

Barriers Interfering on Students Performance at practical Training regarding Maternal and Newborn Health Course

Ola Adel Ali (1), Inaam Hassan Abdelati (2), Zeinab Ali Ali Baraia (3)

(1) Master's student In Obstetrics and Gynecological Nursing ,Faculty of Nursing, Suez Canal University, Egypt.

(2) Assistant Professor of Obstetrics and Gynecological Nursing ,Faculty of Nursing, portsaid University, Egypt.

(3) Lecture of Maternity, Obstetrics and Gynecological Nursing, Faculty of Nursing, Suez Canal University, Egypt.

Abstract

Background: Clinical education is the foundation of nursing education. Students can perform well in clinical settings because theory and practise are linked. The elements that limit the quality of the clinical experience are identified as practical training barriers. Aim:- The purpose of this study was to determine the obstacles to students' performance in practical training for maternal and neonatal courses. Design a correlational descriptive design. Suez Canal University is located in a technical nursing institute. Sample:. This study included 458 nursing students engaged in a maternal and neonatal health course.**Tools:-Tool I.** The evaluation of demographic data was included. Assessment of a practical training obstacle in a technical institute's lab. part 3: Evaluation of practical training barriers in obstetrics and gynaecology departments. Tool 2: An observational checklist for students' performance on four skills (abdominal examination, vaginal inspection, handling procedure, and perineal care). **Result:-.** The majority of the students (97.4%) feel that the number of students in the lab is unadequate to spse in lab. In addition, (94.1%) of respondents said. A sufficient quantity of instructors to train students. Approximately(83.8%). of students face hospital hurdles. The students are not permitted to practise this operation by the doctor. In addition, (78.2%)percent of the students polled agreed on the availability of cases and the number of students. **Conclusion:-.** Apparently insufficient number of students to lab space was one of the impediments impeding student achievement in the lab. Hospital hurdles included the fact that the number of patients was insufficient in comparison to the number of students.. **Recommendation:** It is suggested that open channels between technical nursing institutions and clinical training areas be established in order to promote learning during practical training and communication with nurses and physicians.

Key words: barriers, practical training, students' performance

1.Introduction

Maternity and gynaecological nursing is a discipline of nursing science that deals with the care of women during pregnancy, labour, and disease and treatment of the female reproductive system, as well as other **related areas**.(RA, RAS, AH, & OA, 2018). Nursing students develop into competent professionals through their study and clinical practise experiences, which prepare them to offer quality health care and promote women's health (Hagqvist, Oikarainen et al. 2020). Nursing instruction Nursing students develop into competent professionals through their study and clinical practise experiences, which prepare them to offer quality health care and promote women's health (Hagqvist, Oikarainen et al. 2020). Maternity nursing education is a combination of theoretical and practical learning experiences that allow nursing students to gain the information, skills, and attitudes necessary to provide nursing care. Nursing students' clinical training is regarded as the foundation of nursing practise. Nursing students require help and guidance in order to develop into responsible, accountable, and independent professionals capable of working within the limits of their profession. The

adequacy and competency of nurses and midwives will help the government achieve its goal of improving health outcomes. (Gemuhay, Kalolo, Mirisho, Chipwaza, & Nyangena, 2019). One of the ongoing problems in clinical education is the gap between theoretical knowledge as taught in the classroom and what the students experience in clinical settings (Factor, Matienzo, & de Guzman, 2017).

The performance of students' affect negatively by students' behaviors in clinical practice as inability to demonstrate knowledge and skills, attitude problems

, unprofessionalunprofessional behavior, and poor communication skills with patient and clinical instructors, not asking questions, overconfidence as well as lack of confidence, unmotivated to learn or to work (Chunta and Custer 2018).(Chunta & Custer, 2018).

Significance of the study:

The quality Good performance of nursing students during their training period and graduate nurses in health care providers reveals the quality of education. The principles observed within the practise of professional standards are the competencies

of nurses. Customers are currently witnessing substandard nursing practise, which has resulted in an upsurge in public complaints. As a result, the study was expected to present a variety of sources of observed impediments to low academic performance in nursing education. The findings are likely to provide insight into the factors that contribute to poor nursing education or academic performance (Masenga 2015).

The aim of the study :-sThe aim of the study is to determine the barriers to students' success in practical training. maternal and newborn course at a technical institute of nursing Suez Canal University.

2. Subjects and Method

Study design: a descriptive cross-sectional design was used in this study.

The sample of the study :

Formula (Z,1.96, P, 504, E, 1.36, N is population proportion (72.5%) (RA et al., 2018)

researcher and processes modified by the researcher, assess impediments to practical training in obstetrics and gynaecology departments.

Total of 458 nursing students studying maternal and newborn health course was enrolled in this study which recruited according the following formula and students availability . Convenient sample

Total number of students: 458

Study sample :- A total of 458 nursing students are pursuing a degree in maternity and neonatal health. Students in this study were enrolled in a health course depending on the formula below and their availability. Obtainable sample

Tools of data collection:

Tool (1):

As part of the process, two elements were involved. Part I included information such as age and gender. The assessment barrier of practical training at a technical institute's lab was discussed in Part II (it included fourteen questions) Part II: Using tests devised by the

Tool II:- observational checklist:- utilized to assess students at Suez Canal University's Technical Institute of Nursing (2010). It is used to evaluate students' performance through the skills

Scoring system:

utilized to assess students at Suez Canal University's Technical Institute of Nursing (2010). It is used to evaluate students' performance through the .

Students' responses to this tool will include done (1 point) and not done (0 point) responses. The whole amount is divided into the following:-:-

- Unsatisfied--< 60% of total practice score.
- Satisfied to some extent -----60- <75% of total practice scores.
- Satisfied -----≥75% of total practice scor

(Rasha, et al., 2018)

Reliability of the Tool:

A jury of five experts in the field revised the instrument to ensure clarity, relevance, applicability,comprehensiveness ,understanding, and simplicity of use. The application during practical training in obstetrics and gynaecology departments..

Administrative design:

Before beginning the study, the Scientific Research, Ethical Committee, Faculty of

changes were made in accordance with their suggestions. Cronbach's alpha was used to determine the dependability of the evaluation tools.

Field work:

Students began demonstrating abilities in a maternal and newborn health course at the start of the academic year, followed by practical training in hospitals. Observing. Ob Students' performance levels are assessed during each process by observing them and documenting their results in an observational checklist (abdominal examination – perineal care-handling – vaginal inspection).

Students were given a self-administered questionnaire to measure the barrier during practical training at the nursing institute S.C.U. The researcher and her colleagues spent fifty minutes to accomplish this stage. Students were given a second questionnaire after each process was described to assess obstacles to skill

Nursing, Suez Canal University gained investigator approval. The directors of the Technical Institute of Nursing and the management of Suez Canal hospitals received an official written consent letter from the

Dean of Suez Canal Nursing Faculty outlining the study's goal.

Ethical considerations:

Before using the techniques to establish confidence and trust, each student was told what the study's goal was. Before participating in the study, each student gave their verbal consent. The information was kept private and was coded. Every student has the right to drop out of school at any time.

Statistical design:

The acquired data were organised, updated, tabulated, and summarised using the statistical package for social science (SPSS) programme. (The following test was used to test for significance depending on the type of data.) The results were presented in appropriate tables, figures, and graphics.

The statistical techniques employed were as follows:

- Percentage

Following vaginal inspection, nearly a fifth of the students (20.3%) were satisfied, and more than a quarter (31.2%) were satisfied. Only 48.5 percent of studying pupils are unsatisfied, according to statistics. Less than a fifth of students (18.6%) were satisfied with abdominal grips, less than half of

- Mean score degree \bar{X} .
- Standard deviation SD.
- X² chi-square test
- Proportion probability of error (P- value)
- R, test (Correlation Coefficient)

3. Results

Table (1) shows that the age of the studied technical students ranged from 18-20 years old with the Mean \pm SD age` 18.46 \pm .50 years, while more than half of them are female gender and the majority of them are from rural residence.

Table (2): found that more than a quarter (24.9%) of study students were satisfied with perineal, skill, and that this was the highest percent of the students' practise. Also, more than a fifth (26%) of students were satisfied with their acceptance. Furthermore, nearly half of the pupils (46.1%) are dissatisfied.

students (44.3%) were satisfied with application handling skill, and less than a third of students (34.55%) were satisfied with application handling skill, leaving less than half of students (37.1%) unsatisfied.

table (3) shows that more than 75% of studied students appreciate studding skills

while more than 76% of studied students agree about availability of equipment in perineal skill, but the majority of studied students doesn't agree about availability of equipment in handling procedure .most of studied students agree about number of students are not appropriate to lab space . also number of instructor are not appropriate to number of students.

Table (4) shows that more than 74.7% of studied students demonstrate that the patients agree that students practice the skill with them .while the majority of students agree about that the doctor don't allows students to practice the skills with patients .in addition 98% of studied students agree about nurse doesn't allow students to practice skill with patients . Also 75.8% of studied students agree that the instructor not observes the student while practice the procedure. more than two quarter of studied students.

(Abbasi, Rabiei et al. 2018) "found that the most significant impediments faced by students were a lack of motivation and willingness, a lack of adequate academic understanding, and a lack of self-confidence.

According to the findings of (Jahanpour, Azodi et al. 2016), Students

Table (5) Shows statistically significant between total barriers and total practice p-value <.001 .

4. Discussion :-

Evidence shows that students in clinical learning environments are often unable to match the theoretical content learned in the classroom with what they are actually doing in practise, and as a result, they are unable to provide competent care. There are numerous obstacles in clinical settings, and some of the factors that contribute to theory-practice gaps are system inefficiency, lack of funding, and lack of resources. **(Hashemiparast, Negarandeh, & Theofanidis, 2019)**

Indeed, the research findings revealed that "When Teaching" discovered that in general, 52.7 percent of nursing students from all colleges agreed that clinical student learning is of interest to them. Furthermore,

regarded their interactions with their classmates in the classroom as nice and fulfilling. In a study titled "Explore Barriers that Prevent Student Nurses Practical Training," (AE, AR, et al. 2018) concluded that students had neutral satisfaction with the instructional techniques and equipment used in simulation were useful and effective .

In contrast, (Saifan, Safieh, et al. 2015) reported that numerous students explained that the laboratories were not well equipped to teach nursing students for the real-world clinical situation. Furthermore, according to **(Tiwaken, Caranto, et al. 2015)** in their study "The real world: Lived experiences of student nurses during clinical practise," the availability of school programmes, library references, comfortable classrooms, and fast internet access were all deemed to have a high impact on the academic performance of student nurses. While the opposing outcome **(De Bellis, Sanarica et al. 2018)** revealed that 63.9 percent of students said lab equipment didn't match the required student competencies..

Furthermore, (Masenga 2015) found that (60%) of respondents cited a lack of appropriate time for both clinical and skills more than half of the students said they did not receive adequate support in the clinical setting. In the current study, instructors advise and support students in practical training and rectify problems with it, ensuring that the explanation of the material is clear. skills reaches the students , whether from a practical

laboratory practise as a contributing cause to nursing students' poor academic performance.

Furthermore, current findings are consistent with findings showing nearly all of the students tested said that the number of instructors is insufficient to train students in re-demonstration of abilities.

This is in line with the findings of (Masenga 2015), who discovered Factors Influencing Low Income.

Nurses' Academic Achievement The majority of students said that their schools have an insufficient amount of teaching professionals.

Moreover Furthermore, (Mohammad Jad 2020) reported that (67%) of participants agree that the instructor directs and guides students during the delivery of nursing care. While (Saifan, Safieh et al. 2015) found that or theoretical side, as well as ensuring that students can perform the skill independently.

Furthermore, the current study's findings conflict with those of (Shadadi, Sheyback et al. 2018) who reported a substantial number of students in internship groups in their study "The challenges of

clinical education in nursing: A systematic review..

5. Conclusion:

The following conclusion was drawn from the previously mentioned study findings: there were numerous barriers significantly interfering with the performance of technical nursing students in a maternal and newborn health course at a technical institute of nursing. These barriers included lab barriers such as the number of students not fitting into the lab space during re-demonstration of skills, and the number of instructors not fitting into the number of students. Additionally, there are hospital barriers because teachers do not watch all students in the clinical area during practise skills. There is a negative relationship between impediments and student performance during maternal and infant practical trainin health course at a technical institute of nursing .

6. Recommendations:

Based on the finding of this study, the researcher recommended that:-

For institutions:

- 1- Provides an appropriate lab environment (space and equipment) for student instruction.
- 2- Effective management of the technical nursing institution and the clinical training area in order to support learning during practical training (serve the place, communication with nurses and physions).
- 3- Hire additional employees to fill up the gaps and improve educational and practical training, as well as student clinical follow-up.

For training area agency:

- 1- Work together to provide nursing graduates who are capable of achieving agency goals and dealing with patients.

Table (1) Distribution of demographic characteristics of the studied technical students n=(485):-

Variables	Total Sample (n =458)	
	N	%
Age (Years)		
Range	18-20	
Mean \pm SD	18.46 \pm .50	
Gender		
Male	214	46.7
Female	244	53.3
Residence		
Urban	100	21.8
Rural	358	78.2

Table (2): Percentage distribution satisfactory level of studied technical students' practice

Variables	levels of practice score (458)					
	Satisfied		Satisfied to accepted		Unsatisfied	
	No	%	No	%	No	%
Abdominal grips	85	18.6	203	44.3	170	37.1
Handling	84	18.3	158	34.5	216	47.2
Perineal care	114	24.9	133	26	211	46.1
Vaginal examination	93	20.3	143	31.2	222	48.5

Table (3) Distribution of lab barriers interfering with studied student in procedure (n=458):

Lab barriers	Vaginal ex.		Abdominal grip		Handling		Peineal care	
	Yes	No 0.	Yes	No	Yes	No	Yes	No
	No.(%))	No.(%)	No.(%)	No.(%))	No.(%)	No.(%)	No.(%)	No.(%)
1-The desire to learn the skill and to know the stages of progress of pregnancy.	301 66.4%	154 33.6%	308 67.2%	150 32.8%	234 51.1%	224 48.9%	313 68.3%	145 31.7%
2-Appreciate studding this procedure	125 27.5%	333 72.5%	312 68.1%	146 31.9%	241 52.6%	217 47.4%	345 75.3%	113 24%
3-Not ashamed from re - demonstrate this procedure in front of your colleague .	134 29.3%	324 70.7%	85 18.6%	373 81.4%	116 25.3%	342 74.7%	130 28.4%	328 71.6%
4-The availability of laboratory instrument for this procedure.	327 71.4%	131 28.%	261 57%	197 43%	83 18.3%	375 81.9%	349 76.2%	109 23.8%
5-The laboratory instrument well functional	347 71.4%	131 28.6%	352 76.9%	106 23.1%	328 71.6%	130 28.4%	336 73.4%	122 26.6%
6-The number of students appropriates to the lab area.	12 2.6%	446 97.4%	107 23.4%	351 76.6%	85 18.6%	373 81.4%	95 20.7%	363 79.3%

7-The enough time to re-demonstrate the procedure.	350 76.4%	108 23.6%	326 79%	96 21%	376 82.1%	82 17.9%	74.2	118 25.8%
8-The number of instructors sufficient to train students.	27 5.9%	431 94.1%	92 20.1%	366 79.9%	82 17.9%	376 82.1%	334 72.9%	124 27.1%
the trainer's use data show presentation in theoretical background	394 86%	64 14%	76.6	145 31.7%	370 80.8%	88 19.2%	342 74.7%	116 25.3%
10-The instructor divide the students into small group re-demonstrate the skill.	400 87.3%	58 12.7%	384 83.8%	74 16.2%	372 81.2%	86 18.8%	343 74.9%	115 25.1%
11-you satisfied with the performance of the instructor in this skills	306 66.8%	152 33.2%	361 78.8%	107 23.4%	181 39.50%	277 60.5%	325 71%	133 29%
12-you understand the skill through the instructor`s explanation	278 60.7%	180 39.3%	357 77.9%	101 22.1	350 76.4%	108 23.6%	355 77.5%	103 22.5%

Table (4) Distribution of hospital barriers interfering with studied student in procedure (n=458):

Hospital barriers	Vaginal ex.		Abdominal grip		Handling		Prineal care	
	Yes	No	Yes	No	Yes	No	Yes	No
	No.(%))	No.(%))	No.(%))	No.(%))	No.(%))	No.(%))	No.(%))	No.(%))
The patient agreement to practice this procedure.	116 25.3%	342 74.7%	251 54.8%	207 45.2%	258 56.3%	200 43.7%	251 54.8%	207 45.2%
The doctor allows the students to practice this procedure.	74 16.2%	384 83.8%	242 52.8%	216 47.2%	223 48.7%	235 51.3%	242 52.8%	47.2%
The nurse allows the students to practice procedures.	9 2%	449 98%	230 50.2%	228 49.8%	255 55.7%	203 44.3%	230 50.2%	228 49.8%
The instructor observes the student while practice the procedure.	158 34.5%	300 65.5%	111 24.2%	347 75.8%	302 65.9%	156 34%	111 24.4%	347 75.8%
The hospital working hours sufficient to train students .	295 64.4%	163 35.6%	354 77.3%	104 22.7%	370 80.0%	88 19.2%	344 75.1%	114 24.9%
The availability of cases the number of students.	112 24.5%	346 75.3%	100 21.8%	358 78.2%	312 69.4%	140 30.6%	110 24 %	348 76%
The availability of instrument to practice this procedure.	113 24.7%	345 75.3%	361 78.8%	97 21.2%	260 56.8%	198 43.2%	321 70.1%	137 29.9%
The applicability of the procedure on real situation .	128 27.9%	330 72.1%	225 49.1%	23.3 50.9%	162 35.4%	296 64.6%	118 25.8%	340 74.20%
The fear from practice this procedure to prevent complication to mother and fetus.	286 62.4%	172 37.6%	354 77.3%	104 22.7%	351 76.6%	107 23.4%	354 77.3%	104 22.7%

Table (5): relation between students' total barriers and their total 'practice

Factor	N	Mean ± SD	Pearson correlation (r)	P
Total Barriers	458	53.79±5.80	0.432	<.001*
Total Practice		64.09±13.76		

Pearson correlation (r test), p value < 0.05.

7. References:-

Abbasi, M., et al. (2018). "Experience of nursing students about the barriers to patient education: a qualitative study in Iran." *Korean journal of medical education* 30(4): 327. 5(2): 66-75.

Chunta, K. S., & Custer, N. R. (2018). Addressing Unsafe Student Behavior. *AJN The American Journal of Nursing*, 118(11), 57-61.

De Bellis, M., et al. (2018). "Dual action of mexiletine and its pyrroline derivatives as skeletal muscle sodium channel blockers and anti-oxidant compounds: toward novel therapeutic potential." *Frontiers in pharmacology* 8: 907.

Factor, E. M. R., Matienzo, E. T., & de Guzman, A. B. (2017). A square peg in a round hole: Theory-practice gap from the lens of Filipino student nurses. *Nurse education today*, 57, 82-87.

Gemuhay, H. M., Kalolo, A., Mirisho, R., Chipwaza, B., & Nyangena, E. (2019). Factors affecting performance in clinical practice among preservice diploma nursing students in Northern Tanzania. *Nursing Research and Practice*, 2019.

Hagqvist, P., et al. (2020). "Clinical mentors' experiences of their intercultural communication competence in mentoring culturally and linguistically diverse nursing students: A qualitative study." *Nurse education today* 87: 104348.

Hashemiparast, M., Negarandeh, R., & Theofanidis, D. (2019). Exploring the barriers of utilizing theoretical knowledge in clinical settings: A qualitative study. *International journal of nursing sciences*, 6(4), 399-405.

Jahanpour, F., et al. (2016). "Barriers to practical learning in the field: a qualitative study of Iranian nursing students' experiences." *Nursing and midwifery*

Practical Training. Egyptian Journal of Health Care, 9(2), 141-150.

Saifan, A. R., et al. (2015). "Suggestions to close the gap in nursing education: Nursing students' perspectives." *International Journal of Advanced Nursing Studies* 4(2): 62 .

Shadadi, H., et al. (2018). "The barriers of clinical education in nursing: A systematic review."

Tiwaken, S. U., et al. (2015). "The real world: Lived experiences of student nurses during clinical practice." *International Journal of Nursing Science* 5(2): 66-75.

studies 5(2). *of nursing sciences* 6(4): 399-405.

Masenga, H. H. (2015). Assessment of The Factors Influencing Low Academic Performance in Final Nursing Examinations: A Case of Certificate and Diploma Programmes in Eastern Zone, Tanzania, The Open University Of Tanzania

RA, R., RAS, K., AH, A., & OA, S. (2018). Explore Barriers that Prevent Student Nurses