

Nursing Students' Experiences of Conducting Clinical Research Thesis at the End of Their Nursing Programs. A Phenomenological Descriptive Study

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Abstract

Background: Undergraduate nursing students must complete a bachelor thesis as part of their degree, gaining in-depth experience in their field and understanding research's purpose in solving problems. This final test is crucial for their learning. **Objective:** The aim of the study was to evaluate the experiences of undergraduate nursing students regarding their research thesis. **Methodology:** A Qualitative phenomenological study design used for the current study for deeper understanding of the experiences of undergraduate students. The study was conducted in the nursing institutes having sample size of 12 using purposive sampling technique. Semi-structured interview was used for data collection while for data analysis thematic approach was used through Braun and Clark 6 steps method. **Results:** In the study the total participants who participated in the study were 12 students, where majority of the participants were male n-7 while female were n-5. Three major themes were emerged as a result of analysis, that was increasing in knowledge in the form of gaining new knowledge, new exposure to the subject, and interaction with health professional, while the second theme was regarding the challenges faced during the project in the form of ethical challenges, lack of support from faculty and health professionals and financial constraints, and the last theme was evidence based practices i.e implementation of knowledge in practice, learn and conduct EBP. **Conclusion:** Bachelor's level clinical research projects equip undergraduate nursing students with evidence-based care and motivate future nurses to improve clinical nursing practice, while the institute should address the challenges to facilitate students in future.

Keywords: Nursing Education, Nursing Students, Bachelor Thesis, Evidence-Based Practice.

INTRODUCTION

In Pakistan the basic programme of nursing was a three-year diploma where students could get admission in it after matriculation, but the decision was taken by the nursing regulatory authority to stop induction in the diploma program. As a result, a four-year Bachelor of Science in Nursing (after completing an intermediate in medical) is the degree that students can use to enter the nursing profession and advance to higher education. Nursing education includes both theory and practical skills. At the start of the program, the nursing students attend regular classes, and then gradually they enter into the hospital for the implementation of clinical skills that they learn in their nursing institute

[1]. To follow this step-by-step process of theory and clinical duties in this nursing program, the nursing institutes and nursing students have to follow the curriculum which is approved by the Pakistan Nursing Council and the Higher Education Commission of Pakistan. The Bachelor of Science program consists of 4 years or 8 semesters, in the 7th semester the nursing students are taught a 3 credit hours subject of nursing research to prepare it for upcoming challenges of clinical research and evidence based practices (EBP). In the last semester (8th semester) the students have to conduct a research study (thesis) with the name of senior electives (5 credit hour) only in clinical areas.

Evidence based practices is the idea to practice based on scientific evidence, it is very important for the nurses, to improve patient outcome, build their own body of knowledge, minimize gap between nursing education and provide quality care while reducing health care costs [2]. In Pakistan the nursing students learn about research but not its relation with evidence based practices, therefore in order to prepare nursing students for real life challenges, the higher authorities have to develop a program that follow an organized and comprehensive approach for the assessment and teaching of evidence based practices [3]. The evidence based practices effective learning for undergraduate nurses may be difficult, but cognitive and behavioral skills may be the important elements that are essential for the success [4]. There is evidence of studies that students have positive attitude towards evidence based practices but students face many challenges in research project and one of them are the difficulty to practice or to implement evidence based practices in clinical areas. A study conducted in USA shows that all the students were face difficulty in difference between research and evidence based practices [5].

Nursing research is important part of bachelor program, students select topic and prepare a proposal that required the approval of supervisor. The students then visit hospital for data collection after taking approval from the ethical committee and hospital administration. The bachelor thesis can help the students to gain knowledge and skills and apply it in nursing care [6]. Undergraduate level of education enhances the involvement of students in research activities and offer positive research experiences to students [7]. Working on thesis the students expect to gain valuable knowledge which is required for their future practice in health care setting [8]. The research project give a chance for the students to work autonomously in the formulation of topic, search relevant literature, proposed a research design, collect data and then provide a framework to analyze that numbers. The aim of this paper is to explore nursing student's experiences while conducting their clinical research project.

METHODOLOGY

A phenomenological approach was used to explore the experiences of nursing students while conducting clinical research project, phenomenological approach is used when little is known and the researcher has interest to clearly understand the phenomenon of interest from the perspective of those which is directly involved [9]. Nursing students who are enrolled in any one nursing institutes of Khyber pukhtankhwa, which are affiliated with Khyber medical university and registered by Pakistan nursing council and have completed their clinical research project were the inclusion criteria for the participant. A sample of 12 students was included in this study from different institute while using purposive sampling technique after the approval taken from the institutes administration. Those students will be included which are currently in 8th semester, have assign a supervisor, and have completed their data collection was the inclusion criteria for the study while students who have completed completed data collection or started internship was excluded from the study.

Data Collection

Data were collected through face to face semi-structured interviewed. The purpose and objectives of the study was explained to the participants, and the confidentiality of the information

was ensured to create a trust-based environment. Individual interview were carried out one by one which remain continuous for a period of 45 minutes, to observe the non-verbal expression of students with recording of their explanation. In order to assure their comfort, the participants were initially asked for demographic data and encouraged to talk in Urdu, the country's official language. Audio tape was used to record the data, and field notes were taken to provide an impression. My personal laptop's data was stored in a password-protected file, and a backup password-protected copy was kept in another data storage file. An English specialist observed the transcription of every interview talk into the language. Another English expert double-checked the transcription and listened to the audio to ensure the accuracy of the data.

Data Analysis

Data analysis was done by using thematic approach. Braun and Clark six steps guide was used [10]. For understanding the collected data audio recorded information was listened two times carefully, after transcription data was read and re read to make primary concept. Then code mode accordingly and the similar and duplicate codes adjusted and categories made from them. Themes were generated from categories sand verified with participant quotations.

Ethical Consideration

Prior to gathering data the respondent was given a brief overview of the study's goals and was informed that there was no risk associated with it other than investing your valuable time. You also don't directly benefit from it. The decision to take part in the study was entirely up to the individual. They are free to decline without suffering any consequences. Additionally, they are free to leave the study at any moment without it negatively affecting your employment. If you are uncomfortable answering any of the questions, you have the option to decline to answer any or all of them. Following agreement, the respondents' signed consent was obtained. Throughout the whole data collection process, the participants' privacy and confidentiality were protected. Participants received guarantees that the privacy of their data would be maintained.

Rigor and Trustworthiness

To guarantee the rigor and credibility of data collection and analysis, the criteria of credibility, Transferability, dependence, and reflexivity were applied throughout the process. Investigator triangulation was achieved through the consensus of experts and allowing participants to review the results. Each researcher separately reviewed the codes and fragments assigned to them. All researchers were experienced in academic writing. Subsequently, ambiguous information and disparity of criteria were reviewed until consensus was reached [11].

RESULTS

Socio-demographic data

In the current study the total participants were 12 students, where majority of the participants were male n=7 while female were n=5.

Emerged Themes and Sub-Themes

As a result of data analysis 3 major themes were emerged, that shows that as a result of this project it improve the research skills of the students, while the second theme was regarding the challenges faced by during thesis project, and last and third theme was the evidence based practices.

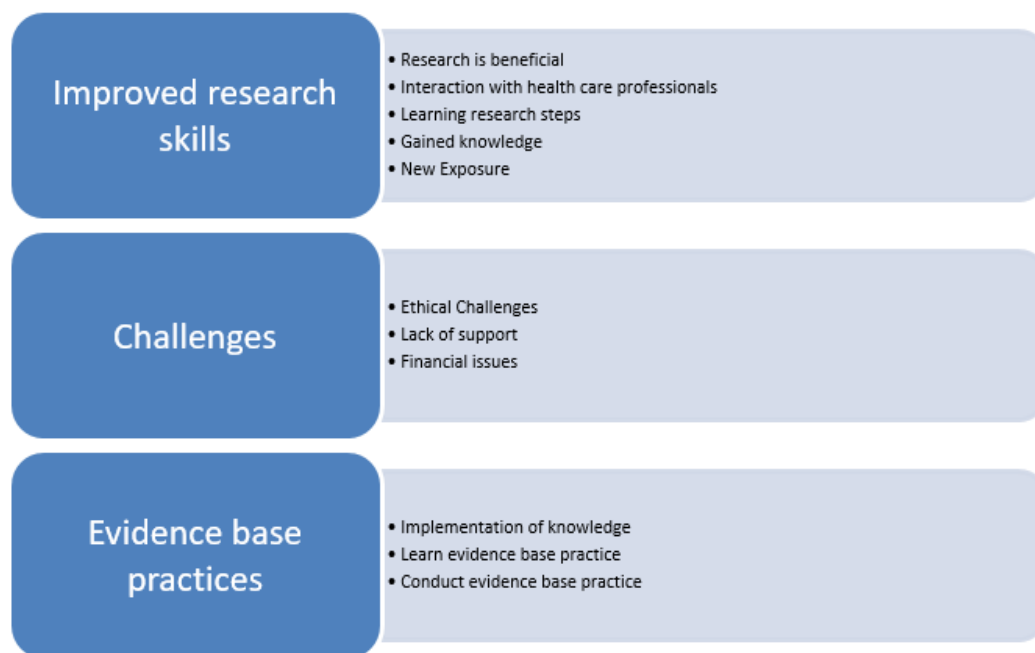


Figure 1: Major themes and sub-themes of the study

Table 1: Major themes and sub-themes of the study

Major Themes	Sub-Themes
Theme 1: Improved research skills	Research is beneficial Interaction with health care professionals Learning research steps Gained knowledge New exposure
Theme 2: Challenges	Ethical challenges Lack of support Financial issues
Theme 3: Evidence base practices	Implementation of knowledge Learn Evidence base practice Conduct evidence base practice

Themes 1: Improved research skills

This Theme developed in this study as a result of participant's response toward clinical research project during their studies. Research skills has been improved while conducting evidence base project in final semester of course. They learned about basic research and its significance in clinical practices. They followed research process step wisely and learn research design, data collection, and analysis

We have learned a lot in doing this research project. Mostly we have learned the research methodology, data collection and data analysis (p.1)

The clinical research and thesis portion of our program was very beneficial for us. (p.6)

According to my opinion it's good to be experience thesis to conduct research, interact with nurses and health workers. (p.2).

Theme 2: Issues related to staff

This theme is emerged from the participants response related research project included in their studies. This theme generated information regarding staffing issues, in which ethical challenges, lack of support and financial issue are the subcategories identified.

Participants not willing to participate and wordiness to be in the study are the problems arise in data collection process.

Ethical issues we faced that Nurses are worried to be the participant in research study. (p.1)

Ethical issues I faced in data collection were the unwilling response of the participants that hear about data collection permission. (p.2)

Higher authorities considerably take more time in the approval of data collection permission letter. in some Institute, lack of Ethical review committee or Board made it difficult for them to further the process, while in some institute due to complex hierarchical structure, the process get delayed.

The ethical issue I face during thesis is permission of higher authority for conducting research study. (p.4)

Inappropriate research knowledge, resources unavailability are the challenges faced in the conducting research project. Research supervisor absence or lack of support struck work to be done, and need expert opinion to get rid of situation

For guidance and help no one was available in clinical setting, but their will clinical nursing staff who guide and help us during our study. (p.1)

The negative experience includes the unavailability of resources, lack of knowledge regarding research and lack of expert researcher (p.1)

Theme 3: Evidence base practice

In this theme participant stated expressed their opinion in the generation of evidence base practice. Knowledge implementation, learn evidence base practice, and conduct evidence base practice are sub-theme generated.

The most effective way of getting knowledge is concentrate on lecture watch online lectures, link your theory to practice. Conducting clinical research project is the best method for generation of evidence base project and its implementation

The best way to learn evidence based practice is to learn in college, assist in clinical area and apply in your practice and evaluate to your performance. (p.2)

Research as the best way to implement it through evidence based practice. A nurse or student nurse should be theoretical strong to implement it in clinical practice. (p.6).

DISCUSSION

The current study was conducted with the aim to identify the challenges faced by undergraduate nursing students during their thesis projects that are conducted by each students to became able for their degree. It is because that students in last year the students it is first time exposure to research therefore students learn research, it became critical but step by step they learn and organize it. In the present study participant's mentioned that the research project improves in research skills, by focusing on basic research, clinical practices, research design, data collection, and analysis. A study conducted in Norway findings was also was in line with our study that the students explain how a floating process allows them to advance and improve their knowledge during this phase. They independently arrange

their work, yet they also feel reliant on others to validate or correct their ideas and comprehensions. This duality demonstrates how the students write both individually and in groups during the planning and performance stages [12]. Another study reveals that one pedagogical strategy for teaching undergraduate nursing students about evidence-based practice (EBP) and helping them apply it to their daily work is to have them complete research thesis projects as part of their bachelor theses. Students mentioned that it not only increased our knowledge but also the writing and evaluating capabilities that can be utilized in future [13]. A study conducted in Spain also reveals that Understanding the perspectives of adult or teenage patients, close relatives, or nurses was the goal. Students select their subjects for individual reasons. The majority of participants said they were pleased with the knowledge and abilities they had learned. Research abilities can be used to nursing practice by students submitting a research proposal for their bachelor's thesis [14]. The findings are in line where the majority of participants believed that developing research skills, particularly the ability to do a bibliographic search, was the primary benefit of writing a baccalaureate thesis. The baccalaureate thesis procedure, according to the participants, gave them abilities that encouraged critical thinking. They mostly alluded to a critical mindset towards the process itself, linked to the notion of enhancing the finished output. This is in line with their acquisition of personal abilities that will help them throughout their professional development to handle and resolve various processes and contentious situations [15]. This finding is consistent with the findings of other studies that demonstrate the baccalaureate thesis as the first formal and systematic research exercise, one that involves three stages: writing of conclusions, research methodology, and review of the literature [16, 17].

In this study it was also reported that there were certain challenges faced by students in the form of ethical challenges, lack of support and financial constraints. It is because students transition from study to clinical setting, interaction with health workers and patients are new experience where they identify that data required for study have some ethical requirement that is necessary in the form of permission from the study setting, informed consent from the patient where there is possibility of refusal or workload of the staff which make them unable to give proper time and support to the undergraduate. Moreover undergraduate or not a proper nurse therefore traveling from home to hospital, expenses of data collection sheet make it challenging from them. A study conducted in Iran reveals that a number of variables, including unsuitable social norms, a poor work environment, and inadequate sources, have an impact on how well nursing staff members are taught to students. Similar to this, nurses have a variety of direct effects on nursing students' clinical learning, both positive and bad, which is a crucial aspect for the students to understand [18,19]. A Pakistani study demonstrated that number of difficulties encountered by nursing students that are, the unavailability of resources, the advantages and disadvantages of the curriculum, and academic results. The following are a few notable challenges: The majority of students admitted to having difficulty putting their theoretical knowledge into reality, and some of them demonstrated the need for teachers to adopt contemporary teaching strategies. Other mentioned that unfair evaluation of some faculty members and time allotment for guidance [20]. A similar study conducted in Pakistan also highlighted important issues faced by undergraduate that the individuals discussed own flaws such feeling tough, not having any clinical expertise, and having low self-esteem. Participants acknowledged that they experienced both physical and mental pressure in the early stages of their research thesis projects and that they were extremely apprehensive. According to the experiences, the majority of seniors had low qualifications, which posed the biggest obstacle to accomplishing thesis objectives. The participants had to deal with backbiting, discrimination based on gender, autocracy, opposition, and a lack of assistance. The sixth category was "College Support Not Provided." The majority of participants agreed that there was inadequate communication between the hospital and the college [21].

In the present study the students also stated their opinion in the generation of evidence base practice. Knowledge implementation, learn evidence base practice, and conduct evidence base practice are sub-theme generated. It is because that students are not exposed to research subject in first three year, while in last semester conducting this project they learn about evidence based practice (EBP) by conducting this project. Supporting our findings a studies showed that while working on clinical projects for their bachelor, undergraduate nursing students learned critical information concerning EBP. The students gained an awareness of the practical research process, which is crucial for comprehending the development of evidence-based knowledge and is necessary for the calibre of nursing care that is given [22]. Other studies also indicated that The EBP courses are crucial for students' confidence in their research abilities and research skills. They may develop their abilities and apply them to further study [23. 24]. Another study also highlighted that the research culture of the clinical units was positively impacted by the students' involvement in their projects, according to this study, underscoring the significance of incorporating evidence into clinical nursing practice [25]. It has been demonstrated that certain university faculty members are unaware of EBP or the necessity of using evidence in their teaching, despite knowing how vital it is to teach EBP to undergraduate nursing students [22, 25]. A Norwegian study reported that the students get familiar with the EBP processes by following the Bachelor thesis steps. They get to practise and get acquainted with it even if it is more theoretical or academic than in the clinical context they would work in as nurses [26]. The study of (Gallart et al., 2015) shows that EBP steps, which are the same ones that students go through during the BT process, are described in the sub-scale practice. The students practise the steps of the EBP process while working on the Bachelor thesis, beginning with developing a strong research topic. Additionally, they must locate and assess pertinent material before demonstrating in the Bachelor thesis discussion chapter how they integrate and analyse it with their prior knowledge, even if in a theoretical manner [27].

A limitation of the study is the small sample size. These limitations may weaken the Transferability of the findings to other settings and to other undergraduate nursing students.

CONCLUSION

According to this study, writing the Bachelor thesis in nursing requires interaction with peers, supervisors, and other people, thus the experiences of the nursing students with this process may be understood from both the individual and social contexts. The process was an independent task. Through these projects, students gain practical experience conducting research and learn the value of staying current with new areas of study. Moreover the study also highlights that certain issues I.e financial issues, ethical issues and cooperation from the clinical environment that should be addressed to facilitate the thesis project. Furthermore conducting bachelor thesis enhancing clinical nursing practice and encouraging students to contemplate evidence based practice and reality in various contexts are two further benefits of doing clinical research projects.

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