



Factors affecting the clinical learning of nursing students: Systematic review

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Abstract:

Introduction: Many factors influence the integration of theory-practice, including providing opportunities for learners. It is necessary and important that nurse educators need to identify the factors that influence the clinical experience of nursing students and the necessary changes to be implemented. It can significantly enhance the students' clinical experiences and learning.

Objectives: Identify the factors affecting the clinical learning during clinical experience of nursing students using systematic review.

Methods: The related research published from 2015 December to 2021 is based on the following inclusion and exclusion criteria. The Studies published in the past 6 years by using a cross section and ex-post-facto design using the quantitative and qualitative tools were included for systematic review. The related studies are selected using PubMed, Google scholar, and Web of Sciences.

Results: The narrative (qualitative approach) was used to synthesis method was used to

summarize and explain the findings of the studies. the most common factors affecting the clinical performance of nursing students were categorized as student, clinical instructor clinical environment, and assessment factors respectively and other relevant factors related to clinical practice.

Conclusion: The study revealed several factors that affect the clinical experience of the nursing student. Technological advancement made everything can be possible in the medical professions. It is ideal time, to in cooperating and utilizing of technology in clinical learning like stimulation model, virtual hospital experience and discussion method, virtual lab, file sharing, augmented reality can improve the students competent in clinical knowledge and skill. This could reduce the students fear and anxiety while working with real patient in hospital and face challenges in competent way.

Key words: Clinical experience, Clinical learning, factors, Nursing students

Introduction

Nursing education has undergone accelerated and fastidious changes in the previous ten years. However nursing education still needs to improve to prepare a nurse to face patients of different demographic, evolving technological innovation in patient care, implementation of evidence-based research for providing quality care to the patients, managing emerging and reemerging infectious diseases and the complex needs of the population. ("Clinical Experience", 2021; Booth RG, et al., 2021; Flaubert JL, et al., 2021)

In nursing education, clinical experience is more important because, in the clinical field, students interact with the patient and apply learned knowledge, gained in labs and classrooms. These clinical settings ought to foster learning so that nursing students may apply what they learning the classroom to real-world situations (Motsaanaka, et al., 2020; Baraz S et al., 2015). Nursing students must be able to learn important information and react effectively to patient care circumstances. A positive clinical learning environment also fosters staff cooperation, a friendly setting, and a sense of collegiality (Chiona, 2020). These clinical settings nurture learning so that nursing students may apply what they learn in the classroom to real-world situations (Motsaanaka ,et al.,2022). Nursing students must be able to learn important information and react effectively to patient care circumstances. Unfortunately, nursing students encounter a variety of issues during their clinical rotation, which negatively impact their function. Learning in a clinical setting presents difficulties that don't exist in a lab environment (Dimitriadou M, et al.,2015). It is necessary and important that the nurse educators identify the factors that influence nursing students' learning in theory and practice. Identifying and

recognizing the factors affecting the clinical experience of the students and introducing necessary changes can rectify clinical learning problems drastically.

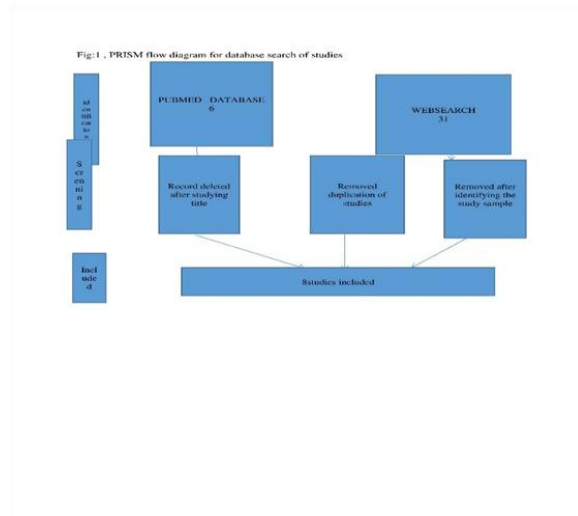
Problem statement: Identify the factors affecting the clinical learning during clinical experience of nursing students using systematic review.

Methods: The related research published from December 2015 to December 2021 is based on the following inclusion and exclusion criteria.

The Studies published in the past 6 years by using across section design and ex-post-facto design using the quantitative and qualitative tools were included for systematic review. The studies done among nursing tutor, staff nurses, nursing students studying in nursing schools, colleges and in hospital attached nursing schools and published in the English language are included for systematic review. It excluded the studies by using a qualitative research. The related studies are selected using PubMed, Google scholar, and Web of Sciences.

Screening: During the initial search, the researcher could identify 37 published papers, 28 of which were excluded after analyzing the title, type of samples, and abstracts. Finally, only eight research papers were selected for the systematic review.

Fig:1 , PRISM flow diagram for database search of studies



Data extraction and synthesis

The selected primary research papers were reviewed independently by two researchers. The researcher evaluated the quality of the study and extracted the required information based on title, author, year of publication, study design, sample, data collection tool, findings and it was discussed.

Results:

The narrative (qualitative approach) was used to synthesis method was used to summarize and explain the findings of the studies. The most common and significant factors affecting the clinical performance of nursing students were categorized as student, clinical instructor, clinical environment, assessment and other relevant factors related to clinical practice.

According to the study, the majority of participants were females and between the age group of 21 -25 years. Most of the students were from the 2nd, 3rd, and 4th levels and interns' students.

Student factors;

The student's level of anxiety is the major

factor affecting the clinical performance of the students in clinical practice (Helena Marco Gemuhay, et al., 2019; Ahn, S., & Kim, Y,2020; Alshammari, F. T., et al., 2020). The students were anxious because of the fear of making mistakes and **having** inadequate experiences—_.The other factors affecting clinical experience are the time taken to travel to the clinical area by students_ and **the** lack of confidence among students and frequent absenteeism from clinical posting. (Khan, A., & Begum, H. 2020).

Clinical environment factors:

The student's clinical experience in the clinical area was affected because of **the** lack of resources in clinical areas (Pusey-Murray A, Onyefulu C.2018). Lack of communication between staff and students, the altitude of the staff (Lawal, J, et al., 2016; Elhami S, et al.,2018; Helena Marco Gemuhay, et al.2019;) the patient behaviour (Pusey-Murray A, et al., 2018), and conflict with the patient (Ahn, S., & Kim, Y. 2020). The non-conductive clinical placement (Alshammari, F. T.etal., 2020) also affected the clinical experiences of the students.

Clinical instructor factors and assessment methods

The students revealed that the lack of clinical instructor, inadequate supervision, mentoring, and inadequate clinical teaching by the clinical instructors was affecting the clinical experience of the nursing students. (Helena Marco Gemuhay, et al., 2019; Elhami S,et al., 2018; Pusey-Murray A, Onyefulu C. 2018, Lawal, J, et al., 2016, Khan, A., & Begum, H. 2020).

Most of the study findings revealed the clinical instructor has not given proper orientation about the objectives of clinical

practice, and assessment method. (Helena Marco Gemuhay, et al., 2019; Elhami S, et al., 2018; Pusey-Murray A, et al., 2018, Getie, A. et al., 2021) and too much of clinical assignment also affected the clinical experience of the nursing students. (Elhami S, 2018). Students verbalized that staff nurses are not taking initiation to interact and teach for the students in clinical area due to insufficient time. Students also felt that the preceptors and student ration is influencing the clinical learning.

Students felt that because of improper students and clinical instructor ration, the clinical instructors are not spending more time to interacting with students and for clinical teaching and evaluation of students' procedure.

Conclusion

This systematic review conclude that though many changes has been implemented in nursing students clinical training as per the feedback of students, preceptor and recommendations, still many factors hindering the clinical learning of the nursing students.

Technological advancement made everything can be possible in the medical professions. It is ideal time, to in cooperating and utilizing of technology in clinical learning like stimulation model, virtual hospital experience and discussion method, virtual lab, file sharing, augmented reality can improve the students competent in clinical knowledge and skill. This could reduce the students fear and anxiety while working with real patient in hospital and face challenges in competent way.

Limitation: In our study, we have not included the study published in other languages. The databases PubMed, Google scholar, and Web of Sciences were used for

searching research studies and studies published before 2016 and studies using qualitative design were not included. Because of these constraints, other relevant studies may have been missed.

Institutional Review/Ethical approval: Not applicable.

Informed Consent Statement: Not applicable

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