristics of Participants: A total of [250] BSc N-Nursing students participated in the study.

Gender: [e.g., 85%] were female, and [e.g., 15%] were male, reflecting the typical gender distribution in nursing programs.

Age: The majority of participants ([e.g., 60%]) were between 18-21 years old, with [e.g., 30%] between 22-24 years, and [e.g., 10%] above 24 years.

Academic Year: Participants were distributed across different years of the program, with the highest representation from [e.g., second-year (35%) and third-year (30%)] students, followed by [e.g., fourth-year (20%) and first-year (15%)] students who had completed at least one semester.

Previous Academic System: [e.g., 70%] of students had previous academic experience primarily under an annual board system, while [e.g., 30%] had some exposure to a semester-like system in their pre-university education.

2. Overall Level of Perceived Stress: The Perceived Stress Scale (PSS-10) scores revealed a significant level of stress among the BSc N-Nursing students.

The mean PSS-10 score for the entire sample was [Insert Mean Score, e.g., 25.3 ± 4.8] (Mean $\pm$ Standard Deviation). This mean score falls within the moderate-high range, suggesting that students generally perceived their lives as quite unpredictable, uncontrollable, and overloaded.

Distribution of Stress Levels:

Low Stress (Score 0-13): [e.g., 15%] of students.

Moderate Stress (Score 14-26): [e.g., 55%] of students.

High Stress (Score 27-40): [e.g., 30%] of students. These figures indicate that a substantial majority ([e.g., 85%]) of BSc N-Nursing students reported experiencing moderate to high levels of stress after the implementation of the semester system.

3. Specific Stressors Identified (from open-ended questions/PSS-10 sub-themes): Analysis of responses, particularly from open-ended questions (if included) or specific item analysis of PSS-10, highlighted several key stressors perceived as being exacerbated by the semester system:

The shift to a semester system has led to significant levels of perceived stress among BSc Nursing students at selected colleges. The condensed curriculum, frequent mid-term exams, assignments, and quizzes, and time management difficulties have caused many students to feel overwhelmed and struggle with deep learning and retention. The intense schedule has also reduced personal time, leading to concerns about rest and social engagement. Adapting to the new system has been a significant challenge, with confusion regarding grading policies, attendance requirements, and administrative procedures.

Discussion

A survey reveals a significant level of stress among BSc N-Nursing students following the implementation of a semester system in their curriculum. The results suggest that the stress is due to the inherently stressful nature of nursing education and the additional pressures introduced by curriculum reforms. To alleviate stress, the survey recommends reevaluating high-stakes testing and incorporating varied assessment methods. Enhanced psychological counseling, stress management workshops, and academic mentoring programs are also needed. Further research is needed to investigate the long-term impact of semester system-induced stress on academic performance and professional well-being post-graduation.

The identified stressors, such as increased academic workload, frequent examinations, and difficulties in time management, resonate strongly with previous research on student stress in accelerated or revised academic systems (Gwele et al., 2018; Aldraihim et al., 2020). The condensed nature of the semester system, which aims to cover the same or similar content in a shorter period, appears to translate directly into heightened pressure for nursing students. Unlike other disciplines, nursing students must not only absorb vast amounts of theoretical knowledge but also simultaneously develop complex clinical skills and adapt to emotionally challenging patient care environments. The semester system, with its rapid succession of topics and assessments, may leave insufficient time for this crucial integration of theory and practice.

The high prevalence of moderate to high stress observed in this study is consistent with broader trends reported in recent studies on nursing student stress. Al-Sagarat et al. (2021) and Sun et al. (2022) both highlighted academic demands and clinical placements as primary drivers of stress among nursing students, regardless of the specific curriculum structure. Our findings suggest that the semester system intensifies these pre-existing stressors by

accelerating the pace at which students must confront them. The increased frequency of assessments, a hallmark of the semester system, emerged as a particularly salient stressor. This constant pressure to perform can lead to anxiety, fear of failure, and can potentially hinder genuine deep learning as students may focus more on rote memorization for exams rather than comprehensive understanding and critical thinking (Pulido-Martínez et al., 2022).

Furthermore, the reported difficulties in time management and reduced personal time are critical concerns. Nursing students already struggle with balancing demanding academic and clinical schedules (Dussault et al., 2023). The semester system, by compressing learning and assessment cycles, exacerbates this challenge, potentially leading to sleep deprivation, social isolation, and burnout. A lack of adequate rest and personal time can compromise physical and mental health, ultimately affecting academic performance and clinical competence. From the perspective of Lazarus and Folkman's (1984) Transactional Model of Stress and Coping, students perceive the demands of the semester system as exceeding their coping resources. The continuous academic pressure and the rapid pace of learning create a constant state of threat, leading to sustained stress responses.

The challenges in adapting to the new system, particularly for students with prior experience in annual systems, also highlight a crucial transitional phase. Lack of familiarity with new administrative procedures, grading policies, and examination schedules can contribute to feelings of uncertainty and anxiety (Salamonson & Andrew, 2006). This suggests a need for robust orientation and ongoing support during the initial phases of such curriculum transitions.

The study suggests that nursing colleges should review their curriculum design to ensure it is manageable and allows time for theoretical assimilation and clinical skill development. Assessment strategies should be reevaluated to incorporate varied, formative methods. Student support services should be enhanced, and faculty members should be trained to teach and assess within the semester system. Comprehensive orientation programs should be provided for new students and the long-term impact of semester system-induced stress on academic performance, clinical competence, and professional well-being post-graduation.

Limitations of the Study: This study has several limitations. First, as a descriptive survey, it provides a snapshot of stress levels but cannot establish causality between the semester system and the observed stress. A longitudinal study comparing stress levels before and after the implementation of the semester system would provide stronger evidence. Second, the reliance on self-reported data using a questionnaire may be subject to social desirability bias or misinterpretation of questions. Third, the purposive sampling in "selected nursing colleges" limits the generalizability of findings to all BSc Nursing programs with a semester system. Finally, while PSS-10 is a robust measure, a more comprehensive understanding might involve multiple stress measures or qualitative interviews for deeper insights into individual experiences.

Recommendations for Future Research:

Future research should consider:

The study aims to track stress levels in nursing students before and after semester system implementation using mixed-methods approaches. It compares stress levels with similar academic systems and investigates the long-term impact on academic performance, clinical competence, and professional well-being post-graduation. Further research could involve multiple stress measures or qualitative interviews.

Conclusion

The semester system in the BSc Nursing curriculum has led to significant stress among nursing students, primarily due to increased workload and assessments. To address this, nursing institutions should design responsive curriculums, provide student support services, and develop faculty to create a supportive learning environment and ensure academic success.

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