Bridging The Gap: Integrating Sociological Theory Into Nursing Education And Laboratory Training

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Abstract:

Background: Undoubtedly the theoretical knowledge of nursing support and focus on the practical training although the factors that help in applying this theoretical knowledge depend only on the practice environment. The theory-practice gap considered the largest universal problem facing the academic education of nursing.

Objective: This review provides some studies that focusing on integrating the nursing education as academic field and laboratory training.

Methods: The literature was performed by searching on Google Scholar PubMed and different online Journals as well as qualitative observations of some nursing students.

Results:

The two main goals which are studied in this literature are raising the awareness of clinical training culture as well as improving and updating the curriculum information. Several proposals are obtained from the students for example decreasing the stress factors and louds on the clinical teachers, synchronizing between the academic information that obtained in their classes and labs beside what they are found in the clinical practicing. Add to this some students thought that they may have more benefit in case of getting their clinical practices in health institutions obtained by the college. Another suggestion providing that having the same academic teachers in the clinical practices. On the other hand many students declared that they prefer the block system rather than the integration system. Another suggestion provides decreasing the sheet work during lab training.

Discussion: This study highlighted in the discussion on universal problem facing the academic education of nursing and summarizes the findings of the literature review which provide solutions to solve and decrease the gap between the academic education of nursing and lab training which lead to graduating well professional nurses to labor market.

Keywords: Nursing education, Theory-practice gaps, clinical training.

Introduction:

It is important to know that nursing education has two main wings theoretical wing and practice wing. Nursing considered one of the scientific jobs that depend on applicable researches and theoretical knowledge. The theory-practice gap considered the largest worldwide problem that facing the academic education of nursing. This problem can be defined as "distancing of theoretical knowledge from the actual doing of practice". The academic information that introduced in the classroom is translated into practical work in clinical practice in

hospitals allow graduating well professional nurses to provide excellent care to the patients. The greater the theory-practice gap the less care provided to the patients. Teaching-learning process depends on several factors which include academic teacher, students addition to organizational culture that has great effects in decreasing the theory-practice gap. It is obvious that the increase of this gab depend on many reasons. The difficulties resulted from increasing this gab affect badly not only on un graduated nurses but also on recent qualified graduated ones and so affect negatively on their role. The actual shock is a mine cause for lowering the job satisfaction and elevate the rates of attrition between recent graduated nurses. Add to these, this gap considered a parameter for medical errors and decrease physical skills between nurses. In contrast diminishing this gab improves the care introduced to the patients by increasing nursing quality. It was believed that the nursing students themselves are the best persons who can detect and find the solutions which decrease this gap as they pass through the experience.

This essay seeks to emphasize the vital role of nursing education and laboratory training in our life. The following are some of the paper's goals:

- 1- Studying the problem of theory-practice gap that facing the academic education of nursing.
- 2- Collecting and analysis the suggestions that help in decreasing the extend of this gap.
- 3- Focusing on the good practical training of un graduated nurses to prepare well qualified nurses for job market.

Literature Review:

Many studies focusing on the gap between the academic education of nursing and laboratory training in all the world including the Middle East and North of Africa (Monaghan 2015, Saifan et al., 2015 and Greenway et al., 2019).

Some of studies looking at whether or not there is a gap, on the other side many researches showed few solutions for this problem. Despite all this effort the suggestions to decrease this gap still not enough (Saifan et al., 2015; Needham et al., 2016; Günay and Kılınç 2018).

Although the critical important of academic nursing education the practical training and the development of un graduated nurses skills can't be denied or ignored (Monaghan 2015; McSharry and Lathlean 2017; Günay and Kılınç 2018; Kantar 2021).

Many researches delivered by Ireland, the US, Turkey and UK highlighted on the relationship between nursing teachers, students, nursing school and hospital practices which play main role in curtailing this gap (McSharry and Lathlean 2017; Günay and Kılınç 2018; Huston et al., 2018; Shoghi et al., 2019).

Many studies discussed the importance of having good trained, qualified academic and clinical teachers as well as showed that having obvious curriculum and standard guidelines in clinical training help in decreasing the gap (Monaghan 2015; Needham et al., 2016; Günay and Kılınç 2018). In order to obtain good service to the patients we should focus on the education of nursing students (Eggertson 2013).

Evaluation Methods:

In this literature we depend on a descriptive qualitative strategy to detect the suitable factors that bridging the gap between the academic education of nursing and laboratory training. A good qualitative method to collect large data is face to face interviews and asking people simply (Bryman 2016 and Glesne 2016).

Some of questions that helping in find the solutions during the interviews:

- Inform us about the first training experiment in the clinical field.
- 2- What are the differences between academic education and laboratory training??
- 3- How did your teachers help and support you??
- 4- What did you learn in classroom helped you in laboratory training??
- 5- What are your suggestions to decrease the gap between the academic education of nursing and laboratory training??

The information for this research obtained from students in College of Health Sciences in the UAE. This college established since 2006 and has an accredited program in nursing education and great number of graduated and non-graduated students in the country. The aim of the collage is that provides the UAE's requirements for good qualified nurses to provide excellent care to the patients (Polit and Beck 2018).

The important step in the process is sampling due to obtain correct interpretations that emerge from the basic results (Onwuegbuzie and Collins 2007). The sampling depend on choosing participants from the Nursing Program in the UAE who are in the 3^{ed} year onwards as they had attended two practice courses at least so can understanding the aim of the experiment. As well as undergo sufficient clinical training to compare with the academic education. The College consists of branches in four emirates of the country, so the students who participate in the study were chosen from all the branches of the college. Finally, 25 female students in the Bachelor of Nursing (BN) program were participated in this experiment.

Some ethical points must be clear in all stages of the research which include:

- 1- Providing protection from any harm to all the members who participate in the experiment.
- 2- The participation is voluntary, optionally, without mention names of participants.
- 3- The participants known that they have the right to leave the experiment at any stage without any explanations or excuses as well as without effect on their educational stage. (Gerrish and Lacey 2010)

After collecting the data from the participants, these data were analyzed by Computerized thematic analysis which used in previous researches. (Lacey and Luff 2009; Braun and Clarke 2019)

Results:

Almost of the participants ensured that there is a gap between the academic education and what they facing in the practical training. Some of the participants mentioned the reasons of this problem and suggested many solutions that may help in bridging this gap. So nursing students themselves are the problem solving key.

In this literature we provide some the participants' suggestions that aim to solve this problem:

- Reduce the stress and load which effect on the clinical teachers.
- **2-** Synchronizing between the academic education and laboratory training.
- **3-** Great benefit will be achieved if the practical training occurred in health buildings which the collage owned.
- 4- Replacing the integration system which depends on academic and practical side by side with the block system which adopts the idea of divide the semester into two parts during the first part of the semester the students having the academic education, however during the second part of the semester the students having the practical trainings.
- 5- Reducing the sheet work through practical training.
- **6-** It is helpful for the students that the academic teachers are the same who training the students during the practical training.
- 7- Increasing the practical facilities.

Undoubtedly that practical training represents the main stone of nursing education so we must intensify the practical training besides improving the acquired skills and knowledge of nursing students.

The participants complain of the increase in students number per group, the time allowed to train students on each unit to learn the nursing services they need, and so the practical teachers responsible for providing enough time to train everyone. The participants suggested having little number of duties and more time will help the instructors to spend more time with the trainers and so on facilitate the training process. On the other hand some students said decreasing the number of trainers per instructor. All these suggestions will provide enough time for each student and help the clinical teachers to support their trainers.

Many students explained that it is important to provide the same teachers supervising the practical training so the partnership between the academic classes and practical sessions will help the students during their practical training. (Kolcabaet al., 2006 and MacDonald et al., 2006)

Other students suggested to summarize and share the competencies required from the students during the clinical training with their teachers to explain these competencies to the trainers before beginning the practical training. This will be helpful to the students by reducing the pressure on them and provide them enough time to learn what they need to know.

Many students showed their designer to have their practical training in one building obtained by the collage. It is hard to apply this suggestion because the nursing curriculum consists of a lot of courses as pediatric, maternity, medical-surgical, mental health and community.

A lot of students prefer the block system which divide the semester into two parts during the first part of the semester the students having the academic education, however during the second part of the semester the students having the practical training instead of the integration system adopts the idea of the theory and clinical at the same time. This will help the students to apply what they learned in the first half of the semester during the practical training. Recently, the plan of education was changed as the students during 3rd and 4th year of semester having practical training every week.

A little number of students focused on in some cases their instructors have good academic and theoretical knowledge whereas they don't have good practical experience. Like those instructors don't have enough clinical experience so they cannot support their students in the practical training.

Many students focus on finishing the paper work firstly during the practical training rather than learning and improve their clinical skills so they prefer to separate the theory and the practical training which will facilitate their practical training as well as avoiding divert the students focus.

Large number of students prefer learning by reflection as it allow the retention of information. Reflection improve the practical and analytic skills of the students and provide them with confidence and promote them to correct their mistakes.

Discussion:

Some studies recorded that the practical teachers have a critical role in improving the students' practical skills and knowledge. This support the findings of other studies which ensured on the interaction between the clinical instructors and students either facilitate or retard the education process. (Ahmed et al., 2019)

(Needham et al., 2016; McSharry and Lathlean 2017) recorded that when the practical instructors cooperated with the students will effect on the nursing education process positively.

Other study done between un-graduated Jordan students revealed that the students did not have well support from their teachers as they were sometimes busy which affect negatively on the practical training for not having enough time for the students to learn. (Saifan et al., 2015)

Many studies focused on the instructor and students ratio or nurse-to-nurse faculty/clinician ratio which fits directly with the large demand and lead to decrease the extent of practical training. (Shoghi et al., 2019)

Some other studies revealed that the curriculum of nursing must contain the national nursing competencies as it include the practical activates and strategy of learning which should be implemented in all courses. (Huston et al., 2018; Billings 2019)

Another study done among un-graduated Turkish students showed that it is important to synchronize between the clinical field and what the students need so achieve good learning. The study proved that the students preferred the integrated system as it help in bridging the gap between the academic and clinical learning (Tanriverdi et al., 2017). This study oppose to the results obtained from the current literature in which the participants preferred the block model of practical training.

A study done between graduated American nursing students who ensured that the practical field simulation decreases the academic- clinical gap (Brown 2019). Although the current literature doesn't speak about simulation practice nor its role in decreasing the gap between the academic and clinical learning.

There is advice to use the practical simulation in nursing learning to reduce the gap between academic and practice. (Wall et al., 2014; Salah et al., 2018; Greenway et al., 2019)

Many researches supposed that the responsibility of reducing the gap between the academic and clinical learning lies within the faculties, un-graduated students and registered nurses. (Günay and Kılınç 2018; Huston et al., 2018; Billings 2019)

Another study revealed that the using of a K-W-L chart encouraging the nursing students to consider what they know and stimulate them to acquire and improve their practical skills and knowledge. This lead to the nursing students to be self-dependent to learn and acquire different experiences. (Raines 2018)

Conclusion:

This study represents several suggestions and solutions to decrease the gap between academic-practice of nursing education. The study concluded also that the nursing students considered the primary key to resolving this gap. In the future many researches can be search for other solutions between the graduated nursing by using mixed-methods approaches for data triangulation.

References:

Abu Salah A., Aljerjawy M. and Salama A. (2018). The role of clinical instructor in bridging the gap between theory and practice in nursing education. Int J Caring Sci. **11**(2):876–882.

Ahmad Saifan, Briliya Devadas, Fares Daradkeh, Hadya Abdel-Fattah, Mohannad Aljabery and Lintu Maria Michael. (2021). Solutions to bridge the theory-practice gap in nursing education in the UAE: a qualitative study. BMC Med Educ J. (21):490. doi: 10.1186/s12909-021-02919-x.

Ahmed S. A., Ahmed S. M. and Awad L. A. (2019). Factors Influencing Undergraduate Nursing Students' Perception of Educational Quality. Evidence-Based Nurs Res. 1(2):11. doi: 10.47104/ebnrojs3.v1i2.36.

Al Awaisi H., Cooke H. and Pryjmachuk S. (2015). The experiences of newly graduated nurses during their first year of practice in the Sultanate of Oman—a case study. Int J Nurs Stud. **52**(11):1723–1734. doi: 10.1016/j.ijnurstu.2015.06.009.

Alamri M. S. and Almazan J. U. (2018). Barriers of physical assessment skills among nursing students in Arab peninsula. Int J Health Sci. **12**(3):58–66.

Billings D. (2019). Closing the education-practice gap. New York: Health, Wolters Kluwer.

Braun V. and Clarke V. (2019). Reflecting on reflexive thematic analysis. Qualitative Res Sport Exercise Health. **11**(4):589–597. doi: 10.1080/2159676X.2019.1628806.

Brown J. E. (2019). Graduate nurses' perception of the effect of simulation on reducing the theory-practice gap. SAGE Open Nurs. 5:2377960819896963. doi: 10.1177/2377960819896963.

Bryman A. (2016). Social research methods: Oxford university press. Eggertson L. (2013). The gap between clinical practice and education. Can Nurse. **109**(7):22–26.

Gerrish K. and Lacey A. (2010). The research process in nursing: John Wiley & Sons.

Glesne C. (2016). Becoming qualitative researchers: an introduction: ERIC.

Greenway K., Butt G. and Walthall H. (2019). What is a theory-practice gap? An exploration of the concept. Nurse Educ Pract. 34:1–6. doi: 10.1016/j.nepr.2018.10.005.

Gregory D., Guse L., Dick D. D., Davis P. and Russell C. K. (2009). What clinical learning contracts reveal about nursing education and patient safety. Can Nurse. **105**(8):20–25.

Günay U. and Kılınç G. (2018). The transfer of theoretical knowledge to clinical practice by nursing students and the difficulties they experience: a qualitative study. Nurse Educ Today. **65**:81–86. doi: 10.1016/j.nedt.2018.02.031.

Huston C., Phillips B., Jeffries P., Todero C., Rich J. and Knecht P. (2018). The academic-practice gap: Strategies for an enduring problem. Nursing forum. Wiley Online Library.

Jones J. H. and Treiber L. (2010). When the 5 rights go wrong: medication errors from the nursing perspective. J Nurs Care Qual. **25**(3):240–247. doi: 10.1097/NCQ.0b013e3181d5b948.

Kantar L. D. (2021). Teaching domains of clinical instruction from the experiences of preceptors. Nurse Educ Pract. **103010**:103010. doi: 10.1016/j.nepr.2021.103010.

Kolcaba K., Tilton C. and Drouin C. (2006). Comfort theory: a unifying framework to enhance the practice environment. JONA. **36**(11):538–544. doi: 10.1097/00005110-200611000-00010.

Lacey A. and Luff D. (2009). Qualitative Data Analysis: The NIHR RDS for the East Midlands / Yorkshire & the Humber.

Maben J., Latter S. and Clark J. M. (2006). The theory–practice gap: impact of professional–bureaucratic work conflict on newly-qualified nurses. J Adv Nurs**55**(4):465–477. doi: 10.1111/j.1365-2648.2006.03939.x.

MacDonald J. A., Herbert R. and Thibeault C. (2006). Advanced practice nursing: unification through a common identity. J Prof Nurs. **22**(3):172–179. doi: 10.1016/j.profnurs.2006.03.009.

McSharry E. and Lathlean J. (2017). Clinical teaching and learning within a preceptorship model in an acute care hospital in Ireland; a qualitative study. Nurse Educ Today. **51**:73–80.

doi: 10.1016/j.nedt.2017.01.007.

Monaghan T. (2015). A critical analysis of the literature and theoretical perspectives on theory-practice gap amongst newly qualified nurses within the United Kingdom. Nurse Educ Today. **35**(8):e1–e7. doi: 10.1016/j.nedt.2015.03.006.

Needham J., McMurray A. and Shaban R. Z. (2016). Best practice in clinical facilitation of undergraduate nursing students. Nurse Educ Pract. 20:131–138. doi: 10.1016/j.nepr.2016.08.003.

Onwuegbuzie A. J. and Collins K. M. (2007). A typology of mixed methods sampling designs in social science research. Qual Rep. 12(2):281–316.

Polit D. and Beck C. (2018). Essentials of nursing research: appraising evidence for nursing practice. Philadelphia: Wolters Kluwer.

Raines D. A. (2018). Using a KWL chart to bridge the theory-practice gap. Nurs Educ Perspect. 39(3):182–183. doi:

10.1097/01.NEP.00000000000000256.

Safazadeh S., Irajpour A., Alimohammadi N. and Haghani F. (2018). Exploring the reasons for theory-practice gap in emergency nursing education: A qualitative research. J Educ Health Promot. 7:–132.

Saifan A., Abu Safieh H., Milbes R. and Shibly R. (2015). Suggestions to close the gap in nursing education: nursing students' perspectives. Int J Adv Nurs Stud. **4**(2):62.

doi: 10.14419/ijans.v4i2.4318.

Saifan A., AbuRuz M. and Masa'deh R. (2015). Theory practice gaps in nursing education: A qualitative perspective. Journal of Social Sciences/Sosyal Bilimler Dergisi. 11(1).

Salah A. A., Aljerjawy M. and Salama A. (2018). Gap between theory and practice in the nursing education: the role of clinical setting. Emergency. 24:17–18.

Shoghi M., Sajadi M., Oskuie F., Dehnad A. and Borimnejad L. (2019). Strategies for bridging the theory-practice gap from the perspective of nursing experts. Heliyon. **5**(9):e02503.

doi: 10.1016/j.heliyon.2019.e02503.

Tanriverdi G., Ozyazicioglu N., Atay S., Sivrikaya S. K., Gursoy M. Y. and Cetin A. (2017). The recommended solutions of nursing students to bridge the gap between the school and practice areas. Int J Caring Sci. 10(1):199–208.

Wall P., Andrus P. and Morrison P. (2014). Bridging the theory practice gap through clinical simulations in a nursing undergraduate degree program in Australia. Int J Learn Teach Educ Res.8(1):127-35. Watkins A. (2018). Closing the theory-practice gap: is it possible? CPD.

Yang W. P., Chao C. S. C., Lai W. S., Chen C. H., Shih Y. L. and G-I C. (2013). Building a bridge for nursing education and clinical care in Taiwan—using action research and Confucian tradition to close the gap. Nurse Educ Today. **33**(3):199–204.

doi: 10.1016/j.nedt.2012.02.016.