สภาพแวดล้อมการเรียนรู้ในคลินิกและความพึงพอใจของนักศึกษาพยาบาล สาธารณรัฐแห่งสหภาพเมียนมาร์

Clinical Learning Environment and Satisfaction among Nursing Students, The Republic of the Union of Myanmar

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บทคัดย่อ

ความพึงพอใจของนักศึกษาได้ถูกนำมาใช้เป็นตัวชี้วัดประสิทธิผลของการศึกษาพยาบาล การศึกษาพบว่าสภาพแวดล้อมการเรียนรู้ในคลินิกส่งผลต่อความพึงพอใจของนักศึกษา การวิจัยเชิงพรรณาหาความสัมพันธ์ครั้งนี้มีจุดมุ่งหมายเพื่ออธิบายสภาพแวดล้อมการเรียนรู้ในคลินิก ความพึงพอใจของนักศึกษาและเพื่อสำรวจความสัมพันธ์ระหว่างสภาพแวดล้อมการเรียนรู้ในคลินิกกับความพึงพอใจของนักศึกษาพยาบาล กลุ่มตัวอย่างเป็นนักศึกษาพยาบาลจำนวน 166 คน จากมหาวิทยาลัยพยาบาล 2 แห่งในสาธารณรัฐแห่งสหภาพเมียนมาร์ เครื่องมือที่ใช้ในการวิจัยได้แก่ แบบบันทึกข้อมูลส่วนบุคคล แบบวัดสภาพแวดล้อมการเรียนรู้ในคลินิก (CLEI) และ แบบวัดความพึงพอใจ (SS) ค่าสัมประสิทธ์สหสัมพันธ์ของครอนบาคของแบบวัดสภาพแวดล้อมการเรียนรู้ในคลินิกแต่ละด้านมีค่าอยู่ระหว่าง .86 - .90 และค่าดังกล่าวของแบบวัดความพึงพอใจเท่ากับ .84 วิเคราะห์ข้อมูลโดยใช้สถิติเชิงพรรณา สัมประสิทธิ์สหสัมพันธ์ของเพียร์สันและสัมประสิทธิ์สหสัมพันธ์แบบลำดับที่ของสเปียร์แมน

ผลการศึกษาครั้งนี้พบว่า

1. กลุ่มตัวอย่างรับรู้สภาพแวดล้อมการเรียนรู้ในคลินิกทั้ง 3 ด้านคือ ด้านความเป็นส่วนตัว ด้านนวัตกรรมและด้านความเป็นปัจเจกบุคคลในระดับต่ำในขณะที่มีการรับรู้ด้านการมีส่วนส่วนร่วมและด้านการมุ่งเน้นงานในระดับปานกลาง

2. ค่าเฉลี่ยโดยรวมของความพึงพอใจของนักศึกษาพยาบาลอยู่ในระดับปานกลาง

3.สภาพแวดล้อมการเรียนรู้ในคลินิกแต่ละด้านมีความสัมพันธ์เชิงบวกอย่างมีนัยสำคัญทางสถิติกับความพึงพอใจของนักศึกษาพยาบาล

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ผลของการวิจัยครั้งนี้สามารถนำไปใช้โดยผู้บริหารของสถาบันการศึกษาพยาบาลในการพัฒนากลยุทธ์ที่จะปรับปรุงสภาพแวดล้อมการเรียนรู้ในคลินิกเพื่อจะช่วยให้ความพึงพอใจของนักศึกษาพยาบาลเพิ่มขึ้นต่อไป

คำสำคัญ สภาพแวดล้อมการเรียนรู้ในคลินิก, ความพึงพอใจ, นักศึกษาพยาบาล, สาธารณรัฐแห่งสหภาพเมียนมาร์

Abstract

Satisfaction of students has been utilized as an indicator of nursing education effectiveness. Studies indicated that the clinical learning environment influences student satisfaction. This descriptive correlation study aimed to describe the clinical learning environment and satisfaction, and to explore the relationship between the clinical learning environment and satisfaction among nursing students. The sample was 166 of the fourth year nursing students from 2 universities of nursing, the Republic of the Union of Myanmar. The research instruments were the Demographic Data Form, the Clinical Learning Environment Inventory (CLEI) and the Satisfaction Scale (SS). The Cronbach's alpha coefficient of the subscales of the CLEI ranged from .86 to .90 and that of the SS was .84. Data were analyzed using descriptive statistics, Pearson's Product-Moment correlation coefficient and Spearman's Rank-Order correlation coefficient.

The results of this study indicated that:

1. The subjects perceived three dimensions of the clinical learning environment including personalization, innovation and individualization at low levels, whereas, the dimensions of involvement and task orientation were perceived at moderate levels.

2. The overall mean score of satisfaction among nursing students was at a moderate level.

3. There were statistically significant positive relationship between each dimension of the clinical learning environment and satisfaction among nursing students.

The results of this study could be used by administrators of nursing institutions in developing strategies to improve the clinical learning environment, thereby; satisfaction among nursing students would increase.

Key Words: Clinical Learning Environment, Satisfaction, Nursing Students, The Republic of the Union of Myanmar

Background and Significance

Over the past decade, there has been growing evidence of the need for the evaluation of the quality of nursing education for greater accountability because of the demands required by healthcare institutions and consumers (Suhayda & Miller, 2006). Organizations such as the National League for Nursing Accrediting Commission (NLNAC) accredit all levels of nursing education require nursing education programs to measure, report, and utilize student satisfaction datum as the indicator of educational effectiveness (American Association of Colleges of Nursing, 1998). Satisfaction of the students contributes to intellectual, social, affective growth, classroom and college retention, academic performance, motivation and college persistence (Elliott & Shin, 2002).

According to Chan (2002a), the satisfaction refers to extent of clinical placement enjoyment as perceived by the students. Knowles (1990) stated that a supportive learning environment was a vital element of human resource development and there was a need for facilitation in the development of individuals through improving the educative quality of their environment. Studies of satisfaction among nursing students were conducted in Italy, the United Kingdom, and Hong Kong with different mean scores. Dunn and Hansford (1997) claimed that satisfaction of the students was both a cause and effect of a positive learning environment. A productive, stimulating, and supportive environment created more satisfied students and more satisfied students facilitated the achievement of a more effective clinical learning environment. Clinical learning environment is a multidimensional entity with a complex social context (Chan, 2004). It refers to an interactive network of forces within clinical settings that influence students' clinical and professional learning outcomes (Dunn & Burnett, 1995).

Chan's concept has five dimensions for clinical learning environment, which are individualization, innovation, involvement, personalization and task orientation (Chan, 2001b). Individualization is extent to which students are allowed to make decisions and are treated differently according to ability or interest. Innovation refers to extent to which the clinical teacher/clinician plans new, interesting, and productive ward experiences, teaching techniques, learning activities, and patient allocations. The clinical tutors often think of interesting activities for the students. Involvement assesses extents to which students participate actively and attentively in hospital ward activities. Personalization emphasizes opportunities for individual students to interact with the clinical teacher/clinician. The clinical teacher considers the students' wellbeing and talks to individual students. Task orientation represents extent to which ward activities are clear and well organized. Students understand exactly what has to be done in the ward.

In Myanmar, the University of Nursing (Yangon) and (Mandalay) are under the Department of Medical Science, Ministry of Health. The two universities offer a four-year "Generic" bachelor degree program designed for high school graduates and , two-year " bridge" bachelor degree program designed for diploma nurses with previous work experience

and a master degree program in nursing (Department of Medical Sciences, 2002).

Regarding satisfaction on clinical field placement for nursing students, Han (2004) found that 94% of students had difficulties to applying nursing procedures from the academic setting into clinical setting. Htay (2009) also found out that students lacked confidence in a clinical setting because clinical staff members did not welcome and support them. They felt isolated from other health care team members. As for the opportunities for individual students to interact with clinical teachers and concern for students' personal welfare, Htay (2009) found that 96% of students viewed clinical nurses could not provide enough guidance and supervision to nursing students. Most of the students stated that they could not get a wide range of learning opportunities in the hospital wards. Clinical staff also did not get clear information about students' clinical teaching (Htay, 2004). The nurse instructors/tutors in Myanmar have limited time to supervise nursing students individually.

In order to enhance collaboration between nursing education and nursing service, the University of Nursing, Yangon which is the WHO Collaborating Centre for Nursing and Midwifery Development, conducted evaluation workshop on the outcomes of the implementation of the model for collaboration between nursing and midwifery service and education. There were 34 participants including 21 clinical staff and 13 teaching staff at the University of Nursing, in Mandalay. Those participants implemented the collaboration model at 15 new wards from 8 teaching hospitals from August 2010 to December 2010. The purpose was to assign a *nursing tutor* similar to a nurse leadership position in teaching hospitals, who is accountable both for the quality of care provided in the clinical setting and the quality of students' teaching and learning in the clinical setting. A pretest was done for the implementation of the collaboration model. Monitoring was done throughout the implementation. Post test and evaluation were also done after 5 months. The output of collaboration model showed it would be very effective if honorary tutors/sisters could be appointed in hospitals. However, some weaknesses in the hospital setting still existed, such as inadequate equipment and teaching aids, manpower shortage, work overload and an overload of students who come from different programs such as B.N.Sc, and Diploma in Nursing etc, (Ministry of Health [MOH], 2011).

According to the former rector of University of Nursing (Yangon), there are many issues in nursing and midwifery education that need to be reviewed and revised urgently. These include curriculum; teaching methods; clinical practice and clinical environments; students' assessment and evaluation methods; and quality assurance and accreditations (personal communication, 2009). Healthcare, employers and consumers continue to complain about the lack of competency in clinical nursing skills and their dissatisfaction with new graduate nurses both of which affect the quality of health care (Htay, 2009).

Overall, many studies demonstrated the importance of clinical learning environment influenced to the nursing students competency (Papp, Markkanen, & von Bonsdorff, 2003).

Furthermore, In Myanmar, one of the studies conducted in Monastic school from Shan State showed students' satisfaction is one of the effective school indicators (Lankara & Ye, 2015). On the other hand, satisfaction about the field of study is one of the most important factors in the students' education and success (Fattahi, Javadi, & Nakhaee, 2004). However, little is known about satisfaction of nursing students in University of Nursing, Yangon and University of Nursing, Mandalay. There is no study conducted regarding the clinical learning environment and satisfaction among nursing students.

Many studies have been conducted in developed countries which were different from Myanmar in terms of curriculum, teaching and learning styles, physical environment and resources. The results from developed countries may not explain the situation of nursing education in the Republic of the Union of Myanmar. This study aimed to describe the clinical learning environment and student satisfaction, and to explore the relationship between the clinical learning environment and satisfaction among nursing students. The results can be used as baseline information for administrators of nursing institutions and related hospitals in order to develop proper strategies to improve the clinical learning environment and increase satisfaction among nursing students. Moreover, the results can increase the managers' awareness and information about present shortcomings in educational system, qualitative and quantitative development of services, and qualitative development of observations in the students' satisfaction.

Objectives

A descriptive correlational design aimed to examine the clinical learning environment and satisfaction among nursing students and the relationships between the clinical learning environment and satisfaction among nursing students, the Republic of the Union of Myanmar.

Conceptual Framework

The conceptual framework of this study was based on the literature review. According to Moos (1987), learning environment of the setting can influence physically and mentally of the people working in this particular setting. The clinical learning environment is a collaborative network of powers within the clinical setting that influences learning outcomes (Dunn, 1995). Chan (2004) found that level of satisfaction was how the students treated, recognized individually when they are in their work place. Clinical learning environment refers to an interactive network of forces within clinical settings that influence students' clinical and professional learning outcomes (Chan, 2002b). It consists of five dimensions; individualization, innovation, involvement, personalization, and task orientation. Satisfaction of the students is both a cause and an effect of a positive learning environment. Satisfaction refers the extent of enjoyment of clinical field placement (Chan, 2002b). The relationship between clinical learning environment and satisfaction among nursing students was tested in this study.

Methodology

A descriptive correlational design was used to examine clinical learning environment and

satisfaction among nursing students and to determine the relationships between clinical learning environment and satisfaction among nursing students, the Republic of the Union of Myanmar.

Population and Sample

The target population of this study included 281 fourth year nursing students who had been studying in the University of Nursing, (Yangon) and (Mandalay). The sample subjects were selected by using simple random sampling from these universities. In accordance with the formula of Yamane (1967), the sample size in this study was 165. Considering the possible loss of subjects, 20 % of the sample size (33 nursing students) was added (Israel, 2003).Therefore, the total sample size was 198 nursing students.

Research Instruments

The research instruments included three parts. The questionnaire regarding demographic data was developed by the researcher. It asked about gender, age, and name of university. The measurement of Clinical Learning Environment Inventory (CLEI) by Chan (2001a) was used with kindly permission from Dr. Chan. It had 35 items with five dimensions: individualization, innovation, involvement, personalization, and task orientation. Each dimension had seven items. CLEI had 16 negative items. Satisfaction Scale (SS) was used to assess the satisfaction level of nursing students (Chan, 2002b). It had seven items. The satisfaction scale had three negative items. For both questionnaires, there were 4-point, Likert-type scale ranging from the alternatives of Strongly Agree, Agree, Disagree and Strongly Disagree. Positive statements were scored 5, 4, 2 and 1 from Strongly Agree to Strongly Disagree respectively. Negative statements were scored in reverse manner. Omitted and invalid responses were scored as 3. Mean scores were divided into three levels as low level (7.00 - 16.33), moderate level (16.34 - 25.67), and high level (25.68-35.00).

Ethical Consideration

The research proposal was approved from the Research Ethics Review Committee, the Faculty of Nursing, Chiang Mai University and the Research and Ethics Committee of University of Nursing (Yangon). The purpose of the study was explained to the rectors of the universities, and human subjects were respected. After getting permission from the rectors, the questionnaires with an informed consent form were distributed. The subjects were informed of their right to refuse or to withdraw from the study at any time without any effect to their educational performance. Confidentiality and anonymity of the subjects had been guaranteed. Only overall results were published.

Data collection

Data were collected from April to May, 2014. After receiving permission from the Ministry of Health, the researcher met with the rectors of two universities to inform them regarding the purpose, objectives, and benefits of the study and requested them to assign one research coordinator from each university**.** A total of 198 questionnaires were distributed to the sample by coordinators of each university. After two weeks, the researcher received 182 responses (91.92%), and among them, 166 questionnaires (83.84%) were complete and used for data analysis.

Data Analysis

Data analysis was done after data collection, using Statistical Package for the Social Sciences (SPSS 13.0). Descriptive and inferential statistics were employed on the data using the statistical package. Descriptive statistics (frequency, percentage, range, mean, and standard deviation) were used to present the demographic characteristics, the level of the clinical learning environment and satisfaction of the subjects and to examine the relationships between each dimensions of the clinical learning environment with satisfaction dimension. Pearson's Product-Moment Correlation Analysis was used for analyzing the correlation between student satisfaction and dimensions of individualization, involvement, personalization and task orientation and Spearman's rank-order correlation coefficient test was used for dimension of innovation at a significance level of $p < 0.05$.

Results

1. Demographic Data of the Subjects

The majority of the subjects (92.8%) were female. Most of the participants (74.70%) were 20 years old. Over half (54.20%) of the subjects studied at the University of Nursing (Yangon) and 45.80% of them were from the University of Nursing (Mandalay).

2. Clinical Learning Environment

As shown in table (1), among five dimensions of CLEI, the dimensions of individualization, innovation and personalization were perceived at low levels ($\bar{x}$ = 14.36, 13.16, 16.08) and (SD = 4.51, 3.40, 5.12) respectively. Involvement and task orientation were perceived at moderate levels ($\bar{x}$ = 16.42, 19.01) and (SD = 3.56, 4.22) respectively.

3. Satisfaction

The overall mean score of satisfaction among nursing students was at a moderate level ($\bar{x}$ = 18.02, SD = 6.00).

4. **Relationships Between Satisfaction and Each Dimension of Clinical Learning Environment**

As shown in table 3, satisfaction of the students had moderate positive correlations with four dimensions of CLEI including; individualization, innovation, involvement, and task orientation (r = .44, .45, .43, .35,) respectively at ($p < .01$). However, satisfaction of the students had a strong positive correlation with personalization($r = .56$; $p < .01$).

Table 3 The Correlation Coefficient Between Satisfaction and Each Dimension of Clinical Learning Environment (n=166)

	Individualization	Innovation	Involvement	Personalization	Task Orientation
Clinical Learning Environment	.44**	.45**	.43**	.56**	.35**

**$p < .01$

Discussion

The results of this study were discussed based on the research objectives of the study.

1. Clinical Learning Environment

Individualization. The study found a low level of individualization ($\bar{x}$ = 14.36, SD = 4.51) (Table 1) perceived by the subjects. It implies that students were not allowed to make decisions and were not treated differentially according to ability or interest. A possible explanation would be that they were allocated to the ward by the head of the department of university. They cannot choose the ward they are interested to go (Personal communication). Moreover there were no elective courses in the curriculum.

Table 1 Range, Mean, Standard Deviation and level of of Each Dimension of Clinical Learning Environment as Perceived by the Subjects (n=166)

Clinical learning environment	Range	$\bar{x}$	SD	Level
Individualization	7.00 to 25.00	14.36	4.51	Low
Innovation	7.00 to 22.00	13.16	3.40	Low
Involvement	9.00 to 26.00	16.42	3.56	Moderate
Personalization	7.00 to 29.00	16.08	5.12	Low
Task Orientation	9.00 to 32.00	19.01	4.22	Moderate

Innovation. The study found a low level of innovation ($\bar{x}$ = 13.16, SD = 3.40) (Table 1) perceived by the subjects. It implies that clinical teachers rarely planned new, interesting, and productive ward experiences for the students. A possible explanation would be that teaching staffs are not supported with resources such as internet access, library resources, facilities and updated research findings to develop new interesting plans and activities for their students. Library had limited data bases (Tun, 2006). University teachers may lack of clinical competence to teach and supervise students in the clinical setting (Htay, 2009).

Involvement. The study found a moderate level of involvement ($\bar{x}$ = 16.42, SD = 3.56) (Table 1) perceived by the subjects. It implies that students did not have enough chance to participate actively and attentively in hospital ward activities. A possible explanation may be nursing personnel working in the clinical setting became less active in teaching students in clinical practice such as supervision of students in assigned units. There appeared to be an increasing gap between teachers and clinical staff (Ohn et al., 2009). Secondly, there are many nursing students allocated in one ward (MOH, 2011).

Personalization. The study found a low level of personalization ($\bar{x}$ = 16.08, SD = 5.12) (Table 1) perceived by the subjects. It implies that there were limited opportunities for individual students to interact with clinical teachers/clinicians and concerning for students' personal welfare. A possible explanation for the low level of personalization could be that the nursing tutors had very limited time to supervise nursing students individually because two teachers have to go four units and one unit has

five to six students in which each nursing tutor is responsible for 24 students each day. The clinical teachers were not able to consider the students' individual wellbeing (Htay, 2004).

Task orientation. The study found a moderate level of task orientation ($\bar{x}$ = 19.01, SD = 4.22) perceived by the subjects. It implies that ward activities were not really clear and well- organized. Students could not understand exactly what had to be done in the ward. A possible reason could be that students received ward orientation from head nurses or nurse in-charge or clinical staffs verbally. However, there is no checklist and manual paper in order to remind students what should be done by the students in the ward (personal communication).

The mean scores of all dimensions in this study were lower than previous studies conducted in South Australia, Hong Kong, the United Kingdom, Italy and Australia by Chan (2002a); IP and Chan (2005); Midgley (2006); Serena and Anna (2009); and Brown et al. (2011) respectively because Myanmar as a less developing country, the clinical learning environment may have different socio-economic background, cultural and structural in clinical area, the system of educational program, the quality of nursing educators and the ratio of teachers and students etc. compared with those developed countries.

2. Satisfaction

The study found a moderate level of satisfaction ($\bar{x}$ = 18.02, SD = 6.00) perceived by the subjects. It implies that they somewhat enjoyed of their clinical field placement. As shown in table 2, the majority of the subjects had low level of satisfaction (44.00%). Forty-three point three percent of them perceived a moderate level of satisfaction. Some subjects perceived a high level of satisfaction (12.70%). The mean score of this study was lower than previous studies conducted in South Australia, Hong Kong, the United Kingdom, Italy and Australia by Chan (2002a); IP and Chan (2005); Midgley (2006); Serena and Anna (2009) and Brown et al. (2011).

Table 2 Frequency and Percentage of Satisfaction as Perceived by the Subjects (n=166)

Level of student satisfaction	Frequency	Percentage
High	21	12.70
Moderate	72	43.30
Low	73	44.00

A possible explanation could be that even though the students had opportunities to practice in a variety of settings, they faced some difficulties. According to Han (2004), 94% of nursing students found difficulties to applying nursing procedures learned in the academic setting to the clinical setting and they were reluctant to go to clinical settings (Htay, 2004). Therefore, nursing students might not fully enjoy clinical field placement.

3. The relationships between satisfaction and each dimension of clinical learning

environment

There was a moderate positive correlation between individualization, innovation, involvement, task orientation and satisfaction of nursing students showed moderate significant relationships (r = .44, .45, .43, .35) respectively with p value (<0.01) in all dimensions. There was a strong positive correlation between performance and satisfaction of nursing student (r = .56; p < .01). The findings showed that every dimension of the clinical learning environment can contribute to satisfaction of students. It means that the higher the level of individualization, innovation, involvement, personalization and task orientation, the higher the level satisfaction perceived by the nursing students. These results were supported by Knowles (1990) who stated that a supportive learning environment was a vital element of human resource development and there was a need for facilitation in the development of individuals through improving the educative quality of their environment. A productive, stimulating, and supportive environment created more satisfied students, and more satisfied students facilitated the achievement of a more effective clinical learning environment (Dunn & Hansford, 1997).

Conclusions and Implications

The results of this study showed the nursing students perceived personalization, individualization and innovation were at low levels and involvement and task orientation were at moderate levels. The nursing students perceived overall score of satisfaction was at a moderate level. According to dimensions, personalization showed a strong significant relationship with satisfaction. Involvement, task orientation, innovation and individualization showed moderate significant relationships with satisfaction among the students.

The findings of this study highlight information for administrators from two universities and related clinical hospitals under the Department of Medical Science, Ministry of Health in order to improve these areas of the clinical learning environment. The implications of this study are: there will be a need to collaborate between educational and clinical staff regarding facilities in the planning and evaluation of clinical learning experience. The administrators and teaching staff should enhance productive clinical learning environment, such as allowing the students to have flexibility to implement individual judgment within boundaries. The administrators should also encourage and support teaching staff to develop new and effective teaching plans and methods. The administrators should provide more facilities and resources for teaching staff and students such as textbooks, computers, and internet access and updated data bases.

Recommendations

Based on the findings of this study, some recommendations for future studies are to conduct the comparison between actual and preferred clinical learning environment as perceived by nursing students in Myanmar and to expand on nursing students in diploma programs and certificate programs in the country.

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