ORIGINAL ARTICLE

Perception of Learning Challenges and Coping Strategies in Clinical Area Among Nursing Students

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Abstract

Background: Nursing students encounter academic and clinical challenges that can impact their health and academic performance. This study aimed to assess their perceptions of learning challenges, the coping strategies they employ in clinical settings, and the association between these factors and demographic variables.

Methodology: A quantitative, descriptive survey design was employed, involving a convenience sample of 205 B.Sc. Nursing students. For data collection, a structured questionnaire was administered which included the Clinical Learning Environment Supervision (CLES) scale to assess perceptions of learning challenges and the Coping Behaviour Inventory (CBI) to evaluate coping strategies.

Results: The results indicated that majority of participants, specifically 67.8%, reported having a 'very good' perception of their learning challenges, while 60.9% indicated that they employed coping strategies 'sometimes'. These findings suggest that while nursing students recognize the challenges they encounter in clinical environments, their engagement with coping strategies varied. Statistical analysis demonstrated significant associations between students' perceptions of learning challenges and various demographic factors, including age, year of study, and the number of weeks of clinical exposure.

Conclusion: The study highlights the importance of acknowledging the unique challenges nursing students encounter in clinical settings and the necessity of developing effective coping mechanisms to enhance their educational experience. Addressing these issues is crucial for improving academic performance and preparing students for professional practice. Future research should aim to develop targeted interventions to support nursing students and strengthen nursing education outcomes.

Keywords: Nursing students, Perception of learning challenges, Coping strategies, Clinical area

Introduction

Nurses' competence is based on the knowledge and skills they are taught.[1] Nursing training is a blend of theoretical and practical learning experiences, enabling students to acquire the knowledge, skills, and attitudes needed to provide effective care.[2] Nursing is a performance-based profession; therefore, clinical learning environment plays an important role in helping students acquire professional abilities and training to enter the profession and become registered nurses.[3] Moreover, the clinical

area selected for education is significant as it influences the selection or rejection of nursing as a profession.[4]

Nursing students face a variety of challenges related to both academics and the clinical environment. These challenges may affect their health and academic performance and identifying them allows for better assessment and implementation of effective coping strategies. To improve the quality of education, adapt to necessary changes, and to address the needs of the current generation, it is essential to conduct intermittent studies on the challenges faced by nursing students.[5]

Materials and Methods

Research Design

The study employed descriptive survey design.

Sample Size

The study was conducted at a selected college of nursing in Kottayam. The sample consisted of 205 B.Sc. Nursing students who were selected using a non-probability convenience sampling technique. Inclusion criteria consisted of B.Sc. Nursing students from all batches, including both semester and yearly systems, who were available at the time of data collection, had at least three months of clinical exposure, were willing to participate in the study, and who could read and write in English. Nursing students pursuing M.Sc. Nursing and Post Basic B.Sc. Nursing were excluded.

Demographic Variables

Demographic data including age, gender, year of study, weeks of clinical exposure, adequacy of pre-clinic orientation, and the method of selection of the nursing profession were recorded.

Tools

Clinical Learning Environment Supervision (CLES)

The CLES is a standardized five-point scale tool used to measure clinical learning environment challenges among nursing students. Permission to use the tool was obtained from the original author (Cronbach's alpha = 0.98) [23]. The scale consists of 34 items, with responses scored in reverse order: 4 for strongly agree, 3 for agree, 2 for neutral, 1 for disagreement, and 0 for strongly disagree. The maximum possible score is 136.

Coping Behaviour Inventory (CBI)

The CBI is a standardized tool used to assess the coping strategies of nursing students. Permission was taken from the original author to use the tool (Cronbach's alpha = 0.84) [32] . The inventory includes 19 items rated on a five-point scale ranging from 0 to 4, with the following response options: 0 (seldom), 1 (sometimes), 2 (very often), and 3 (always). The total score ranges from 0 to 57. The scale consists of four subscales: problem solving behavior, optimistic behavior, avoidance coping, and transference behavior.

Statistical Analysis

Statistical analysis was conducted using the Statistical Package for Social Sciences with significance level (alpha) established at 0.05. The demographic characteristics, CLES, and CBI scale scores were interpreted using percentages, frequency, mean, and standard deviation (SD). The Chi-square test of independence was employed to determine the associations between demographic variables, the CLES, and the CBI scales.

Ethical Considerations

The study protocol was approved by the principal of the selected college of nursing. Permissions to use the CLES and the CBI tools were obtained from their original authors. The study's objectives and methodology were explained to the participants and informed consent was obtained. Participants were assured of privacy and confidentiality, and they were informed of their right to withdraw from the study at any time without giving an explanation and without any negative consequences.

Results

Demographic Characteristics

Among the participants, 154 (75.12%) were aged 19-21 years, 195 (95.12%) were females, 70 (34.14%) were in their 2nd semester of B.Sc. Nursing, and 70 (34.14%) had 12 weeks of clinical exposure. A total of 164 (80) students selected the course by self-motivation, and 191 (93.18%) received pre-clinic orientation.

Descriptive survey of participants

Among the selected student sample, the descriptive analysis using CLES showed that the majority (139; 67.8%) had a very good score, 47 (22.92%) had an excellent score and 19 (9.26%) had a good perception of learning challenges in the clinical area. Poor perception was not found in the sample. The mean (92.67), median (93) and SD (17.74) indicated that students had a very good perception of learning challenges.

Chi-square Test of Independence

Chi-square test of independence was used to determine the level of significance of selected demographic variables

and the research variables. The Chi-square values of variables were calculated at a significance level of 0.05 and a table value of 3.84. The demographic variables with *P* value <0.05 were assumed to be significantly associated with the research variables i.e. perception of learning challenges and use of coping strategies.

Analyzing the CLES scores of the participants, it was evident that the Chi-square values of age (19.332), year of study (14.409), and weeks of clinical exposure (12.984), were greater than the table value of 3.84.

Also, the *P*-values of age (0.02), year of study (0.02), and weeks of clinical exposure (0.04), were below the significance level. Thus, it was clear that the perception of learning challenges in clinical areas among nursing students was significantly associated with age, year of study and weeks of clinical exposure. This suggest that age, year of study and the duration of exposure to clinical settings can have an impact on students' perceptions of challenges encountered during clinical postings.

Table 1: Frequency and percentage distribution of subjects based on demographic variables

Variables		Frequency (%)
Age (Years)	16-18	5 (2.43)
	19-21	154 (75.12)
	22-23	45 (21.95)
	>23	1 (0.48)
Gender	Male	10 (4.87)
	Female	195 (95.12)
Year of Study	2nd semester	70 (34.14)
	3rd semester	68 (33.17)
	3rd year	18 (8.78)
	4th year	49 (23.9)
Weeks of Clinical Exposure	12 weeks	70 (34.14)
	13-23 weeks	68 (33.17)
	24-71 weeks	18 (8.78)
	72-86 weeks	49 (23.9)
Basis of Course Selection	Family pressure	41 (20)
	Self-motivated	164 (80)
Pre-clinic Orientation	Yes	191 (93.18)
	No	14 (6.82)

Table 2: Percentage and frequency distribution of perception of learning challenges among nursing students in the clinical area

Perception of Learning Challenges	Range of Score	Frequency (%)
Poor	≤34	0 (0)
Good	35-68	19 (9.26)
Very good	69-103	139 (67.8)
Excellent	103-136	47 (22.92)

Table 3: Percentage and frequency distribution of perception of learning challenges among nursing students in the clinical area

Coping Strategies	Range of Score	Frequency (%)
Seldom	0-16	4 (1.95)
Sometimes	17-30	125 (60.97)
Very often	31-50	75 (36.58)
Always	51-57	1 (0.48)

Table 4: Chi-square values of selected demographic variables and their level of significance with learning challenges in clinical area

Demographic Variables	Use of coping strategies				Chi Square χ^2	*P* value
	Seldom (f)	Sometimes (f)	Very often (f)	Always (f)		
Age						
16-18 years	0	2	3	0		
19-23 years	1	90	63	0		
22-23 years	2	33	9	1	63.239	*0.00*
>23 years	1	0	0	0		
Gender						
Male	0	0	6	4	2.565	0.46
Female	0	19	133	43		
Year of Study						
2nd sem B.Sc. Nursing	0	6	39	25		
3rd sem B.Sc. Nursing	0	4	49	15		
3rd year B.Sc. Nursing	0	3	13	2	14.409	0.02
3rd year B.Sc. Nursing	0	6	38	5		
Weeks of Clinical Exposure						
12 weeks	0	7	42	26		
13-23 weeks	0	5	50	13		
24-71 weeks	0	2	26	5	12.984	0.04
72-86 weeks	0	5	21	3		
Basis of Course Selection						
Family pressure	0	6	28	7	2.360	0.30
Self-motivated	0	13	111	40		
Pre-Clinic Orientation						
Yes	0	16	130	45	2.914	0.23
No	0	3	9	2		

Table 5: Chi-square values of selected demographic variables and their level of significance with coping strategies

Demographic Variables	Use of coping strategies				Chi Square χ^2	*P* value
	Seldom (f)	Sometimes (f)	Very often (f)	Always (f)		
Age						
16-18 years	0	2	3	0	63.239	*0.00*
19-23 years	1	90	63	0		
22-23 years	2	33	9	1		
>23 years	1	0	0	0		
Gender						
Male	0	6	4	0	0.292	0.962
Female	4	119	71	1		
Year of Study						
2nd sem B.Sc. Nursing	0	36	34	0	18.761	0.02
3rd sem B.Sc. Nursing	1	44	23	0		
3rd year B.Sc. Nursing	2	12	4	0		
3rd year B.Sc. Nursing	1	33	14	1		
Weeks of Clinical Exposure						
12 weeks	0	40	35	0	16.711	0.05
13-23 weeks	0	43	24	1		
24-71 weeks	2	23	8	0		
72-86 weeks	2	19	8	0		
Basis of Course Selection						
Family pressure	2	22	17	0	3.283	0.35
Self-motivated	2	103	58	1		
Pre-Clinic Orientation						
Yes	4	116	70	1	0.397	0.94
No	0	9	5	0		

The Chi-square test values of the CBI scores also exhibited findings similar to those related to perceptions of learning challenges. The table value for age was 63.239 with a *P* value of 0.00, indicating a significant association with the use of coping strategies in the clinical environment. Apart from age, Chi-square value for year of study (18.761, *P*=0.02) was also greater than the table value of 3.84, indicating significance. The *P* value for weeks of clinical exposure was 0.05 with a Chi-square value of 16.711 (>3.84), suggesting a significant relationship with coping strategies as well. These results indicate that the use of coping strategies by nursing students is significantly associated with age, year of study, and weeks of clinical exposure.

Therefore, the Chi-square test of independence produced similar results for both CLES and CBI scores. It indicated that both the perception of learning challenges in clinical areas and the use of coping strategies by nursing students were significantly associated with age, year of study and weeks of clinical exposure.

Discussion

The analysis of demographic variables revealed that the majority of the subjects (75%) belonged to 19-21 years age group, and 95% were females. The data showed that 34% of the participants were 2nd semester B.Sc. Nursing students. It was reported that 80% of the subjects chose nursing profession by self-motivation. About 34% had clinical experience of 12 weeks and the majority (93%) had received adequate pre-clinical orientation regarding the clinical environment. The baseline variables of this study were comparable to the findings of a study conducted in Saudi Arabia, which reported an average participant age of 21 years, with the majority being females (57.5%). In that study, most students expressed interest in nursing (83.0%). The data showed that 62.0% of the participants were third year B.Sc. Nursing students and most were enrolled in advanced adult care nursing (29.0%). The majority had no previous experience in nursing (75.5%).[6]

In the present study, 67.8% of participants demonstrated a very good perception of learning challenges in clinical areas, 22.92% had an excellent perception, and only 9% had a good perception. This indicates that more than half of the participants had a very good understanding of the learning challenges faced in clinical settings. The findings are supported by a study conducted in Saudi Arabia, which reported that 72.1% of participants

had a very good perception, 21.5% had an excellent perception, and 6.4% had a good perception of learning challenges in clinical areas.[6] In the present study, out of 205 participants, 60.97% reported using coping strategies sometimes in the clinical settings, 36.5% used them very often, and 1.9% reported never using coping strategies. These results are comparable to those of the Saudi Arabian study which revealed that 85% of nursing students used coping strategies.[6]

The present study findings revealed a significant association between the perception of learning challenges and selected demographic variables such as age, year of study, and weeks of clinical exposure. These results are supported by a study conducted in Hong Bang, which also found a significant association between demographic variables such as age (0.266), and gender (0.474) with the perception of learning challenges.[7] The findings of the present study also revealed a significant association between coping strategies and selected demographic variables, such as age, year of study, and weeks of clinical exposure. This finding is consistent with a study conducted in Ghana, which reported an association between demographic variables and the perception of learning challenges.[8]

Study Limitations

This study was conducted with a relatively small sample size of 205 participants from a single college, which limits the generalizability of the findings. Additionally, only B.Sc. Nursing students were included, and the study was also limited to individuals who were willing to participate.

Conclusion

The present study findings provide valuable insight, indicating that the majority of students had a very good perception of learning challenges in clinical areas, and most participants reported using coping strategies sometimes in these settings. These results can serve as useful resource for nursing educators in guiding and supporting nursing students in the clinical environment. Based on the findings, student nurses may also use the assessment tool to identify learning challenges and coping strategies in clinical environments. The results can be incorporated into continuing nursing education sessions. Nurse educators have a responsibility in enhancing the knowledge of students related to coping strategies. Additionally, the study may serve as a reference for future researchers in related areas. The abstract

can be published in nursing journals or presented as posters at academic forums. Future studies can replicate this research in similar or varied settings with larger samples and may also explore coping strategies among students in other allied health disciplines. Furthermore, a descriptive study can be conducted to assess the effect of psychoeducation on nursing students' perception of learning challenges, particularly from the perspective of nursing educators.

Conflict of Interest
Nil

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