

ORIGINAL ARTICLE

Learning Satisfaction on Practical Teaching Methodologies among Nursing Students of Universiti Teknologi Mara (UiTM)

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ABSTRACT

Introduction: Practical skills are vital for undergraduate nursing students. The attainment of skills depends largely on the methodology used in the teaching. The study was to determine the satisfaction level towards the two teaching methods during a practical session namely the didactic and videotape methods. **Method:** This study was conducted among 243 nursing students at University Teknologi Mara (UiTM) using the convenience sampling method. A cross-sectional study design was applied to assess the students' satisfaction level with the teaching methods during the practical session. Additionally, the study was to compare the satisfaction level of two tertiary education groups, namely Diploma and Bachelor of Nursing students using the Satisfaction Teaching Methodology questionnaire. **Result:** The findings showed that the overall mean of students' satisfaction was 3.93 ± 0.43 for the didactic method and 2.14 ± 0.12 for the videotape method, indicating that all nursing students ($n=243$) were satisfied with the didactic teaching method used during the practical sessions. Moreover, the two tertiary education groups, namely, the Diploma and Degree level Nursing students did not show a significant difference in the satisfaction level of didactic teaching (p value=0.76). Hence, 90% of students preferred didactic teaching for their practical sessions rather than videotaped demonstrations. **Conclusion:** The findings suggest that each practice session should begin with didactic teaching to enhance immediate learning absorption and be followed by video demonstration as a teaching aid for retention of knowledge and memory retrieval.

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INTRODUCTION

Nursing is an academic course that involves theory and practice to promote higher standards of healthcare and prevent illness (1). Theories are concepts that are used to explain facts or phenomena, especially in a case that has been tested repeatedly or accepted widely, which could also be used to make predictions on natural phenomena in a form of statements or principles. Whereas practice is defined by the dictionary as an act or a whole process of doing something, action, and even performance (1). In nursing education, the practical session is very important and necessary for the students to learn and improve their nursing skills (2). Dadgaran, et al explained that nursing in nature is a practical career (2-3). Hence, the practical session in the nursing course helps the nursing students to prepare themselves to face

the reality of the nursing profession.

Nowadays, most nursing institutions use various sources of teaching methods, such as didactic teaching and videotaped demonstration rather than live demonstration. Didactic teaching is performed by providing a live demonstration on a replica of a human body rather than performing the procedure on a real human being. Recently, simulation has been gaining popularity until it has become an integral method of clinical teaching and learning in the nursing field. Simulation is an effective solution to replace real-life clinical exposure and provide adequate clinical learning opportunities (4). The videotaped demonstration uses video recordings as a tool to deliver classes and to gain an understanding of a procedure. Several types of research have been conducted regarding student satisfaction with the teaching method during practical sessions in the laboratory emphasizing that in practical classes with large numbers of students, especially those that involve the teaching of practical skills, the use of a different strategy becomes vital as the students may have the tendency to lose their focus and that the skills

demonstration may not be supported by the appropriate equipment (5-8). The problem that we identified was that the students' needed to follow and adapt to the nursing educators' teaching methods. Moreover, it is necessary to identify how satisfying the teaching methods are for the students.

Previous research about students' satisfaction and preference towards learning experiences showed that a student with a higher level of satisfaction has a greater chance of successfully continuing their studies and finally, culminating in graduation (9). Nursing students should have enough learning experience during practical sessions in the laboratory before having clinical practice in the ward. Therefore, students' satisfaction with their learning experience must be fulfilled to produce excellent and skilful graduates.

MATERIALS AND METHODS

The study was conducted at Universiti Teknologi MARA (UiTM) Selangor Puncak Alam campus using a descriptive survey method that utilizes the questionnaire as an instrument for gathering data. All full-time nursing students (n=243) pursuing both diploma and bachelor programs were included using the convenience sampling method.

The questionnaire used in this study was adapted from the Satisfaction survey Teaching Methodology by Tosta in their study in 2012. The adapted questionnaires consisted of three sections, PART A: demographic data, PART B: measurement of satisfaction with teaching methodology, and PART C: students' preferred teaching method during laboratory sessions. Part B consisted of 15 questions that used Likert scales to measure the satisfaction of students on the teaching method during the practical session which was rated from (1) = Very Dissatisfied (VD), (2) = Dissatisfied (D), (3) = Neutral (N), (4) = Satisfied, and (5) = Very Satisfied (VS). While Part C consisted of three close-ended questions to determine the student preference of practical teaching between didactic teaching and videotaped demonstration. The reliability test score of the questionnaire was 0.872. At first, a short briefing about the aims and objectives of the study was given to the students and the questionnaires were collected immediately upon completion. The students were given the questionnaires that came with informed consent. The data collected were analyzed by using tests contained in the IBM Statistical Package for Social Sciences (SPSS) Version 21.

This study was approved by UiTM Research Ethic committee with reference number of 600-IRMI (5/1/16).

RESULTS

This study involved two hundred forty-three (n=243) samples from full-time nursing students. The students came from both diploma and bachelor levels. Fifty-one

students were excluded as they refused to participate in this research. The mean age of respondents was 20.64±1.55 with a minimum age of 18 years and a maximum age of 25 years.

The majority of respondents were females with 91%, followed by males with only 9%. Meanwhile, the respondents in this study consist of 96% Malays and 4% non-Malays. This study had two tertiary education groups as respondents, 62% of the respondents were bachelor students, and 38% were diploma students. Finally, the respondents were from varied years of study. Among the respondents, 43% were in their 1st year, then followed by 2nd year, 3rd year, and 4th year as 26%, 19%, and 12%, respectively. Table I portray the participants' characteristic in the study.

Table I: Demographic characteristics of the respondents' Characteristics

Characteristics	Mean (SD) or n (%)
Age	20.64 ±(1.55)
Gender	
Male	22 (9%)
Female	221 (91%)
Race	
	Malay 233 (96%)
	Non-Malay 10 (4%)
Educational	
Diploma	93 (38%)
Bachelor	150 (62%)
Year 1	105 (43%)
Year 2	63 (26%)
Year 3	46 (19%)
Year 4	29 (12%)

Table II shows the level of Satisfaction with the Teaching Method used during the Practical Session. The satisfaction level towards the Teaching Method used during practical sessions among nursing students is that the cut-off point is 3.5 which could represent the level of satisfaction either satisfied or dissatisfied (10). Therefore, less than 3.5 (<3.5) indicates dissatisfaction, while more than 3.5 (>3.5) indicates satisfaction. As shown in Table II, the overall mean average for the satisfaction level among nursing students for the teaching method used during practical sessions was 3.93±0.49. This finding which was more than 3.5 (>3.5) showed that students were satisfied with the current practical teaching method. Moreover, there was no significant difference between the two tertiary education groups, diplomas, and degrees on their satisfaction level with the practical teaching method. The finding was supported by obtaining a p-value of 0.763. Additionally, both tertiary education groups were satisfied with the practical teaching with a satisfaction mean of >3.5. This result shows that the nursing students are satisfied with the current teaching method employed by the lecturers during practical sessions in the laboratory.

Table II: Level of Satisfaction on Teaching Method used during Practical Session

Group	n (%)	Mean±SD	P value
All nursing students	243	3.93±0.43	*0.76
Diploma	93	3.94 ±0.43	
Bachelor	150	3.92± 0.53	

*Independent t-test

Table III shows the most preferable teaching method by nursing students during the practical session. The results in Table III showed that 93% of the Diploma nursing students and 88% of the Bachelor nursing students have chosen the didactic method as their most preferred method for the practical session. There was also no significant difference between variables, education level, and the most preferable method for practical sessions (p-value = 0.159).

DISCUSSION

These findings are in line with Omer's study in 2016, which did a study about nursing students' perceptions of satisfaction and self-confidence (11). The study presented that the students were satisfied with the didactic teaching method as well as the strategies used in the teaching and learning, which is shown by the overall satisfaction mean range from 3.76 to 4.0. The teaching method used in his previous study combined live demonstration by the lecturers with simulation. The didactic teaching used during practical sessions in Universiti Teknologi MARA was performing a live demonstration by lecturers and a simulation demonstration using mannequins and plastic body parts that were available in the laboratory. This method is applied by teachers as the core of teaching as it involves the tutor or lecturer in discussing the syllabus and observing student assessments (12).

Moreover, the didactic teaching method is often emphasized for its advantage of offering two-way communication. Direct feedback from lecturers can improve students' learning. Hence, this method gives high satisfaction to the students. Previous studies found that students with modern methods of teaching

were less satisfied with the teaching and learning process on several important points such as immediate question answering, no feedback from lecturers, and no communication between students and lecturers (13).

One of the items asked in the survey was students' satisfaction with skill practicing in a safe environment. This factor is divided into two measurements, sufficient guidance by the lecturers before performing skills and a clear understanding of what is expected by the lecturers. The findings of these two measurements showed that students were satisfied with the service provided by the lecturers with overall mean satisfaction of 3.9±0.43. This result is supported by Eman and Sabah (14) that a didactic teaching method helps to decrease errors, evaluate and learn a specific skill. It is also beneficial in finding out a way to increase safety for the students and the environment around them. The result of this study revealed that the Nursing students in Universiti Teknologi MARA (UiTM) Selangor Puncak Alam campus preferred the didactic teaching method as their method of teaching during practical sessions.

The students were also asked about their experience with videotape demonstrations. A total of 57% of participants stated that they have not been exposed to videotape demonstrations during practical sessions for skills demonstrations by their lecturers. This indicates that the students were less exposed to videotape demonstrations in their learning process. The Mosby Nursing skills website was introduced to the students by the nursing department, in which nursing students can access any nursing skills procedure. This website had a complete video demonstration along with the steps to perform the procedure. Usually, lecturers will tell their students to visit the website before attending the practical session in the next class. However, many students reported they were having difficulties in assessing the website, which resulted in their dissatisfaction with the videotaping method. Similarly revealed in a study by Kelly et al students found it easy to access the videos and understood the instructions for access however had difficulty downloading the video demonstration to their home computers (15). Moreover, most students claimed

Table III: The most preferable teaching method by nursing students during the practical session

Question	Diploma	Bachelor	X ²	P value
Did you ever experience video-taping demonstration during practical session?	Yes 40 (43%)	Yes 65 (43%)	0.002	0.96
What is your preferable method for skill demonstration during practical session in the laboratory Didactic?	87 (93%)	132 (88%)	1.98	0.15
I can clearly see every step of procedures via				
• Didactic	86 (92%)	130 (87%)	1.96	0.16
• Video taping	7 (8%)	20 (13%)		
What is your preferable method for skill demonstration during a practical session in the laboratory Didactic?			1.98	0.15
• Didactic	87 (93%)	132 (88%)		
• Video taping	6 (7%)	18 (12%)		

Chi Square test

that they could see every step of the nursing skills procedure during the practical session more clearly.

A previous study conducted by Alqahtani et al found that there was a significant difference in the mean response between live demonstration groups and procedural groups in measuring the clearness and ease of understanding of the steps in the teaching methods (16). The study was conducted among fourth-year undergraduate male dental students (n=49) for teaching an orthodontic laboratory. In terms of students' preference of the teaching method, a study by Carpenter regarding five types of teaching methods (n=109), found that 38% of the students choose the didactic method. The students claimed that they must be active learners and should engage in the discussion, something that can only be done through the didactic teaching method (17). A current study investigates the satisfaction level of online teaching during a pandemic, the result shows that students are most satisfied with their teachers' competencies and preparedness, while they are least satisfied with the online class quality, where it seems that further steps (18) are needed to be taken.

This reflects the findings of this study as most nursing students in Diploma and Bachelor have chosen the didactic teaching method as their preferred method of teaching. The overall findings suggest that didactic teaching was the students' choice as the most preferable teaching method during practical sessions.

The findings and the data were only collected among the nursing students in Universiti Teknologi MARA Selangor, Puncak Alam Campus. For a larger research scale, we recommend that future research should include other Nursing institutions with undergraduate courses and conduct qualitative research regarding the advantage and disadvantages of both didactic and videotape methods during practical sessions. Then the teaching methods used in the laboratory can be compared to improve the students' nursing skills for the clinical setting.

Future research is recommended to improve the questionnaires used to analyse the students' satisfaction level and their most preferred method during practical sessions in the laboratory. Especially the questionnaire in Part C, which the researcher thought that future research should include open-ended questions to identify the reasons why the students chose the method for the practical session in the laboratory, the weaknesses of the teaching method applied in the practical session, and the perspectives of students towards the applied teaching method. For future researchers, we recommend finding more articles from an academic journal to support the data collection process.

Besides that, future research should also include other methods of teaching during practical sessions such as

e-learning and video teaching to find any associations between the type of teaching methods and students' satisfaction towards it. From this, future researchers can also find any associations between students' performances in clinical practice and the type of teaching method used during practical sessions. The teaching methods that the current researcher has recommended are a didactic method, modern teaching, distance learning approaches, and hybrid teaching models.

CONCLUSION

Student satisfaction is one of the indicators for an institution to measure the effectiveness of its teaching method. It is important to improve in the aspect of teaching methods if the students are not satisfied with the used teaching method.

A previous study revealed that when the students are satisfied with the teaching method, their achievement and performance will be increased (19,20). There are several methods of teaching used in the practical session to ensure that the students can clearly see the demonstration given by their lecturers or clinical instructors such as didactic demonstration and videotape demonstration. Each teaching method has its own advantages and disadvantages. Hence, lecturers should have the creativity to make their teaching varied and interesting according to the procedure protocols. This will expose the students to a more interesting learning process which will eventually satisfy them and attract them to learning.

Based on the study findings, nursing students of Universiti Teknologi MARA Selangor, Puncak Alam Campus have shown no difference in satisfaction levels between diploma and bachelor students. Both tertiary education groups were quite satisfied with the didactic teaching used in the laboratory which is the currently used method of teaching during practical sessions nowadays. Furthermore, the students reported that they prefer didactic teaching more as their practical instructors' teaching method. However, some of them emphasized that the videotape method provides a clearer observation of the demonstration steps. This finding is the same as most reports by previous studies in which the students were satisfied with didactic teaching, a common teaching method used in most nursing institutions, and preferred it more than other methods (5,16-17). This is because didactic teaching emphasizes more on student-teacher interaction, in which two-way communication is a must. With two-way communication, students will be able to gain feedback regarding their performance on time and are able to discuss a matter regarding their learning directly with the lecturers. However, videotape demonstration is recommended for use in places that lack proper facilities, have limited space, or with large numbers of students attending the demonstration session. This way, the problems that usually occur

during live demonstrations such as limited materials and instruments in the laboratory for use and student difficulty in clearly observing the demonstration in crowded classes can be avoided.

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