Nursing Students' Satisfaction towards Clinical Learning Environment (CLE) in Universiti Kebangsaan Malaysia Medical Centre

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ABSTRACT

In the previous studies, it was found that many nursing students have the highest satisfaction towards clinical learning environment (CLE). CLE has an impact on nursing students in preparing them in terms of knowledge and providing quality care for patients. The objective of this study was to determine the level of satisfaction among nursing students in the Universiti Kebangsaan Malaysia Medical Centre (UKMMC) towards CLE. A purposive sampling technique was used in quantitative and cross-sectional descriptive design. Ninety-three of Year 1 to Year 4 nursing students participated by answering modified self-reported Clinical Learning Environment, Supervision and Nurse Teacher (CLES + T) scale questionnaire. The questionnaire consisted of three sections; sociodemographic, clinical placement and five dimensions of satisfaction towards CLE (pedagogical atmosphere, leadership style of the head nurse, premises of nursing in the ward, preceptor relationship and role of the preceptor). In medical ward, 51.6% of nursing students had high satisfaction towards CLE and 48.4% reported to have low satisfaction. Whereas for surgical, orthopaedic, homecare and critical area wards reported to have 50% for both high and low satisfaction towards CLE. The relationship between year of study, gender and level of satisfaction towards CLE among nursing students in UKMMC were statistically not significant ($p = 0.715$, $p = 0.139$). Among the five dimensions of satisfaction towards CLE, leadership style of the head nurse was the highest (72.0%) and the lowest (30.1%) was from pedagogical atmosphere. This study showed that regardless of specific clinical placement for the nursing students, their satisfaction towards CLE were almost similar and the leadership style of the head nurse had the highest impact. Perhaps, the impact of involvement of the head nurse in the clinical teaching should be explored further in the future.

Keywords: *Nursing students, Clinical learning environment, CLES + T*

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INTRODUCTION

Clinical practice is a practice of involvement with the clinical placement (environment) that provides an opportunity for nursing students to apply the theory into practice in real environment and real patients, as well as developing their skills and attitudes that act as a foundation in their profession (1, 2). A good learning experience is needed in preparing the nursing students in providing quality care to their patients (3).

Clinical learning environment (CLE) is an interactive network of forces within the clinical setting that influence the students' clinical learning outcomes (4). The students' behaviour could be influenced by the CLE (5). According to Papastavrou et al. (6), CLE consists of five dimensions which are pedagogical atmosphere, supervisory relationship (mentor), leadership style of ward manager, premises of nursing in the ward and role of the nurse teacher.

Studies have shown that CLE has a great impact to the clinical practice among nursing students because they can apply the theory on what they have learned in the nursing course. Support from the staff in clinical ward is also essential in order to achieve the learning outcomes of the clinical practice placement (3). The nursing students are expected to progress through the clinical practice, and it is important to ensure that the clinical environment is very supportive along the students' development process. Negative perception through clinical placement experience give an impact to the next clinical posting for the first-year nursing students and it could be one of the reason to withdraw from the programme (7).

Although nursing students have the highest satisfaction towards CLE, it is being perceived as one of the most anxiety-provoking components of nursing education because there are dual roles for them to achieve, which are as a learner and as a worker (5–7). As reported by Panduragan et al. (8), a good nursing curriculum, which incorporated clinical placement, teaching and supervision, is one of the factors in producing passionate, intellectual and competent nurses and in turn could help the nursing students to be trained better and performed confidently in clinical setting.

Furthermore, CLE has been shown to produce high quality nursing students from institutions that incorporated it in their nursing curriculum (5). By implementing CLE, the nursing students would be able to achieve satisfactions towards CLE and have the opportunity to practise nursing skills and deliver good quality of care with adequate supervision.

Study on clinical placement of nursing students in Malaysia is extremely limited compared to other countries. In fact, clinical experience is a pillar of nursing programme because students have to work in the clinical after they finished their study. This study was aimed to examine the level of satisfaction towards CLE among nursing students in the Universiti Kebangsaan Malaysia Medical Centre (UKMMC). The findings of this study will improve the organisational management to review the preceptors' job specification and their main roles in supervising nursing students during their clinical practice.

METHODS

The respondents in this study were Year 1 to Year 4 of nursing student from UKMMC. A total of 98 undergraduate nursing students are as follows: 39 (Year 1), 39 (Year 2), 7 (Year 3) and 13 (Year 4). The inclusion criteria were ability to understand Malay/English language and had completed clinical posting in the Semester 1 of Bachelor of Nursing course. The exclusion criteria was nursing students who have working experience as registered nurse. The purposive sampling technique were used in order to focus on

characteristics of interest population and enable to answer for this current research objectives.

The instrument used in this study was Clinical Learning Environment, Supervision and Nurse Teacher (CLES + T) scale which focused on CLE, supervision and nurse teacher which has been developed and validated by Saarikoski et al. (9). This instrument achieved Cronbach's alpha values ranging from 0.82 to 0.96 and the scale was adapted into Malay versions (permission was obtained from the original author to use the questionnaire and translated in Malay language). This questionnaire was a self-reported questionnaire, which determined the nursing students' satisfaction towards CLE in UKMMC. The questionnaire consists of Part A (sociodemographic data), Part B (clinical placement background) and Part C (CLES + T scale [34 items]) that consists of pedagogical atmosphere (PA), leadership style of the head nurse (HN), premises of nursing in the ward (NC), preceptor relationship (PR) and role of preceptor (P). The Likert-scale in the questionnaire ranged from "fully disagree" to "fully agree" for each question and the Cronbach's alpha obtained for this questionnaire ranging from 0.83 to 0.98.

Data was analysed using SPSS version 23 with the significance level set at $p < 0.05$. Descriptive analysis such as mean and standard deviation (SD), frequencies and percentage were carried out in data analysis, which focused on the year of study, gender, last clinical placement and achievement of the learning outcomes. All continuous data were tested for its normality before proceeding to inferential statistics. The total scores were categorised into two categories (highest satisfaction and lowest satisfaction). The aims of this study were to examine sociodemographic data and levels of satisfaction, and presented by using one-way analysis of variance (ANOVA) for the year of study and independent samples t-test for gender. The Kruskal-Wallis test was used to examine the relationship between last clinical placement in the previous semester and level of satisfaction. The Spearman Rank Order Correlation analyses were also used to examine the relationship between achievement of learning outcomes in previous semester as well as frequency of end-shift reflection per week and level of satisfaction.

RESULTS

This study was responded by a total of 93 nursing students. The respondents consisted of 41.9% of Year 1, 40.8% of Year 2, 6.5% of Year 3 and 10.8% of Year 4. In terms of gender, there were 12.9% of male and 87.1% of female (Table 1).

Table 1: Background of nursing students

Background	Frequency	Percentage (%)
Year of study		
Year 1	39	41.9
Year 2	38	40.8
Year 3	6	6.5
Year 4	10	10.8
Gender		
Male	12	12.9
Female	81	87.1

The mean score for a total of satisfaction towards CLE among nursing students in UKMMC was 133.81 (SD = 19.67). The total scoring of the respondents who have high satisfaction was 50.5% ($n = 47$) and low satisfaction was 49.5% ($n = 46$). Table 2 showed the level of satisfaction towards CLE among nursing students in UKMMC. There were five dimensions of satisfaction towards CLE and the leadership style of the head nurse (72.0%) was the highest and the lowest was from pedagogical atmosphere (30.1%).

The satisfaction level of nursing students towards CLE in the medical ward was 48.4% for low satisfaction and 51.6% for high satisfaction, and 50.0% for both

low and high satisfaction in the surgical, orthopaedic, homecare and critical area wards (Table 3). The relationship between year of study, gender and level of satisfaction towards CLE among nursing students in UKMMC were statistically not significant ($p = 0.715$, $p = 0.139$) (Table 4).

Table 5 showed the relationship between last clinical placement in the previous semester and satisfaction towards CLE among nursing students in UKMMC, which also revealed insignificant result ($p = 0.274$).

Table 6 showed a positive significant relationship between achievement of learning outcomes in the last clinical placement and satisfaction towards CLE among nursing students in UKMMC; ($p < 0.001$) for Year 1. However, for Year 2 the same relationship failed to yield significant correlation ($p = 0.173$). The result for Year 4 found that there was no relationship at all between the two variables with p-value of 1.000. The data was not presented for Year 3 nursing students and was removed due to the failure to interpret

Table 2: Level of satisfaction towards CLE

Domains	Low satisfaction		High satisfaction	
	Frequency	Percentage (%)	Frequency	Percentage (%)
Pedagogical atmosphere	65	69.9	28	30.1
Leadership style of the head nurse	26	28.0	67	72.0
Premises of nursing in the ward	42	45.2	51	54.8
Preceptor relationship	37	39.8	56	60.2
Role of the preceptor	33	35.5	60	64.5

Table 3: The clinical placement and level of satisfaction towards CLE

Clinical placement area	Low satisfaction (%)	High satisfaction (%)
Medical	48.4	51.6
Surgical	50	50
Orthopaedic	50	50
Homecare	50	50
Critical care	50	50

Table 4: Relationship between year of study, gender and level of satisfaction towards CLE

Background	Frequency	Mean	SD	F value	p-value
Year of study					
Year 1	39	132.33	21.644	0.454	0.715
Year 2	38	134.97	18.199		
Year 3	6	141.00	14.805		
Year 4	10	130.80	20.778		
Gender					
Male	12	141.67	18.007	1.493	0.139
Female	81	132.64	19.745		

during the study. It is attributed to the small number of nursing students involved. The relationship between frequency of end-shift reflection per week in the last clinical placement and satisfaction towards CLE among nursing students in UKMMC also showed no significance with p-value of 0.333 (Table 6).

Table 5: Relationship between last clinical placement and level of satisfaction towards CLE

Last clinical placement in previous semester		Frequency	Mean rank	X^2	df	p-value
Year 1	Medical 1	5	55.80	24.405	21	0.274
	Medical 2	4	52.75			
	Medical 5	5	29.90			
	Medical 7	5	53.00			
	Surgery 1	4	27.88			
	Surgery 2	5	50.90			
	Orthopaedic male	6	40.00			
	Orthopaedic female	5	54.30			
Year 2	Medical 1	3	62.17			
	Medical 3	5	19.20			
	Medical 5	4	70.13			
	Surgery 1	3	63.83			
	Surgery 3	5	42.10			
	Surgery 4	4	50.50			
	Surgery 5	5	51.30			
	Surgery 7	6	44.25			
	Orthopaedic male	3	46.33			
Year 3	Home care	6	54.58			
Year 4	CCU	4	46.88			
	ICU	2	75.50			
	Burn	2	4.25			
	ED	2	43.25			

Table 6: Relationship between achievement of learning outcomes, frequency of end-shift reflection and level of satisfaction towards CLE

Description	ρ value	p-value
Achievement of learning outcomes of the year of study		
Year 1	0.523	0.001
Year 2	0.226	0.173
Year 3	–	–
Year 4	0.000	1.000
Frequency of end-shift reflection in the last clinical placement and satisfaction towards CLE	0.101	0.333

DISCUSSION

Studies have shown that CLE has a significant impact to the clinical practice among nursing students especially in preparation for practice and student satisfaction with the nursing profession (10). It is important to avoid the Year 1 nursing students to quit from the programme as the experience give impression towards nursing carer (7).

The current study revealed that there was no significant relationship between the year of study and level of satisfaction. This result might be due to a large gap between the numbers of nursing students in each year. This result was also supported by a similar study in Europe by Warne et al. (11), where the study showed no correlation between year of study and level of satisfaction. On the contrary, Papastavrou et al. (6) showed significant findings in relationship between the year of study and students' satisfaction. In addition, another study by Ahmad et al. (12) found that Year 3 and Year 4 had a significant effect on the domain of CLE because students gain more experience when they regularly undergo clinical placement.

This study found that there was no significant relationship between gender and the level of satisfaction, which could be due to the small number of male nurses in the study. Previous studies which also showed a small numbers of males involved, however, it was not stated in any of the results about the relationship (5, 12). The relationship between last clinical placement in the previous semester and the level the of satisfaction was not significant in this study, which could be due to the small data sets for a few clinical placements. Based on results of the current study, there was no relationship between the achievement of learning outcomes in the last clinical placement in the previous semester and the level of satisfaction for each year except for Year 1 nursing students. Year 1 nursing students are attached to supervisors as they are novice in the clinical.

Good interpersonal relationship with the supervisors is one element that caused effective clinical learning, besides the understanding improves as they move from junior to senior phase (12).

This study also showed there was no significant relationship between the end-shift reflection per week and the level of satisfaction towards CLE. In contrast, the previous studies showed that there were significant differences in frequency of meetings, level of satisfaction and students who had frequent sessions with the preceptor where they were reported more satisfied (6, 13). In addition, majority of the students had only single reflection per week, which different with previous studies (6, 13) that had more reflection sessions.

The researchers faced some limitations throughout this study. They encountered some difficulties in the process of analysing the data due to unevenly clinical placement distribution. Their clinical placement depended on the number of nursing students in each year and their learning outcomes for the semester. Therefore, the number of nursing students of each clinical placement varied. Besides that, the respondents completed a self-report questionnaire, which can cause them to answer questions in a socially desirable way and bias response may arise. In short, students' satisfaction could not be reviewed as the only measurement to assess the CLE's effect on students' learning and development because there might due to other interesting and unknown variables (6).

CONCLUSION

This study found the clinical placement is important to ensure the nursing students gain knowledge and skills as a preparation to become a competent nurse. Respondents in this study had higher satisfaction towards CLE. The highest dimension that being asked was the leadership style of the head nurse in guiding the students during the

placement. In future study, there were several recommendations that can help the nursing school to improve the respondents' satisfaction. The implementation of end-shift reflection should be strengthened in order to acquire a continuous feedback from preceptors and students regarding their learning process and performance in the clinical placement. In order to enhance the pedagogical atmosphere experience, the ward staff should be exposed to the nursing students' scope of learning in the clinical placement by implementing seminars or lectures. In terms of nursing research, the study should deal with the limitations inherent in this study by including a larger sample size. It would be interesting if a future study could be performed by comparing the similar practices with other nursing schools. On the other hand, nursing institution could improve the nursing curriculum and clinical placement in order to produce passionate, intellectual and competent nurses for the future.

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