

Factors Affecting Nursing Students Learning in Clinical from Student Viewpoint at Taif University

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ABSTRACT

Introduction: Clinical practice is important because it allows students to apply their theoretical knowledge in a real environment, develop psychomotor skills, observe and adapt the professional role. In clinical practice, many factors may affect students' learning. These factors are listed as These factors are listed as students related issues, clinical instructor related issues and clinical environment related issues. In order to plan an effective learning, it is essential to specify these factors and organize them in a way that will support the students' learning. This research will discuss these factors in detail.

Aim: The research aims was assessing the factors affecting nursing student learning in clinical practice

Method: Descriptive cross-sectional community-based study was conducted at the University of Taif in the Kingdom of Saudi Arabia. The duration of the study spanned from August 2021- June 2022, the questionnaire was sent to participants via electronic links on Mobile phones,

Results: the study consists of 218 participants, most of them from the fourth year , numbered 92, third year was 54, then the second year was number 41 and finally the first was 31 and most of them are females (62.8%) , 151 student did not have diseases (69.1%) While 49 students had vision impairment (23.3%), Majority of the nursing students 128(58.7%) choosing nursing as a opportunity , the Majority 169 nursing Student agreed that worried about making mistakes in clinical placement while 96 students was said the characteristics of instructor is difficult and 86 students complain the instructor is more interested in their appearance more than their education , half the students 112 student They said there is a difference between theory and practical training and 73 students they said they needed more time for hospital training , the was statistic significant association between student related factors and A grade point average (p.v =.084) and also the was significant statistic association between Clinical related factors and A grade point average (p.v =.091)

Conclusions: It is clear that all themes mentioned by the students play an important role in student learning and nursing education in general. Learning of students in clinical placements is affected by factors originating from themselves, the instructor and clinical wards. Readiness of students, personal and professional characteristics of instructor and attitudes of staff towards students in placements have importance on learning of students.

Recommendation: Practical training is very important in the educational process. We recommend increasing the hours of practical training, link practice with the theoretical part and use modern methods in training

Keywords: Clinical practice, Nursing Students, Learning, Student Viewpoint and Taif University

INTRODUCTION

Clinical education enables students to practice skills learned during courses in real and a controlled environment (Elçigil and Yıldırım,2007). Clinical areas selected in education are environments in which students develop professional attitudes and skills specific for nursing by communicating with patient, making right decisions and improve problem solving skills and self-understanding (Fry, B. (2011).) & (Midgley, 2006). Thus, it is highly important to select the best clinical areas.

These areas contain many factors that may affect learning such as students, instructors, nursing and other healthcare staffs, physical environment, equipment and patients (Kingston, A. 2014).

Knowing these factors is important for controlling, improving, and solving Problems to create an effective clinical educational environment, to make a capable self-confident nursing staff through qualification and training in an appropriate environment.

Clinical education is a process which students experience from the beginning to the end of his/her educational life. During this process, some factors (student, instructor and environment related) affect learning of students (Gemuhay, H 2019). If these factors well-managed, students can finish clinical placements with a positive learning experience.

The research done to assess the factors that affect nursing students on the clinical learning environment and how we can decrease the negative points to enhance nursing study experience and enhance the next nursing generation knowledge and skills.

Researchers hope that the outcome of this study will be value to the students at Taif University in general and to students

at the college of applied medical Sciences regarding their clinical learning, academic level and achievements.

METHODOLOGY

Research design: A descriptive, community -based study

Research setting: Taif University, College of Applied Medical Sciences , nursing department

Research duration: During the period extended from August 2021- June 2022

Study population: Nursing student at Taif University College of applied medical sciences. Male and female students attending the college program, general nursing, who are accepted to participate in the study.

Sampling and sample size: A total sample of 200 college students were selected by using Stratified random sampling technique.

Data collection technique: Data collection instrument Closed, and open-ended questionnaire will be used, consisted from five sections.

Data management and analysis: The data will be analyzed by online service (Google Forms).

Ethical consideration: Ethical approval for this research was obtained from the ethics review committee of Applied Medical Sciences College at Al-Taif University. No potential identifiers such as name, email or phone no. asked from the participants and the consent was asked at the beginning of the questionnaire.

Message for explaining the major aim of the research was written at the beginning of the survey in order to give the

participants clarifications about the research. By agreeing to answer the survey, that has considered as approval of the participants to involving in the study. Additionally, all of the collected data were kept with the researchers in order to protect persons' confidentiality who involved in this study.

RESULTS

218 of students participated in the questionnaire, 151 of them did not have diseases (69.1%), 49 of students had vision impairment (22.3%), 10 of students had chronic diseases (4.4%), 5 of students had anemia (2%), 3 of students had Shortness of breath (1.1%) and 2 of students with hearing impairment (0.9%).

Table 1: The health problems among nursing students.

Chronic disease	10	4.4%
Impired in vision	49	22.3%
Impired in hearing	2	0.9%
Shortness of breath	3	1.1%
Anemia	5	2%
No Disease	151	69.1%
TOTAL	218	100

Table 2: Year in program academic.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	first	31	13.5	14.2	14.2
	second	41	17.8	18.8	33.0
	third	54	23.5	24.8	57.8
	Fourth	92	40.0	42.2	100.0
	Total	218	94.8	100.0	
Missing	System	12	5.2		
Total		230	100.0		

The highest percentage from the fourth year was 42.2% (92 students), the third year 24.8% (54 students), followed by the second year 18.8% (41 students) and the first year 14.2% (31 students).

Table 3: Grade Point Average among nursing students.

Grade Point Average	Frequency	Percent %
0.75 - 1.75	31	14.2%
1.76 - 2.75	105	48.2%
2.76 - 3.75	69	31.7%
3.76 - 4.00	13	6%
Missing	12	6.1%
Total	230	100%

In Table 3: The higher percent 48.2% in Grade Point Average (1.76-2.75). After that percent 31.7% in Grade Point Average (2.76-3.75). Then 14.2% in Grade Point Average (0.75-1.75). The last one 6% in Grade Point Average (3.76-4.00). The total percent is 93.9% from 100%. The missing percent is 6.1% about 12 students.

Table 4: Gender distribution of nursing students.

Gender	Frequency	Percent %
Male	77	33.5%
Female	141	61.3%
Missing	12	5.2%
Total	230	100%

Table 5: Crosstabulation between student related factours and A grade point average

Count		student						Total
		Worried about making mistakes	I cannot communicate professionally with patients	I do not have a readiness for practical learning	I was not informed of the educational objectives from the practical part	There is no official's field follow-up from department during the training	You do not have previous knowledge of the goals that you must as a student achieve during the day	
GPA	0.75 - 1.75	3	2	2	0	2	0	9
	1.76 - 2.75	25	4	4	4	6	7	50
	2.76 - 3.75	0	0	2	1	0	0	3
	3.76 - 4.00	57	7	28	21	29	11	153
Total		85	13	36	26	37	18	215

In Table 4: The female percent is 61.3% the highest. The male percent is 33.5%. The total percent 94.8%. The missing percent is 5.2% about 12 student

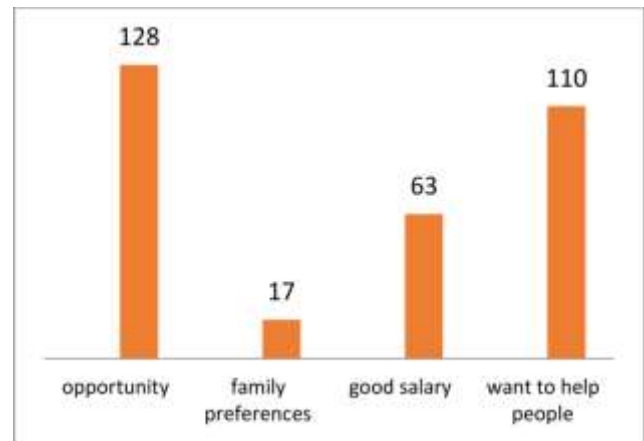


Figure 1: The reason for preferring nursing as a job.

The reason for preferring nursing as a job. Majority of the nursing students 128(58.7%) agreed have the opportunity, followed by 110(50.5%) they agreed that they wanted to help people. Fewer respondents indicated to good salary 63(28.9%) and family preference 17(7.8%). (see Figure 1).

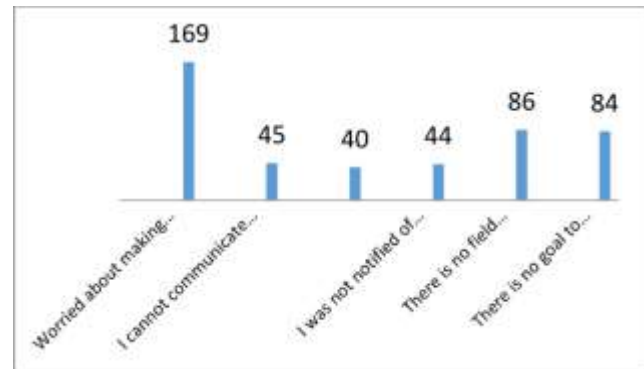


Figure 2: Student-related factors during practical application (in the hospital).

Student-related factors during practical application (in the hospital). Majority (169) of the nursing students agreed that worried about making mistakes in clinical placement and they mentioned there is no field follow-up during training (86), followed by there is no goal to achieve during the day (84), they cannot communicate professionally with patients (45), they wasn't notified of practical training goals (44), an they're not ready for practical training (40). (see Figure 2).

There is a relationship between the factors related to the student and academic achievement:

- Students with rates from 0.75 to 1.75 who were 9, were the most prominent factor Worried about making mistakes ... They were 3 and total 9 students
- Students with rates from 1,76 to 2,75 who were 50 , were the most prominent factor Worried about making mistakes ... They were 25 and total 50 students
- Students with rates from 2.76 to 3.75 who were 2 , were the most prominent factor I do not have a readiness for practical learning ... they were 2 and total 3 students,
- Students with rates from 3.76 to 4 who were 57 , Worried about making mistakes... they were 57 and total 153 students.

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	23.026 ^a	15	.084
Likelihood Ratio	23.403	15	.076
Linear-by-Linear Association	1.147	1	.284
N of Valid Cases	215		

a. 14 cells (58.3%) have expected count less than 5. The minimum expected count is .18.

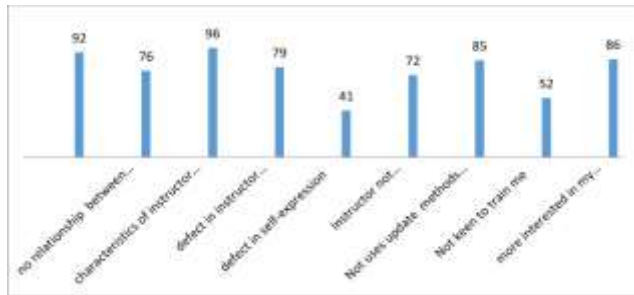


Figure 3: Instructor related factors

The table 5 and 6: Show There is a statistical correlation between the factors related to the student and academic achievement in this figure (96) students is refer to the characteristics of instructor is difficult, then (92) students complain of the number of students according to number of is instructor , also (86) students complain the instructor is more interested in my appearance than my education, then (85) students. Refer to the instructor is not uses update methods of training, (79) students complain of defect in instructor communication skill, (76) students is mentioned there is no relationship between student and instructor,(72) students complain of the Instructor is not available/reachable for them,(52) students refer to the instructor is Not keen to train me, and finally the fewest students percentage (41) students have defect in self-expression.(see figure3).

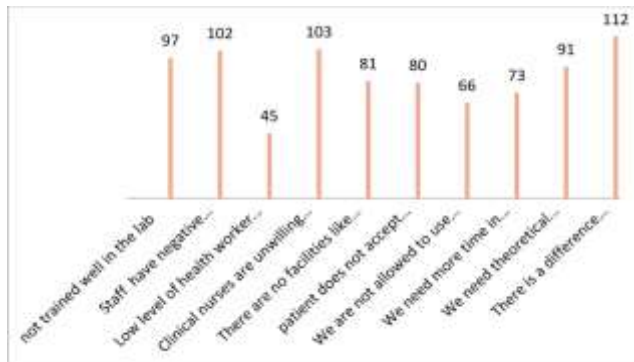


Figure 4: Explore Clinical wards related factors

Almost half the students (112) is refer to presence of different between theory and practical training, then some students (103) is complain from Clinical nurses are unwilling to teach the student, also (102) students negative attitudes from staff, and (97) is mentioned they are not training will clinical, and (91) students is agree with theoretical learning first then try the clinical practice, (81) students is complain from poor students facility ,also (80) students unaccepted from the patient , (73) students need more time for hospital training, (66) students is complain from limited allowing to use hospital facility, finally the fewest students percentage (45) is refer to Low level of health worker information. (see figure 4)

Table 7: Crosstabulation between Clinical related factors and A grade point average

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
academic * clinical	216	100.0%	0	0.0%	216	100.0%

The first table is the Case Processing summary, which tells us the number of valid cases used for analysis (216) also we didn't have missed cases which is mean the total number is 216 (100.0%) . (see table 7)

Table 8: cross tabulation between GPA and Clinical Practice:

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
GPA * clinical	214	100.0%	0	0.0%	214	100.0%

The first table is the Case Processing summary, which tells us the number of valid cases used for analysis (214) also we didn't have missed cases which is mean the total number is 214 (100.0%)

Table 9: cross tabulation between Clinical works related factors

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	37.225 ^a	27	.091
Likelihood Ratio	40.617	27	.045
Linear-by-Linear Association	1.180	1	.277
N of Valid Cases	216		

a. 22 cells (55.0%) have expected count less than 5. The minimum expected count is .14.

The Chi-Square Test of Independence determines whether there is an association between categorical variables ,This table explore The possibility of any noticeable difference between groups appearing by chance (Pearson Chi- Square) value is (37.225) degrees of freedom is (27) Asymptotic Significance is (.091), then we can note the

Table 10: cross tabulation of Independence determines:

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	38.923 ^a	27	.064
Likelihood Ratio	32.646	27	.209
Linear-by-Linear Association	.184	1	.668
N of Valid Cases	214		

a. 27 cells (67.5%) have expected count less than 5. The minimum expected count is .01.

The Chi-Square Test of Independence determines whether there is an association between categorical variables ,This table

explore The possibility of any noticeable difference between groups appearing by chance (Pearson Chi- Square) value is (38.923) degrees of freedom is (27) Asymptotic Significance is (.064), then we can note the Likelihood Ratio value is (32.646) degrees of freedom is (27) Asymptotic Significance (2-sided) is less than 1 (.209) which is mean less than 1 indicates that the result is associated with absence of the incidence, Linear-by-Linear Association value is (.184) degrees of freedom is (1) Asymptotic Significance (2-sided) is (.668). There is a relationship between the academic year and clinical factors.

Table11: Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	23.034 ^a	15	.083
Likelihood Ratio	23.022	15	.084
Linear-by-Linear Association	1.054	1	.304
N of Valid Cases	214		

a. 14 cells (58.3%) have expected count less than 5. The minimum expected count is .17.

The Chi-Square Test of Independence determines whether there is an association between categorical variables ,This table explore The possibility of any noticeable difference between groups appearing by chance (Pearson Chi- Square) value is (23.034) degrees of freedom is (15) Asymptotic Significance is (.083), then we can note the Likelihood Ratio value is (23.022) degrees of freedom is (15) Asymptotic Significance (2-sided) is less than 1 (.084) which is mean less than 1 indicates that the result is associated with absence of the incidence, Linear-by-Linear Association value is (1.054) degrees of freedom is (1) Asymptotic Significance (2-sided) is (.304)

DISCUSSION

The study was conducted at Taif University “Nursing Department” by using electronic survey. The survey has been sent by phone . This study included 218 studies randomly selected. To detect the problems that affecting nursing students in clinical area from several factors, the study was evaluated by using questionnaires. Related to students who have health problems, more than half did not have diseases (69.1%),□ 49 of students had vision impairment (23.3%) ,10 of students had chronic diseases (4.4%) , 5 of students had anemia(2%) , 3 of students had Shortness of breath (1.1%)□ and 2 of students with hearing impairment(0.9%) . Year in program academic for participants in study, the highest percentage from the fourth year was 42.2% (92 students), the third year 24.8% (54 students), followed by the second year 18.8% (41 students) and the first year 14.2% (31 students).

Related to grade point average among nursing students, higher percent 48.2% in Grade Point Average (1.76-2.75) . After that percent 31.7% in Grade Point Average (2.76-3.75). Then 14.2% in Grade Point Average (0.75-1.75). The last one 6% in Grade Point Average (3.76-4.00). Gender distribution, the female was more percentage (61.3%) while the male was (33.5%).

The reason for preferring nursing as a job. Majority of the nursing students 128(58.7%) agreed have the opportunity, followed by 110(50.5%) they agreed that they wanted to help people. Fewer respondents indicated to good salary 63(28.9%) and family preference 17(7.8%).

Student-related factors during practical application in the hospital, Majority (169) of the nursing students agreed that worried about making mistakes in clinical placement and they mentioned there is no field follow-up during training (86), followed by there is no goal to achieve during the day (84), they cannot communicate professionally with patients (45), they wasn't notified of practical training goals (44), an they're not ready for practical training (40). According to a conducted and published study in February 2019, among 208(123 nursing students and 85 nursing tutors) from Nursing schools in Northern Tanzania. Majority (60%) of nursing students reported that clinical placement did not provide

them adequate opportunity for effective clinical learning and they mentioned shortage of nurse tutors in clinical area as the main reasons for inadequate clinical learning (60%) followed by learning resources (26.7%). (Gemuhay et al., 2019).And in a relationship with Grand Point Average showed statistically association with students related factors.

Instructor related factors, (96) students is refer to the characteristics of instructor is difficult, then (92) students complain of the number of students according to number of is instructor , also (86) students complain the instructor is more interested in my appearance than my education, then (85) students. Refer to the instructor is not uses update methods of training, (79) students complain of defect in instructor communication skill, (76) students is mentioned there is no relationship between student and instructor,(72) students complain of the Instructor is not available/reachable for them.(52) students refer to the instructor is Not keen to train me, and finally the fewest students percentage (41) students have defect in self-expression. In a study published inFebruary 2019, it started the most reported barriers preventing effective perfor- mance in clinical practice leaning were unsupportive environment due to shortage of health care staff in the clinical placement sites, lack of clinical instructors and nurse tutors, high patients loads for staff in the ward 34 (45.9%) and anxiety 27(36.5%) among students. (Gemuhay et al., 2019).

Another study about Barriers to Practical Learning in the Field: A Qualitative Study of Iranian Nursing Students' Experiences published in 2016, The participants believed that interpersonal communication between students, nurses, teachers, physicians, and patients was one of the most important factors affecting clinical learning. From the students' point of view, a positive and friendly relationship between students, nurses, and instructors affects the clinical learning environment.However, the majority of the students believed that the lack of clinical experience among instructors was the main barrier that decreased their competency to train students effectively. (Jahanpour et al., 2016).

Explore Clinical wards related factors, Almost half the students (112) is refer to presence of different between theory and practical training, then some students (103) is complain from Clinical nurses are unwilling to teach the student, also (102) students negative attitudes from staff, and (97) is mentioned they are not training will clinical, and (91) students is agree with theoretical learning first then try the clinical practice, (81) students is complain from poor students facility ,also (80) students unaccepted from the patient , (73) students need more time for hospital training, (66) students is complain from limited allowing to use hospital facility, finally the fewest students percentage (45) is refer to Low level of health worker information. According to a conducted and published in August 2017, about gap between theory and training class among 150 students of the (Post-RN and BSN) of the University Of Lahore, Pakistan. students answers on the question that Do you compare theoretical knowledge with what you do in practice? Results shows that 8.7% (13) of the respondents were agree 88.7% (133) of the respondents were disagree concerning this question, student's answers on the question that Do you compare theoretical knowledge with what you do in practice? The results shows that 67.4% (101) of the respondents were agree and 27.3% (41) of the respondents were disagree concerning this question and student's responses on the question that is there a gap between theoretical knowledge and clinical procedure in the ward? The result shows that 84% (126) of the respondents were agree and 13.3% (20) of the respondents were disagree regarding this question. (Shahzadi et al., 2017).

In a study published in 2000, about The insights of nurse teachers, student nurses and preceptors of the theory- practice gap in nurse education, studying it from the perspectives of three different groups: nurse teachers, student nurses and clinical preceptors, Twenty- three group interviews were conducted One of these interviews is related to Sequencing theory and practice was particularly worrying for students who said they were sometimes not taught the theory relevant to a particular placement, prior to

their allocation there: You don't know why you're doing things – that could be hazardous for the patient. Like respiratory patients, you might get them to lie flat when they should be sitting up. (Student)

Contrariwise, the theory may have been showed some time previously, in which case they had forgotten it. Teachers were also concerned about the result of poor sequencing on student learning. Part of the difficulty stems from large numbers of students on various courses requiring clinical placements in a limited number of areas, restricted to the students they can take at any one time. This is especially problematic in specialist areas such as maternity and pediatrics, where there are only a small number of areas available. (Corlett, 2000).

Another study about the challenges of nursing students in the clinical learning environment : a quality study published in Journal 2016,It stated nursing students is do not have sufficient time to practice and repeat these skills to completely enter the clinic, Nursing students complained that nurses discriminated in dealing between them and medical students and some students were also up set and complained about discrimination in the use of educational facilities. (Jamshidi et al., 2016). There are two statistically association, the first statistically association between the academic year and clinical factors, and statistically association between practical achievement and factors related to the clinical part.

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