INTRODUCTION

The learning environment consists of the physical, educational, psychological and social context in which students play different significant roles for full filling their academic requirement and professional development. The entry to higher education always involves a series of challenges and changes in the environment. Globally rapid and continuous changes in the educational system of higher education and health professions including new programmes, curricula and strategies have increased the importance of improving the learning environment of all level students under universities. The purpose of higher education is to provide learning environment that guides the students toward academic achievements which promote their professional and personal lives.

At present different specialized courses have been incorporated in post graduate program in Nursing education creating challenges to educational institutions on the preparation of their graduates’ students. Studies have found that many factors such as the physical environment, personal interest, teaching methodology, interpersonal relationships, and social environment influence teaching and learning process and its outcome for producing competent graduates to the society. Positive relationship have been observed between students positive perception of their learning environment and their academic achievements.

In order to evaluate learning environment previous studies have widely used Dundee Ready Education Environment Measure (DREEM) scale among medical and nursing students but its utilization among post graduate level of nursing program has not been well established. Thus this study aimed at finding the perception of educational environment of the post-graduates’ students in different nursing colleges of Nepal.

METHODS

Descriptive cross-sectional design was adopted to find out the students’ perception on educational environment of the postgraduate program in selected nursing colleges of Nepal. Undergraduate students who were studying in Maharajgunj Nursing Campus (MNC), Pokhara Nursing Campus (PNC), Chitwan Medical College School of Nursing (CMC-SON) and National Medical College (NMC), Birgunj were taken as study sample using complete

ABSTRACT

Background: Student’s positive perception towards the academic environment determines the quality of education. This study aimed at finding students’ perception on educational environment of the postgraduate nursing programme of Nepal.

Methods: Descriptive cross-sectional design was conducted among 104 masters level nursing students from four selected nursing campuses under Institute of Medicine, Tribhuvan University. Enumerative sampling technique was used to select the sample. Data were collected using validated standard tool Dundee Ready Educational Environment Measure (DREEM) scale and analyzed using descriptive statistics.

Results: Most of the nursing students (81.7%) had positive level of perception on their educational environment and few had excellent perception. Total DREEM mean score was 134.37±21 out of 200. Specifically, mean score of learning was 31.93±5.1 out of 48; students’ perception of teachers was 30.02±5.072 out of 44; students’ academic self-perception was 22.32±3.54 out of 32; students’ perception of atmosphere was 32.26±5.1 out of 48 and mean score for students social self-perception was 17.82±3.3 out of 28. Lower mean score <2.0 was identified on teaching factual learning, opportunities to memorize learning, supporting during stress, time management of programs, well preparation for classes and student’s self-perception.

Conclusions: The findings indicate more positive perception on educational environment among postgraduate nursing students. Similar aspects such as teaching factual learning, memorizing learning, supportive students during stress, and social environment need to be emphasized to enhance the students’ educational environment of post-graduate nursing program by the academic institution.

INTRODUCTION

The learning environment consists of the physical, educational, psychological and social context in which students play different significant roles for full filling their academic requirement and professional development. Students’ entry to higher education brings about a series of changes in their affective, cognitive, professional and social levels. Globally rapid and continuous changes in the educational system of health professions including new programmes, curricula and strategies have increased the attention to improve the learning environment of all level students under universities. The purpose of higher education is to provide learning environment that guides the students toward academic achievements which promote their professional and personal lives.

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In order to evaluate learning environment previous studies have widely used Dundee Ready Education Environment Measure (DREEM) scale among medical and nursing students but its utilization among post graduate level of nursing program has not been well established. Thus this study aimed at finding the perception of educational environment of the post-graduates’ students in different nursing colleges of Nepal.

METHODS

Descriptive cross-sectional design was adopted to find out the students’ perception on educational environment of the postgraduate program in selected Nursing Colleges under Institute of Medicine, Tribhuvan University. All postgraduate nursing students who were studying in Maharajgunj Nursing Campus (MNC), Pokhara Nursing Campus (PNC), Chitwan Medical College School of Nursing (CMC-SON) and National Medical College (NMC), Birgunj were taken as study sample using complete
enumeration technique. There were 104 master level nursing students in the selected colleges.

Ethical approval was obtained from Institute of Medicine Institutional Review Committee. Administrative approval for data collection was obtained from each nursing colleges. Data was collected from March 2019 to June 2019 by researchers themselves. Respondents were informed about the date of data collection and time was set on mutual plan consulting with their class coordinators. Written informed consent was taken from each respondent prior to data collection.

Perception of postgraduate students on their educational environment was measured by validated standard tool named Dundees Ready Educational Environment Measure (DREEM) developed by Roffs. DREEM is 50 items inventory, consisting of 5 subscales: Students’ Perceptions of Learning (SPL)-12 items, Students Perception of Teachers (SPT)-11 items, Students’ Academic Self-Perceptions (SASP)- 8 items, Perception of Atmosphere (SPA)- 12 items, and Students’ Social Self-Perception (SSSP)-7 items. The responses were rated on a five-point Likert scale, ranging from a minimum score of 0 (strongly disagree) to a maximum of 4 (strongly agree). The 50-item DREEM has a maximum score of 200, indicating the ideal educational environment. DREEM questionnaires were distributed to the students after a brief explanation of the purpose of the study, and data collection process. They were requested to fill up the questionnaire in front of the researchers. They were also assured about anonymity and confidentiality of the information given by them. Also the name of the colleges were coded as college I, II, III and IV. Data were entered into Statistical Package for Social Science (SPSS) version 20 and were analysed by using DREEM author guide to assess the mean score and standard deviations on each subscale.

RESULTS

A total 104 master level 1st and 2nd year nursing students were participated from four selected nursing campuses. Among them, 41 students were from MNC, 29 students from PNC, 31 students from CMC-SON and 3 students from NMC, Birgunj Campus. All were female students.

Table 1: Students’ level of perception on educational environment

| Level of Perception | Number (%) |
|---------------------|------------|
| Students’ Perception of Learning | |
| Very Poor (0-12) | - |
| Teaching is Viewed Negatively (13-24) | 1 (1.0) |
| A more Positive Perception (25-36) | 85 (81.7) |
| Teaching highly thought of (37-48) | 18 (17.3) |
| Students’ Academic Self Perception | |
| Feeling of Total Failure (0-8) | - |
| Many Negative Aspects (9-16) | 7 (6.7) |
| Feeling more on Positive Side (17-24) | 72 (69.2) |
| Confident (25-32) | 25 (24.0) |
| Students’ Perception of Atmosphere | |
| A Terrible Environment (0-12) | - |
| There are many issues which needs change (13-24) | 8 (7.7) |
| A more positive Atmosphere (25-36) | 75 (72.1) |
| A good feeling Overall (37-48) | 21 (20.2) |
| Students’ Perception of Teachers | |
| Abysmal (0-11) | - |
| In need of some retraining (12-22) | 9 (8.6) |
| Moving in the right direction (23-33) | 71 (68.3) |
| Model Teachers (34-44) | 24 (23.1) |
| Students’ Social Self Perception | |
| A Terrible Environment (0-12) | - |
| There are many issues which needs change (13-24) | 9 (8.7) |
| A more positive Atmosphere (25-36) | 75 (72.1) |
| A good feeling Overall (37-48) | 21 (20.2) |
| Overall Perception | |
| Very Poor (0-50) | - |
| Plenty of Problems (51-100) | 1 (1.0) |
| More positive than negative (101-150) | 85 (81.7) |
| Excellent (150-200) | 18 (17.3) |
Most of the students overall perception on education environment was more positive than negative (81.7%) and few (17.3%) had excellent perception on their educational environment. Majorities of the students had more positive perception of learning (81.7%), positive atmosphere (72.1%), and social self-perception of positive atmosphere (72.1%). Similarly, 68.3% of students’ perceived that teachers are moving in the right direction and 23.1% perceived as model teachers. Still few students perceived many negative aspects in academic side (6.7%), many issues which needs change in atmosphere (7.7%) and social self-perception (8.7%) as well as they felt need of some retraining of teachers (8.6%) (Table 1).

Regarding students’ perception on learning subscale, mean scores were higher on the aspects of teaching and also on learning abilities but less on aspect as teaching over-emphasizes factual learning. Likewise, on students perception of teaching subscales, mean scores were higher on aspect as teacher were knowledgeable followed by teachers communication skills than on aspect on teachers give relevant examples and well prepared on classes (Table 2).

Table 2: Students’ scores on educational environment: perception of learning and teachers

| Items                                           | Mean score ±SD | Mean % |
|------------------------------------------------|----------------|--------|
| **Perception of Learning:12 items**            |                |        |
| I am encouraged to participate in class         | 3.37 ± 0.55    | 84.25  |
| I am clear about the learning objectives of the course | 2.97 ± 0.95    | 74.25  |
| The teaching encourages me to be an active learner | 2.98 ± 0.63    | 74.50  |
| The teaching is often stimulating              | 2.73 ± 0.68    | 68.25  |
| The teaching is student centered              | 2.71 ± 0.99    | 67.75  |
| The teaching helps to develop my confidence    | 2.68 ± 0.93    | 67.00  |
| Teaching helps to develop my competence        | 2.53 ± 1.07    | 63.25  |
| The teaching is well focused                   | 2.64 ± 0.85    | 66.00  |
| **Teaching is too teacher centered**           | 2.68 ± 1.03    | 66.00  |
| Long term learning is emphasized               | 2.55 ± 0.84    | 63.75  |
| The Teaching time is good / worthy             | 2.41 ± 0.96    | 60.25  |
| **Teaching over-emphasizes factual learning**  | 1.67 ± 0.90    | 41.75  |
| **Total mean score**                           | 31.92 ± 5.1    | 66.50  |
| **Perception of Teachers (11 items)**          |                |        |
| The teachers are knowledgeable                 | 3.14 ± 0.614   | 75.50  |
| The teachers have good communication skills with students | 2.87 ± 0.711   | 71.75  |
| The teachers are good at providing feedback to students | 2.82 ± 0.93    | 70.50  |
| The teachers provides constructive criticism   | 2.81 ± 0.96    | 70.25  |
| **The teachers ridicule to the students**       | 2.77 ± 0.97    | 69.25  |
| The teachers gives clear examples              | 2.75 ± 0.81    | 68.75  |
| The teachers are patient with students         | 2.67 ± 0.86    | 66.75  |
| The teachers are well prepared for their class | 2.45 ± 0.92    | 61.25  |
| **The teachers are authoritarian**              | 1.66 ± 1.12    | 41.50  |
| **Students irritate the teacher**               | 2.75 ± 0.81    | 68.75  |
| **The teachers get angry in class**            | 2.82 ± 0.96    | 70.50  |
| **Total Score**                                | 30.02 ± 5.07   | 68.23  |

Among items of academic self–perception scale, students’ mean scores were higher on aspects of confident about passing this year and learned a lot about empathy in their profession whereas less mean score was observed on aspect of memorizing all the needed and good preparation for this year work. Similarly, in the students’ perception of atmosphere scale, mean scores were observed higher in the items of opportunities to develop interpersonal skills, and feel comfortable in class socially whereas lower in the item related to aspect of program is well time tabled (Table 3).

On students’ social self-perception scale, students rated higher score on the aspects of having good friends in this campus and good social life whereas lower mean score was observed on feeling bored on this course (Table 4).

Students perception of learning was more positive (31.92/48), students perceptions of teachers was moving in the right direction (30.02/44), students’ academic self/perception was feeling more on positive side (22.32/32), students’ perceptions of atmosphere was a more positive atmosphere (32.36/48) and their social self-perception was a more positive atmosphere (32.36). Highest score was found in subscales academic self-perception (69.75%) and perception of teachers (68.23%) whereas lowest score was found in social self-perception (63.64%) (Table 5).
Table 3: Students’ scores on educational environment: academic self perception and perception of atmosphere (n=104)

| Statements                                                                 | Mean Score ±SD  | Mean % |
|---------------------------------------------------------------------------|-----------------|--------|
| **Academic Self Perception (8 items)**                                    |                 |        |
| I am confident about passing this year                                   | 3.26±0.71       | 81.5   |
| I have learned a lot about empathy in my profession                      | 3.16±0.68       | 79.0   |
| Much of what I have to learn seems relevant to a career in health care   | 2.92±0.75       | 73.0   |
| I feel I am being well prepared for my profession                        | 2.84±0.93       | 71.0   |
| My problem solving skills are being developed here                       | 2.73±0.76       | 68.25  |
| Learning strategies worked for me before work for me now                 | 2.60±0.83       | 65.0   |
| Last year’s work has been a good preparation for this year work          | 2.46±0.99       | 61.5   |
| I am able to memorize all I need                                         | 2.35±0.95       | 58.75  |
| **Total Score**                                                          | 22.32±3.54      | 69.75  |
| **Statements: Students’ Perceptions of Atmosphere (12 items)**           |                 |        |
| Opportunities for me to develop interpersonal skills                     | 3.19±0.59       | 79.75  |
| I feel comfortable in class socially                                     | 3.18±0.72       | 79.50  |
| The atmosphere is relaxed during lectures                                | 2.89±0.76       | 72.25  |
| The atmosphere is relaxed during the teaching                            | 2.80±0.86       | 70.00  |
| The atmosphere is relaxed during tutorials                               | 2.86±0.94       | 71.5   |
| I am able to concentrate well                                            | 2.73±0.68       | 68.25  |
| Cheating is the problem in this college                                  | 2.61±1.28       | 65.25  |
| I find the experience disappointing                                       | 2.66±1.00       | 66.50  |
| The atmosphere motives me as a learner                                   | 2.60±0.81       | 65.00  |
| The enjoyments outweighs the stress of studying nursing study           | 2.12±1.03       | 53.00  |
| The program is well time tabled                                         | 1.60±1.24       | 40.00  |
| I feel able to ask questions I want                                      | 3.01±0.81       | 75.25  |
| **Total**                                                                | 32.26±5.1       | 67.21  |

Table 4: Students’ scores on educational environment: social self-perception (n=104)

| Statements: Social Self-Perception (7 items)                             | Mean Score ±SD | Percentage |
|--------------------------------------------------------------------------|----------------|------------|
| I have good friends in this campus                                       | 3.27±0.81      | 81.75      |
| My social life is good                                                   | 3.12±1.09      | 78.00      |
| I am too tired to enjoy this course                                      | 2.46±1.09      | 61.5       |
| My accommodation is pleasant                                            | 2.89±0.88      | 72.25      |
| There is a good support system for students who get stressed             | 2.33±0.93      | 58.25      |
| I seldom feel lonely                                                     | 2.05±1.28      | 51.25      |
| I am rarely bored on this course                                         | 1.70±1.17      | 42.5       |
| **Total**                                                                | 17.82±4.37     | 63.64      |

Table 5: Students’ mean score and percentage in DREEM subscales (n=104)

| DREEM Subscales            | Maximum Score | Mean Score ± SD | Percentages |
|----------------------------|---------------|-----------------|-------------|
| Students’ Perception of Learning (SPL)       | 48            | 31.92±4.9       | 66.50       |
| Students’ Perception of Teachers (SPT)       | 44            | 30.02±5.07      | 68.23       |
| Students’ Academic Self-perception (SASP)    | 32            | 22.32±3.54      | 69.75       |
| Students’ Perception of Atmosphere (SPA)     | 48            | 32.36±5.1       | 67.42       |
| Students’ Social Self Perception (SSSP)       | 28            | 17.82±3.3       | 63.64       |
| **Total DREEM Score**                      | 200           | 134.37±21       | 67.18       |

**DISCUSSION**

Educational environment is very important for the medical students to get valuable achievement, satisfaction and success. Every educational institution put their effort to provide the best possible learning environment and experience for their students. Students also play the vital role in the evaluation, implementation and enhancement of the quality of their educational environment.
In this study, most of the students (81.7%) rated more positive than negative perceptions and 17.3% had excellent perception on their educational environment. Overall mean score was 134.37±21 out of 200 DREEM score, which indicates the positive learning environments. This finding is similar to the study done in a nursing college in Eastern Nepal among students in which overall mean score of nursing students was 131.25 ± 15.82 out of 200.\(^8\) Similar result was also found in the study conducted at university of Malaysia where medical students’ perception of learning environment was more positive than negative (135.6/200).\(^9\) Further other studies in Bangladesh\(^15\) and India\(^16\) revealed more positive than negative learning environment (110/200 and 123/200 total mean DREEM scores) for the undergraduate medical students.

Regarding five essential subscales of DREEM, students had more positive perception of learning (31.93/48). This is similar to the study by Said, Rogayan & Halfizahamon among Malaysian students where they found mean score of 31.43.\(^8\) Other study in Malaysia was also revealed 33.04/48 score in the perception of learning.\(^13\) Here we found students perception of teachers was moved in the right direction (30.02/44). This findings is consistent with the findings of the study done by Koirala (2019) among undergraduate students of Nursing, Institute of Medicine where the mean score on perception of teacher was 30.7 out of 44.\(^14\) Similar score was also reported in the done in Malaysia in which DREEM mean score on perception of teachers was 29.68/44.\(^14\)

In this study, students had a more positive perception of atmosphere (32.26/48) and this finding is almost similar with the finding of Koirala (2019) in Kathmandu in which nursing students scores was 33.3 on this subscale.\(^3\) Concerning social self-perception, students reported that there are many issues which needs change (17.82/28) and this findings is almost similar with the study done among nursing students of the Institute of Health Science, province no. 1 of Nepal which revealed 16.43 score on this scale.\(^8\)

Further, item wise score signifies the lower score on items such as providing factual learning with examples, time management, well preparation for class and opportunities for increasing memories which are similar with the findings of studies done in Kathmandu and Dharan of Nepal.\(^8,13\)

Despite overall positive perception, specifically we identified that students perceived that the teachers were authoritative, need to more time management for classes and the lack of good support system for the students at the time of stress. This findings is consistent with study conducted among nursing students in one of institution from Nepal which emphasized the need to consider these aspects among nursing programmes.\(^8\)

Here we discerned that students’ perception of social self-perception was lower than other aspects with low mean score. This finding is consistent with findings conducted among medical and nursing students in previous studies.\(^8,11,14\)

**CONCLUSION**

Overall level of perception and overall obtained mean scores indicates the post graduate nursing students’ positive perception on educational environment. Consequently, providing factual learning, time management, well preparation for class, opportunities for increasing memories and the aspects of social self-perception are shown to be the consideration areas for the enhancement of educational environment of the post graduate nursing students.

**CONFLICT OF INTEREST:** None

**FINANCIAL DISCLOSURE:** None

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