



Instilling Confidence in the Clinical Performance of Nursing Students

Puji Astuti Wiratmo¹, Vimala Ramoo², Elly Nurachmah³

¹University of Binawan

²University of Malaya

³University of Indonesia

puji@binawan.ac.id, vimala@um.edu.my, elly@ui.ac.id

Abstract

There is existing concerns from clinical education that nursing students need to improve confidence on clinical performance. Confidence is basis of nursing education and determines graduates' level of competence to enter workforce. Confidence promotes safe and effective patient care. However, it is challenging to understand concept of confidence and how nurse educators instill confidence with innovative teaching strategies. The purpose of this review is to discuss concept of confidence, factors influencing confidence, and teaching strategies to improve students' confidence. Science Direct, EBSCOhost, and Pubmed databases were used to identify evidence based research related to students' confidence and teaching strategies. The key words included confidence, nursing students, teaching strategies, and clinical performance. The articles were selected based on objectives, relevance, and year published. The result suggested that simulation should be modified by other strategies such as repeated simulation, team based learning, and self-debriefing. Another strategy is multidisciplinary teaching using technological tool such as video podcasting, immersive 3d interaction, game-based learning and video-based learning. Clinical confidence is an essential element in students' clinical performance. Innovative and creative teaching strategies are needed to instill nursing student's confidence. Further studies are needed in assimilation of teaching strategies for nurturing students' clinical confidence.

Keywords: Confidence, nursing students, teaching strategies, clinical performance.

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1. Introduction

Nursing as clinical based profession needs to use clinical setting as integral component of nursing education. Nursing education is a combination of theoretical and practical learning that acquires students to achieve adequate knowledge, skill and attitudes to deliver nursing care professionally. Clinical practice has to allow nursing students to apply theoretical knowledge in a real environment, improve nursing skills, critical thinking and clinical reasoning. In addition,

clinical practice gives students opportunity to observe and adapt the professional role of a nurse (Bisholt et al., 2014). In clinical learning, confidence is an important determinant that can influence critical thinking and problem solving abilities, as well as clinical judgment among nursing students (Fong, 2013). Professional confidence can affect nurse's clinical performance in all aspects including the relationships with patients, family and other

health care team members (Makarem et al., 2019).

Generally, confidence is defined as the belief or conviction of someone to successfully accomplish a task of a certain level of performance (Keller, 2018). Self-confidence involves the ability of individuals to recognize their ability and feelings of wellbeing as a result of deepening positive emotions (Kukulu et al., 2013). While, clinical confidence is the self-perceived ability to deal with clinical scenarios and it does not necessarily related to competency, it is however a requirement for students to participate fully in clinical learning (McNair et al., 2016).

Confidence for nurses can be reflected as a faith or belief that one will act in a right, proper, or effective way and may play an important role for the success of a health care provider and their patients (Hecimovich, 2009). Self-confidence has a strong relationship with clinical performance (Porter et al., 2013). Students who have good self-confidence are considered to gain success in clinical learning outcomes, while students who have low self-confidence can be pessimistic on their clinical performance (Lundberg, 2008). Thus, it is essential to assess and nurture students' self-confidence through teaching approaches that will cultivate self-confidence.

2. Method

CINAHL, Science direct, EBSCOhost and Pubmed databases were used to identify evidence based research related to students' confidence and teaching strategies. The key words included confidence OR self-confidence, teaching strategies OR teaching methods, nursing student and clinical performance. The articles were selected based on objectives and relevance of the articles that have focused on nursing students' confidence and teaching strategies, peer reviewed article, written in English and published between 2015 and 2021.

3. Findings and Discussion

3.1 Concept Analysis of Confidence in Learning

Self-confidence can be related to self-efficacy theory and often used interchangeably. However, self-confidence and self-efficacy are different concept. It is essential for nurse educator to understand the concept of confidence in order to promote students' learning particularly in clinical learning. Based on the concept analysis conducted by Perry (2011) and White (2009), basically there are three attributes related to confidence in learning including knowledge acquisition, experience and success. Prior to performing clinical skills on patients, nursing students need to gain a set of knowledge to learn a new task. It is expected for nurse educator to facilitate students by reviewing knowledge and theories underpinning a particular of nursing procedure before students demonstrate it to patients. Experience is another attribute that need to exist in confidence. Experience constitutes to students exposure to various situations and opportunity to practices numbers of skills on patients in clinical settings. The last attribute is achieving success which is the most critical component in students' confidence development.

3.2 Factors Influencing Confidence

Fuvich (2017) conducted a qualitative study on eleven senior students' nurses from Rhode Island College (RIC) School of Nursing to explore students' perception of confidence in clinical setting. The result identified there are two types of factors influencing confidence that are positive and negative factors. Firstly, making difference which is resulted from students experience in taking care of patient and ability to make a difference in patient outcomes can develop students' confidence. Second is being educated in which students were facilitated by clinical educators to review theoretical knowledge of nursing procedures before performing the skills on patients. Third is effective communication with nurse educators that enhances students' confidence in clinical learning. Fourth is

being a member of team, which is shown by nurse instructor by accepting them as part of health care team. Thus students felt like a real nurse which makes them more confidence in delivering patient care. Fifth is support from nurse educators that make students are ready to confront with various situation in clinical environment. Finally is trust that is given from nurse educator through autonomy on nursing students to deliver nursing care on patient without leaving supervision. On the other hand, there several factors that may hinder development of confidence in nursing student clinical performance as opposed to identified factors that may promote students' confidence including not being educated, lack of communication, not feeling like a team, lack of support and lack of trust.

3.3 Teaching Strategies to Improve Confidence

According to The World Health Organization (WHO), there are two main golden standards for teaching strategies in nursing education including simulation and multidisciplinary teaching (Zengin, 2021). Simulation is believed to be an effective educational strategies in the development of students cognitive, affective and psychomotor skill (Adamson, 2015). However, along with the vast increase of simulation usage in educational practice, there has been much attention paid to its effectiveness to be integrated with the nursing curriculum. To be effective, simulation as an educational tool cannot stand alone but should be combined or modified with various ways or teaching. For example simulation which is combined with didactic lecturer that will improve students' self-confidence as well as knowledge acquisition and clinical reasoning. Adding theoretical class as part of simulation can affect theoretical knowledge, critical thinking and self-confidence (Kim & Kim, 2015). When performing nursing care on simulation, students are expected to have good understanding of knowledge about specific disease process that underpin students clinical reasoning ability to assess and to analyze data accurately based on patient's needs.

Another strategy is through a combination of simulation based education with team based learning (TBL) based the work of Eun and Hye Young (2017). Team based learning is different with small group discussion. TBL uses team system in which each team members interact to each other to share their vision and build effective communication in order to reach the learning goals. Thus, each student will learn how to organize themselves in teams and work in synergy with others to solve patients' problems (Considine et al., 2021). Meanwhile, small group learning utilize the team itself to improve performance thus requires cooperation of team member to solve the problems. Then each individual need to contribute their knowledge and skill as a learning resource. Therefore, the individual achievement of learning outcome can be difficult to measure because of the ambiguity of learning outcome. In addition, intrarrater reliability and inter rater reliability can be inconsistent (Eun & Hye Young, 2017). To conclude, TBL can give more advantages on improving students' performance because it provides clearer learning direction to students and stimulate individual learning participation through quizzes on learning content. Moreover, TBL has positive impact on communication, leadership and team collaboration.

Another approach used in simulation is through repeated exposure of simulation as has been done in a study conducted by Scherer et al (2016). In this study, the first group used repeated exposure by observation first followed by participation and the second group performed participation first followed by observation. Regardless of different type exposure, both repeated scenario exposure in simulation provide significant outcomes in performance. Both students groups had opportunity to evaluate their performance based on what went well and what need improvement through debriefing session. Repeated measure simulation allows the students to learn from their mistake as and thus can improve their knowledge and confidence. Even though repeated exposure of simulation scenario need more time for experiential learning and faculty workload, it

offers significant benefits in improving students' knowledge, confidence and performance measure evaluation (Scherer et al., 2016).

Another important aspect to maximize students learning through simulation is in the debriefing stage as about 80% of learning occurs at this stage (Adamson, 2015). Debriefing facilitates reflection for nursing student based on their performance in simulation so that they can improve knowledge acquisition, communication skills, critical thinking and clinical reasoning skills for better confidence clinical performance. A study conducted by Kang & Yu (2018) combining students self-debriefing (SSD) with instructor led debriefing (ID) on 123 senior nursing students from two universities in South Korea. During simulation students were recording their performance and at the end of simulation, each team performed SSD based on the reviewed of team members. The instructor provided guidelines on the purpose, sequence and content of debriefing. Based on the post test, students who had combination of SSD and ID had significant improvement in problem solving process and team effectiveness that promote confidence to perform specific task compared with those with ID only after the simulation.

The second teaching strategies to promote students confidence in clinical performance is through multidisciplinary teaching methods. This requires teachers to use technologies in designing and developing an engaging teaching and learning activities. An example of multidisciplinary teaching method is the use of podcasting through mobile based learning. This teaching strategy uses Mayer's cognitive theory of multimedia learning whereby the instructional methods through podcast may reduce the extraneous cognitive processing for more positive learning outcome. Stone et al (2020) used video podcast learning on nursing students by creating a short 12-18 minutes instructor developed clinical skills in MP3 or MP4 format then publish the video recording on You tube or iTunes for further access for students as an adjunct to face to face teaching. The result from the study indicates

that combination of face to face teaching and podcast could improve students learning engagement and confidence in clinical skills performance. The other example of multidisciplinary teaching is an immersive 3D interactive program conducted by Chao et al (2021) on forty five nursing students in Taiwan on nasogastric tube insertion skill. The immersive 3D interactive program used the advancement of technology in virtual reality and augmented reality that enabled nursing students to have a sense of being in the scenario and the clinical environment to learn a particular skill. This teaching strategy also enable students to provide more learning resources that include pictures, videos, audios and 3D models as well as more learning interaction by answering quizzes or theoretical readings. The study showed that immersive 3d interactive program could improve nursing students learning outcome including students' knowledge, skill, and confidence.

Game based learning is another example of multidisciplinary teaching method that adopted social and cultural learning perspective (Liu & Hou, 2021). In nursing education game based learning can be applied through flash card in scenario based activity, situational role play, and situational simulation that give challenge and enjoyment for the students among complex nursing concept (Sharma, 2017). It is a challenging work for teacher to develop innovative and positive learning strategies using gamed based learning strategies.

4. Conclusion

Confidence in teaching and learning activities is a critical component in the development of clinical performance on nursing students. Confidence is related to the belief of a person ability to be successful. Significant attributes are necessary in the promotion of confidence for nursing students including knowledge acquisition, experience and success. Nurse educators need to understand the concept of confidence as well as factors that influence students' confidence to develop confidence-building teaching strategies such as simulation and multidisciplinary teaching methods. Future study is needed on the

application of innovative teaching strategies for instilling clinical performance confidence on nursing students including in classroom, laboratory and clinical settings.

6. References

- [1] Adamson, K. (2015, Sep-Oct). A Systematic Review of the Literature Related to the NLN/Jeffries Simulation Framework. *Nurs Educ Perspect*, 36(5), 281-291. <https://doi.org/10.5480/15-1655>
- [2] Bisholt, B., Ohlsson, U., Engstrom, A. K., Johansson, A. S., & Gustafsson, M. (2014, May). Nursing students' assessment of the learning environment in different clinical settings. *Nurse Educ Pract*, 14(3), 304-310. <https://doi.org/10.1016/j.nepr.2013.11.005>
- [3] Chao, Y. C., Hu, S. H., Chiu, H. Y., Huang, P. H., Tsai, H. T., & Chuang, Y. H. (2021, Aug). The effects of an immersive 3d interactive video program on improving student nurses' nursing skill competence: A randomized controlled trial study. *Nurse Educ Today*, 103, 104979. <https://doi.org/10.1016/j.nedt.2021.104979>
- [4] Considine, J., Berry, D., Allen, J., Hewitt, N., Oldland, E., Sprogis, S. K., & Currey, J. (2021, Sep-Oct 01). Specific Elements of Team-Based Learning Used in Nursing Education: A Scoping Review. *Nurse Educ*, 46(5), E84-E89. <https://doi.org/10.1097/NNE.0000000000001061>
- [5] Eun, K., & Hye Young, K. (2017). Effects of Simulation-based Education Combined Team-based Learning on Self-directed Learning, Communication Skills, Nursing Performance Confidence and Team Efficacy in Nursing Students. *Journal of Korean Academy of Fundamentals of Nursing*, 24(1), 39-50. <https://doi.org/10.7739/jkafn.2017.24.1.39>
- [6] Fong, W. C. K. (2013). Nursing Students' Satisfaction and Self-Confidence Towards High-Fidelity Simulation and Its Relationship with the Development of Critical Thinking in Hong Kong The Chinese University of Hong Kong].
- [7] Fuvich, J. I. (2017). Exploring the Perceptions of Nursing Students' Self-Confidence in the Acute Care Setting University of Rhode Island].
- [8] Hecimovich, M. D. V., Simone, E. (2009). Importance of Building Confidence in Patient Communication and Clinical Skills Among Chiropractic Students [Literature Review]. *The Journal of Chiropractic Education*, 23, 151-164.
- [9] Keller, O. (2018). Exploring workforce confidence and patient experiences: A quantitative analysis. *Patient Experience Journal*, 5(1), 97-105.
- [10] Kim, J. Y., & Kim, E. J. (2015). Effects of Simulation on Nursing Students' Knowledge, Clinical Reasoning, and Self-confidence: A Quasi-experimental Study. *Korean Journal of Adult Nursing*, 27(5). <https://doi.org/10.7475/kjan.2015.27.5.604>
- [11] Kukulu, K., Korukcu, O., Ozdemir, Y., Bezci, A., & Calik, C. (2013, Apr). Self-confidence, gender and academic achievement of undergraduate nursing students. *J Psychiatr Ment Health Nurs*, 20(4), 330-335. <https://doi.org/10.1111/j.1365-2850.2012.01924.x>
- [12] Liu, Y. M., & Hou, Y. C. (2021, Aug). Effect of multi-disciplinary teaching on learning satisfaction, self-confidence level and learning performance in the nursing students. *Nurse Educ Pract*, 55, 103128. <https://doi.org/10.1016/j.nepr.2021.103128>
- [13] Lundberg, K. M. (2008, Mar-Apr). Promoting self-confidence in clinical nursing students. *Nurse Educ*, 33(2), 86-89. <https://doi.org/10.1097/01.NNE.0000299512.78270.d0>
- [14] Makarem, A., Heshmati-Nabavi, F., Afshar, L., Yazdani, S., Pouresmail, Z., & Hoseinpour, Z. (2019, Jul-Aug). The Comparison of Professional Confidence in Nursing Students and Clinical Nurses: A Cross-Sectional Study. *Iran J Nurs Midwifery Res*, 24(4), 261-267. https://doi.org/10.4103/ijnmr.IJNMR_102_17
- [15] McNair, R., Griffiths, L., Reid, K., & Sloan, H. (2016, Jul 15). Medical students developing confidence and patient centredness in diverse clinical settings: a longitudinal survey study. *BMC Med Educ*, 16, 176. <https://doi.org/10.1186/s12909-016-0689-y>
- [16] Perry, P. (2011). Concept Analysis: Confidence/Self-confidence. *Nursing Forum*, 6, 13.
- [17] Porter, J., Morphet, J., Missen, K., & Raymond, A. (2013). Preparation for high-acuity clinical placement: confidence levels of final-year nursing students. *Adv Med Educ Pract*, 4, 83-89. <https://doi.org/10.2147/AMEP.S42157>
- [18] Scherer, Y. K., Foltz-Ramos, K., Fabry, D., & Chao, Y. Y. (2016, Sep-Oct). Evaluating Simulation Methodologies to Determine Best Strategies to Maximize Student Learning. *J Prof Nurs*, 32(5), 349-357.

<https://doi.org/10.1016/j.profnurs.2016.01.003>

- [19] Sharma, R. K. (2017). Emerging Innovative Teaching Strategies in Nurisng. JOJ Nursing Health Care, 1(1), 3. <https://doi.org/10.13140/2.1.4024.0322>
- [20] Stone, R., Cooke, M., & Mitchell, M. (2020, Mar). Exploring the meaning of undergraduate nursing students' experiences and confidence in clinical skills using video. Nurse Educ Today, 86, 104322. <https://doi.org/10.1016/j.nedt.2019.104322>
- [21] White, K. A. (2009). Self-Confidence : A Concept Analysis. Nursing Forum, 44, 12.
- [22] Zengin, D., Ardahan-Sevgili, Seda, Yardimci, Figen., & Basbakkal, Zumrut. (2021). Effect of Computer-Based Simulator Use on Students' Self-Confidence, Satisfaction and Perceived Learning International Journal of Caring Sciences, 14(1), 8.