

Pre-clinical experiences among nursing students of reputable Islamic university in the capital city of Indonesia

Jamaludin¹, Mutiara Eka Rahmanda¹, Handono Fatkhur Rahman²

¹Faculty of Health Sciences, Syarif Hidayatullah State Islamic University Jakarta, Banten, Indonesia

²Department of Nursing, Faculty of Health Sciences, Universitas Nurul Jadid, Probolinggo, Indonesia

Article Info

Article history:

Received Dec 20, 2022

Revised Feb 8, 2024

Accepted Feb 25, 2024

Keywords:

Clinical training

Learning method

Medical student

Nursing science

Pre-clinic experience

ABSTRACT

Clinical trainings were employed in the nursing sciences in order to provide student's experiences in applying nursing care according to the theory. They required to accomplish some competencies depending on their study levels. Students would also experience the possible barriers and challenge during clinical trainings. However, there were limited number of research which explored these experiences, especially in nursing students. This study aimed to explore the experiences of nursing students in performing fundamental nursing pre-clinical activities. This research conducted qualitative study with phenomenological approach. This study involved 5 nursing students according to inclusive criteria. Data collection method used in-depth interview techniques. The obtained data were analysed further using Colaizzi test. The collected data identified six themes of student's experiences, such as student's understanding about pre-clinic, their experiences during pre-clinic, theoretical gaps with hospital procedures, some barriers in clinical practice, student's expectation, and obtained support during pre-clinic trainings. Pre-clinical trainings allowed nursing students to gain various medical experience and knowledge regarding nursing care. They could implement and compare the nursing theory with actual conditions in the hospital and society living. This topic needed to assess further about the benefits of pre-clinic trainings.

This is an open access article under the [CC BY-SA](#) license.



Corresponding Author:

Jamaludin

Faculty of Health Sciences, Syarif Hidayatullah State Islamic University Jakarta

Jl. Ir. H. Juanda No. 95, Cempaka Putih, Ciputat Timur, Tangerang Selatan, 15412 Banten, Indonesia

Email: jamalpsik@uinjkt.ac.id

1. INTRODUCTION

Nursing students did not only require theoretical understanding about nursing care, but also need to improve their clinical skills [1]. Clinical practice was a learning method to enhance student's ability to employ nursing care and integrate theoretical knowledge in the actual clinical settings [2], [3]. During clinical trial, nursing students had to achieve the competencies targets according to the curriculum levels [4]. The competency that commonly had to be completed by nursing students was related to the basic human needs with nursing care approaches, such as clinical assessments, formulating nursing diagnoses, construct nursing interventions, conduct the nursing care, and evaluate the implementations. Therefore, exercising practical skills was considered to be important part for being nursing student [5].

Preclinical training aimed to allow students gaining new experiences and applying their obtained theoretical knowledge directly to the actual patients with disabilities. Facing the experiences directly was understood for being the most appropriate learning method [6]. Students did not only observe the technical activities, but also involved in nursing care and had responsibilities of the outcomes. This study method

would provide students with some chances to be skilled nurses, develop their attitudes and psychomotor, increase knowledge, learn time management, and enhance their critical thinking [7].

Preliminary study mentioned that preclinical training was a practical exercise for medical students to conduct patient's treatment in the clinical settings based on their gained knowledge in the college. This training authorized students to sharpen their skills independently under assistant of professional nurse. Nursing students might also meet some challenges during preclinical trainings and needed supports from various support systems. According to the explanation above, the purpose of this research was to explore the experiences of nursing students in performing Fundamental Nursing Pre-clinical activities.

2. METHOD

This research was a qualitative study using phenomenological approach. This research was carried out in the Faculty of Health Sciences Syarif Hidayatullah Islamic University on March to July 2020. The variable of this study was an experience among nursing student during pre-clinical training. This research involved 5 respondents that were chosen using purposive sampling method. Data collected employed in-depth interview method with semi-structured interviews (Guided interview). Study instruments used mobile phone, applications that provide video call features (Whatsapp, Zoom, Google Meet), voice recording tools, and field notes. For the triangulation process, this study included lecturer and doing observation according to the participants shift time. All the obtained data was analysed using Colaizzi analysis. This study's ethical clearance certificate was approved by Research Ethical Committee Faculty of Health Sciences, Syarif Hidayatullah State Islamic University Jakarta with No. Un.01/F.10/KP.01.1/KE.SP/06.08.032/2020.

3. RESULTS AND DISCUSSION

3.1. Pre-clinical understanding

Research participants described pre-clinical training was a chance to practice their knowledge and skills about nursing care in various health care area, which have been studied previously. This study result revealed that all participants gained practical skills according to the studied theories, also experienced how to work as a nurse. Clinical training significantly elevated student skills, attitude, and knowledge about nursing competencies [8]. Pre-clinical training was being a method to develop future nurses with professional attitude by directly interacted with actual environment of health facilities [9]. Besides, nursing student obtained some opportunities to apply nursing theories. Nursing students believed that they could improve their skill, knowledge, and competencies due to clinical education [10]. This learning method also allowed lecturer or clinical supervisors implementing knowledge-transfer according to learning concept framework along with their goals and student's characteristics.

"...pre-clinic training is a learning activity to go to the hospital with our gained knowledge from college..." (P3)

"...we were providing patient's nutrition, oxygenation needs, doing bed-making, mobilization, and so on..." (P1)

"...about caring, how to do therapeutic communication with patients, and some activities that we learned before..." (P2)

Participants mentioned pre-clinical activities in the hospital were related to the basic human needs also therapeutic and caring communication. This basic need included oxygenation, electrolyte and body fluid requirements, exercise and sleep needs, body temperature, safety, comfort, sexuality needs, self-esteem and actualization [11]. As a future professional nurses, students were required to learn therapeutic communication earlier. Therapeutic communication was an interaction between nurses and patients, which aimed to optimize and shorten the treatment duration as its effective communication. This kind of communication was associated with the art of treatment [12]. The practice of caring could help patients in healing process effectively by providing a clean environment, proper identification, and maintaining comfort for patients [13].

"...asked our seniors, wondering what kind of experiences that should be prepared..." (P4)

This complementary information provided them with new idea and perspectives from the other point of views regarding pre-clinical experiences. They got the information from their seniors, internet, professional nurses, and nursing students from the other institutions. Therefore, they would feel more prepared before pre-clinical training was conducted.

3.2. Experiences during pre-clinic training

Pre-clinical training needed preparation from the students, theories, and practice equipment. Participants in this study received information about pre-clinical training from their seniors, lecturers, and friends from the other universities. Besides the provided educational training from the nursing school, participants asked this information in order to enhance self-confidence and provide clinical illustrations. Moreover, the other's experiences about pre-clinical training were valuable for student as it could be used as a guideline during pre-clinical training. Clinical simulation method while preparing knowledge material before pre-clinical training enhanced student's confidence [14].

"All the nursing students have obtained educational preparation about pre-clinical activities for 2 days before doing the pre-clinical training..." (Lecturer1)

Students had got some assignments before doing the pre-clinical training. They had to complete preliminary assignment to assist them before conducted their competencies based on the theory. In addition, they had to prepare their psychological health since they required to adapt to the new environments, which possible to supply stressors. Conducting activity in the new environment could become psychosocial stressors and provoke anxiety for students [15]. Therefore, participants studied and shared information with their friends in regards to achieve optimum contribution during pre-clinical trainings. Knowledge sharing with the other colleague or friend was recommended to increase understanding about clinical skills [16]. Study in a group enhanced student's cooperation skills, experiences, and working effectivities [17], [18]. Student improved their critical thinking skills during pre-clinical training. Critical thinking skills could not be achieved only in-campus learning, but also through the assessment process in order to solve patient's problem [19].

"It needed mental preparation before our actual meeting with the patients..." (P2)

According to the observation in the clinical fiels, study participants were active to do nursing care. They also actively asked to their supervisor if they found some difficulties during patient's treatment. This was in line as students mentioned that they were required to prepare some kinds of assignments, such as dividing tasks to the groups, studying data reviews, and making action plans. During pre-clinic training, they did the nursing care according to the training shift and the kind of wards. They gained many experiences, for instance interacted with patients and their family, how to communicate with the nurse and the other health professional due to patient's condition, and how to form a good teamwork. In addition, respondents felt various emotion during pre-clinical training. They tended to worry about their responsibilities while were doing their preparation and nursing care, however they were glad if it was done smoothly. Therefore, they learnt how to manage their feeling in order to maintain the care stability.

Students experienced various feeling due to this training, such as feeling of pleasure, sadness, and tiredness. Feeling of pleasure increased student's enthusiasm while they were carrying out nursing care. This feeling was assumed to be an appreciation that led students to have high motivation at clinical settings [20]. Student's tiredness was occurred due to workload. A study mentioned that occupational exhausted and work motivation could intrigue work stress significantly [21]. There was a significant effect of working shift for nurses [22]. This working shift intrigued stress among nurses based on their schedule [22], [23]. On the other hand, a study mentioned that mental workload did not affect their psychological aspect, oppositely, they gained new experiences from high workload [24]. Previous research revealed that healthy work environment, having balance nutrition, good stress management provoked student health status [25]. Therefore, students tended to share their feeling to their friends and family to relieve their sadness in regards to provide optimum care for patients in the next day. Personal factor, for instance quality of nursing work life (QNWL), influence the nurse's performance in the work place [26]. Furthermore, student needed to be provided a psychological counselling from universities in order to prevent psychological burden [27].

3.3. Theoretical gaps with hospital's procedures

The interview resulted that participant found a theoretical gap with clinical practice in the hospital during pre-clinic trainings. These gaps occurred in nursing care procedures and communication skills due to various factors, such as limited equipment, high nursing's workload, and the difference situations between theory and reality. Participants reported that they ask about these gaps to the senior nurse and their supervisors as their role to educate nursing students in the clinical fields.

Theoretical gap was also found by students during pre-clinical training. This gap was influenced by several factors, for examples inadequate infrastructure and facilities of the hospital; health professionals did different procedures from learned theories, lack of interpersonal relationship and communications. Students were actively asking to the senior nurses as clinical supervisor about these gaps. Clinical supervisors played an important role as educator for nursing student to provide knowledge adequacy [28]. Supervisors also facilitated

students while they were facing some challenges, such as limited understanding since they were at the first time doing professional tasks, working in the new environments, and difficult to communicate with actual patients.

3.4. Challenges during pre-clinical training

Participants experienced some obstacles during their pre-clinical training, such as supervisor and assistance from senior nurses, patient's family cooperation, and them-selves. They mentioned that they were exhausted because of many assignments inside and outside the hospital settings. These exhausted activities triggered their body immunity to be worsen.

"patient's family tend to avoid collaborating with the nurse. They did not even help during our nursing implementation, such as changing diapers" (P3)

Participants showed various kinds of solution to deal with their obstacles. Some of them did body exercises and consumed high nutrition food to maintain their health. Besides, they visited psychologist in order to increase their motivation and self-improvements. For the academic and clinical purposes, they studied together with their friends in achieving communication and nursing skill competencies.

3.5. Expectation of pre-clinical training

This study participants expected to gain new clinical experiences and knowledge from patients, friends, and the health professionals. They could sharpen their communication skills with actual patients for the first time. They believed that these experiences were useful for themselves and other regarding working as a nurse. Study participants were hope to get a similar chance for elevating their knowledge in the next semester. They would prepare better before pre-clinical trainings.

3.6. Social support during pre-clinical training

All the participants needed social support during pre-clinical training. They required some support from various sources, such as parents, friends, lecturers, and colleague. Social support was being essential factor since it could enhance their working satisfaction [29].

"The support from my parents influenced me to be more enthusiastic in this training. My worries faded away in a sudden with their support" (P3)

Nursing students in this study has expected to gain vast experiences about nursing care from senior nurses. They believed to obtain a courage to treat patients directly and could help wider amount people who need them. Furthermore, students required supports from their family, friends, colleague, and academic staff to enhance their working performance in the future pre-clinical trainings. This support provided them to be calm, enjoy, and reduced anxiety. A good working and studying atmosphere during pre-preclinical trainig elevated positive working behaviours [30].

4. CONCLUSION

Nursing students actively asked for the related information about preclinical training. Since they might face various obstacles during preclinical training, they prepared themselves with theory, psychological preparation, physical health, and clinical equipment. Students also experienced some gaps and obstacles of nursing care in the hospital. All these clinical experiences expanded student's ability to improve their skills to treat patients properly in the future.




REFERENCES

- [1] J. L. Flood and K. Commendador, "Avatar case studies: a learning activity to bridge the gap between classroom and clinical practice in nursing education," *Nurse Educator*, vol. 41, no. 1, pp. 3–4, Jan. 2016, doi: 10.1097/NNE.000000000000195.
- [2] M. D. McHugh and E. T. Lake, "Understanding clinical expertise: nurse education, experience, and the hospital context.," *Research in nursing & health*, vol. 33, no. 4, pp. 276–287, 2010, doi: 10.1002/nur.20388.
- [3] K. Koukourikos *et al.*, "Simulation in clinical nursing education," *Acta Informatica Medica*, vol. 29, no. 1, pp. 15–20, 2021, doi: 10.5455/AIM.2021.29.15-20.
- [4] A. Blaževičienė, A. Vanckavičienė, R. Paukštaitienė, and A. Baranauskaitė, "Nurse's role from medical students' perspective during their interprofessional clinical practice: evidence from Lithuania," *Healthcare (Switzerland)*, vol. 9, no. 8, Aug. 2021, doi: 10.3390/healthcare9080963.
- [5] M. Fukada, "Nursing competency: definition, structure and development," *Yonago Acta Medica*, vol. 61, no. 1, pp. 1–7, Mar. 2018, doi: 10.33160/yam.2018.03.001.
- [6] B. E. Neubauer, C. T. Witkop, and L. Varpio, "How phenomenology can help us learn from the experiences of others," *Perspectives on Medical Education*, vol. 8, no. 2, pp. 90–97, Apr. 2019, doi: 10.1007/s40037-019-0509-2.
- [7] M. Mlambo, C. Silén, and C. McGrath, "Lifelong learning and nurses' continuing professional development, a metasynthesis of the literature," *BMC Nursing*, vol. 20, no. 1, Dec. 2021, doi: 10.1186/s12912-021-00579-2.
- [8] A. C. Prakoeswa, F. Arofiati, and N. Hidayah, "The effect of basic trauma and cardiac life support training in increasing the




- competence of emergency room nurses," *Jurnal Ners*, vol. 17, no. 1, pp. 8–13, Apr. 2022, doi: 10.20473/jn.v17i1.33754.
- [9] M. Chaghari, M. Saffari, A. Ebadi, and A. Ameryoun, "Empowering education: a new model for in-service training of nursing staff," *Journal of advances in medical education & professionalism*, vol. 5, no. 1, pp. 26–32, Jan. 2017, [Online]. Available: <http://www.ncbi.nlm.nih.gov/pubmed/28180130><http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=PMC5238493>
 - [10] H. Mariyanti and K. J. Yeo, "Facilitating and inhibiting factor in clinical nursing education: concept paper," *Indian Journal of Public Health Research and Development*, vol. 10, no. 12, pp. 1719–1723, Dec. 2019, doi: 10.37506/v10/i12/2019/ijphrd/192111.
 - [11] Budiono, *Basic nursing clinical practice (in Bahasa: Konsep dasar keperawatan)*. Jakarta: Ministry of Health of the Republic of Indonesia, 2016.
 - [12] D. Živanović, "Therapeutic communication in health care," *SciFed Nursing & Healthcare Journal*, vol. 1, no. 2, 2017.
 - [13] M. Abdolrahimi, S. Ghiyasvandian, M. Zakerimoghadam, and A. Ebadi, "Therapeutic communication in nursing students: a Walker & Avant concept analysis," *Electronic Physician*, vol. 9, no. 8, pp. 4968–4977, Aug. 2017, doi: 10.19082/4968.
 - [14] X. Shen *et al.*, "Effectiveness of near-peer simulation for managing the acutely deteriorating patient among residents of an internal medicine junior residency programme," *Singapore Medical Journal*, vol. 61, no. 1, pp. 34–38, 2020, doi: 10.11622/smedj.2019056.
 - [15] I. P. K. Denak and Suherman, "The relationship between age, student gender and parental income with anxiety levels in undergraduate students of the Medical Education Study Program FKIK Tadulako University (in Bahasa: Hubungan umur, jenis kelamin mahasiswa dan pendapatan orang tua deng)," *Jurnal Ilmiah Kedokteran*, vol. 3, no. 1, pp. 23–32, 2016.
 - [16] T. Wahyanto, N. A. Damayanti, and S. Supriyanto, "Creating knowledge using seci model as a knowledge management stage to improve nurses' ability in undertaking parenteral therapy," *Indian Journal of Public Health Research and Development*, vol. 10, no. 6, pp. 374–378, Jul. 2019, doi: 10.5958/0976-5506.2019.01301.9.
 - [17] E. Hammar Chiriari, "Group work as an incentive for learning-students' experiences of group work," *Frontiers in Psychology*, vol. 5, Jun. 2014, doi: 10.3389/fpsyg.2014.00558.
 - [18] K. Scager, J. Boonstra, T. Peeters, J. Vulperhorst, and F. Wiegant, "Collaborative learning in higher education: evoking positive interdependence," *CBE Life Sciences Education*, vol. 15, no. 4, Dec. 2016, doi: 10.1187/cbe.16-07-0219.
 - [19] I. V. Papathanasiou, C. F. Kleisiaris, E. C. Fradelos, K. Kakou, and L. Kourkouta, "Critical thinking: the development of an essential skill for nursing students," *Acta Informatica Medica*, vol. 22, no. 4, pp. 283–286, 2014, doi: 10.5455/aim.2014.22.283-286.
 - [20] M. R. Ghasemi, H. K. Moonaghi, and A. Heydari, "Strategies for sustaining and enhancing nursing students' engagement in academic and clinical settings: a narrative review," *Korean Journal of Medical Education*, vol. 32, no. 2, pp. 103–117, Jun. 2020, doi: 10.3946/KJME.2020.159.
 - [21] R. Damayanti and E. D. Nawawinetu, "Determinant factors of work stress among teaching and non teaching staff in Indonesia," *Indian Journal of Public Health Research and Development*, vol. 10, no. 3, pp. 321–325, Mar. 2019, doi: 10.5958/0976-5506.2019.00511.4.
 - [22] P. Ferri, M. Guadi, L. Marcheselli, S. Balduzzi, D. Magnani, and R. Di Lorenzo, "The impact of shift work on the psychological and physical health of nurses in a general hospital: a comparison between rotating night shifts and day shifts," *Risk Management and Healthcare Policy*, vol. 9, pp. 203–211, Sep. 2016, doi: 10.2147/RMHP.S115326.
 - [23] S. H. Lin, W. C. Liao, M. Y. Chen, and J. Y. Fan, "The impact of shift work on nurses' job stress, sleep quality and self-perceived health status," *Journal of Nursing Management*, vol. 22, no. 5, pp. 604–612, 2014, doi: 10.1111/jonm.12020.
 - [24] K. B. Christy and N. Widajati, "The correlation of length of work and mental workload with work stress at university lecturers," *Indian Journal of Forensic Medicine and Toxicology*, vol. 14, no. 3, pp. 1936–1941, Jul. 2020, doi: 10.37506/ijfimt.v14i3.10710.
 - [25] D. Wijaya and N. A. Damayanti, "Healthy nurses for a quality health care service: a literature review," *Indian Journal of Public Health Research and Development*, vol. 9, no. 11, pp. 1762–1766, Nov. 2018, doi: 10.5958/0976-5506.2018.01699.6.
 - [26] N. Nursalam, A. Fardiana, C. P. Asmoro, H. Fadhillah, and F. Efendi, "The correlation between the quality of nursing work life and job performance," *Indian Journal of Public Health Research and Development*, vol. 9, no. 10, pp. 330–335, Oct. 2018, doi: 10.5958/0976-5506.2018.01364.5.
 - [27] E. Astutik, S. K. Sebayang, S. I. Puspikawati, T. D. Tama, and D. M. S. K. Dewi, "Depression, anxiety, and stress among students in newly established remote university campus in Indonesia," *Malaysian Journal of Medicine and Health Sciences*, vol. 16, no. 1, pp. 270–277, 2020.
 - [28] S. Farzi, M. Shahriari, and S. Farzi, "Exploring the challenges of clinical education in nursing and strategies to improve it: a qualitative study," *Journal of Education and Health Promotion*, vol. 7, no. 1, p. 115, 2018, doi: 10.4103/jehp.jehp_169_17.
 - [29] H. Sigursteinsdottir and F. B. Karlsdottir, "Does social support matter in the workplace? social support, job satisfaction, bullying and harassment in the workplace during COVID-19," *International Journal of Environmental Research and Public Health*, vol. 19, no. 8, Apr. 2022, doi: 10.3390/ijerph19084724.
 - [30] H. N. K. Giao, B. N. Vuong, and H. Tushar, "The impact of social support on job-related behaviors through the mediating role of job stress and the moderating role of locus of control: empirical evidence from the Vietnamese banking industry," *Cogent Business and Management*, vol. 7, no. 1, Jan. 2020, doi: 10.1080/23311975.2020.1841359.

BIOGRAPHIES OF AUTHORS






Jamaludin    is Lecturer in Faculty of Health Sciences, Syarif Hidayatullah State Islamic University Jakarta, Indonesia. He has article paper published in International Journal indexed scopus and National Journal indexed SINTA. He can be contacted at email: jamalpsik@uinjkt.ac.id.



Mutiara Eka Rahmanda    is student of Faculty of Health Sciences, Syarif Hidayatullah State Islamic University Jakarta, Indonesia. She can be contacted at email: mutiara.rahmanda27@gmail.com.



Handono Fatkhur Rahman    is Lecturer in Department of Nursing, Universitas Nurul Jadid, Paiton, Probolinggo, Indonesia. He has article paper published in International Journal indexed scopus and and National Journal indexed SINTA. He can be contacted at email: handono.hfc@gmail.com.