Original Article

MJN Effectiveness of Mentorship Program for Nurses Retention, Job Satisfaction, and Intention to Stay

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ABSTRACT

Introduction: Mentorship program has thought to be able to facilitate the transition of newly graduated nurses into practice. That is why this study sought to determine the effectiveness of mentorship program for nurses retention and job satisfaction. **Methods:** A quantitative, non-experimental, descriptive-correlational research was designed. The study was conducted in a government hospital in Indonesia. The sampling technique used was purposive sampling. Online survey questionnaires were distributed to the 70 nurses selected via email and WhatsApp messaging software application. **Results:** The identified improved nurses job satisfaction through mentorship program had a total results of 7.4808±2.62335, (p=0.0012). The identified nurses retention through mentorship program in the nursing profession had a total results of 14.1346±2.77262, (p=0.005). The identified intention of nurses to stay through mentorship program had a total results of 7.00±1.98, (p=0.02). **Conclusion:** There is a positive outcome towards nurses retention, job satisfaction, and intention to stay following a successful mentorship program. Mentorship program has revealed a promising accomplishment in facilitating the transition of newly hired nurses into employment.

Keywords: Nursing Profession; Mentoring; Mentorship Program; Nurses; Survey

INTRODUCTION

Mentor, mentoring and mentorship are frequently used terms when discussing concerns regarding newly hired nurses. A mentor is frequently assumed of as a more knowledgeable person sharing information, advice, knowledge, or training with a novice (Gruber, 2016). The role of a mentor is often engaged to assist a person to achieve certain objectives, goals and to accomplish certain task. Further discussed by Gruber (2016), in nursing, an experienced nurse mentor is assigned to facilitate a novice nurse transition to a registered nurses role and expand the level of responsibility.

As suggested by various scholars, mentoring can be described as a symbiotic relationship. Horner (2017) indicates that mentoring allows an experienced nurse to share knowledge and transmit this care to the life of another. In addition, mentoring offers a sense of connection with fellow nurses and support in developing a sense of belonging. An effective mentorship program offers professional growth and career satisfaction for both mentor and mentee, creating a supportive working environment, thus assisting transition at the workplace. Mentorship as defined by Van Patten and Bartone (2019), can be described as a trusting relationship between a novice and a professional with the intent to provide support.

Furthermore, existing studies did not include the significance of good mentoring skills to fit the role model appearance. Trained nurse mentors with good mentoring skills, when paired with new nurses, will enhance nursing competency and provide supportive environment. Consequently, patient care outcomes will be improved. In addition, this meta-analysis will also provide fresh insights for nurse managers and healthcare organizations, that future potential nursing leaders may be identified through mentorship program.

Transitioning from a student nurse to a registered nurse can be an exhilarating feeling. As it brings long awaited excitement, it can also bring fear and anxiety due to uncertainty. There are many programs to facilitate these new graduates transitioning to become a registered nurse. One of the most effective way to facilitate this transition period is through mentorship program (Horner, 2017; Szalmasagi, 2018; Mariani, 2012; Schroyer *et al.*, 2016 & Zhang *et al.*, 2019).

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The idea of facilitating newly graduated nurses' transition into practice is not new. These approaches vary among healthcare organization worldwide. As advancement of technologies meet pandemic health crisis in this 21st century, newly hired nurses are often overwhelmed by many factors. Since then, the indication to increase job satisfaction and improve nurses' retention has become more significant in the nursing profession. The time, effort and budget to train nursing students are costly. In view of this matter, when a novice nurse quits during the first year of employment, all the time and effort that was dedicated during training will be wasted. Not only that it's a great loss for the healthcare stakeholders, the nurse psychological being will also be affected and so patient outcome will be compromised as well.

Mentorship program has thought to be able to facilitate the transition of newly graduated nurses into practice. Various scholars revealed in their studies regarding the positive impact of mentorship program towards nurses' knowledge, behavior and skills (Horner, 2017; Szalmasagi, 2018; Mariani, 2012; Schroyer *et al.*, 2016 & Zhang *et al.*, 2019).

Nonetheless, even with the advancement of technologies and evidence-based nursing practice, nursing shortage has remained a challenge for healthcare organizations globally. The requirement for nursing service is in demand with the pandemic crisis of Coronavirus the whole world is currently battling against with. In addition, there is an anticipated increase of old age population in future. As per Leung *et al.*, (2019), due to the worldwide ageing population, concern for nursing shortage is further growing.

Mentorship programs are thought to be effective in developing novice nurses. The worldwide nursing shortage contributes to the ever-increasing demand for nurses in healthcare organizations globally. In order to meet this demand, healthcare industries have been focusing more on measures to improve nurses job satisfaction and therefore, improve nurses' retention in nursing profession. However, the transition phase from a student nurse to a full-time professional nurse is usually a reality shock, moreover during this pandemic health crisis of Coronavirus disease. It is extremely important to mentor and support the newly hired nurses during this phase, as it is indeed a demanding and tough chapter during their nursing career.

Mentorship programs focused on facilitating the movement of newly graduated nurses into employment. The meta-analysis of five selected studies regarding the

effectiveness of mentorship program revealed that, there is a positive outcome towards nurses' retention and job satisfaction following a successful mentorship program. The results discovered that not only newly hired nurses' benefits from this program, but also the mentors and the healthcare organizations. In addition, it promotes career advancement for both mentor and mentee. Good mentoring skills are learned to be an important feature as a successful role model for newly hired nurses. The mentorship program has revealed a promising accomplishment in facilitating newly hired nurses into employment. The finding from this metaanalysis is able to provide evidence to healthcare organizations to revise or design and implement a proper mentorship program relevant to the needs of newly hired nurses.

This research deems to pave new ways for the effectiveness of mentorship programs towards increasing nurses' intention to stay in nursing profession. Consequently, this research also aims to explore the relationship between mentorship program and job satisfaction among newly hired nurses.

Nevertheless, most healthcare organizations are implementing mentorship program without a proper plan. This action usually originates from the idea of increasing nurses' retention into nursing profession, without paying attention to job satisfaction for both mentor and mentee. A mentorship program without proper strategy will often lead to the allocation of unqualified mentors and unclear designation of mentor and mentee responsibilities.

The mentorship program will reach its maximum potential benefit when the assigned mentor is able to perform the mentor task properly. The gaps between theory learned in nursing colleges and implementation of nursing practice in real work settings are often underestimated. Understaffing, workload, burnout and emotional stress are often seen as major obstacles for newly graduated nurses to set foundation in nursing profession (Mariani, 2012; Schroyer *et al.*, 2016 & Horner, 2017).

The relevance of this research will help to justify healthcare organizations for policy update and proper planning for mentorship program. Hence, novice nurses will be able to gain maximum benefit from the mentorship program.

METHODOLOGY

This research will be quantitative, nonexperimental, descriptive-correlational research in design. The study will be conducted in a hospital in Indonesia, involving one group of nurses only. Scope: Research purpose is to study the effect of Mentorship program towards improving job satisfaction and nurse's retention in hospital settings. Not all other factors that might affect nurses' retention and job satisfaction will be studied in this research. Limitation: The research will be done only in one unit only, as it is not time efficient to include the whole hospital as population. Consideration for future research, sample can be taken from another unit, to improve the ability to generalize the results.

The sampling technique used is purposive sampling. The sample has the characteristics that are suitable for this study and those nurses' falls under inclusion criteria. As described by Etikan, Musa and Alkassim (2016), the purposive sampling technique, also called judgment sampling, is the deliberate choice of a participant due to the qualities the participant possesses. The sample size is 70 nurses. Ethical approval will be obtained prior to commencing this research. Research ethical form approval will be filled in and submitted for Lincoln University approval (Appendix 1). After the research proposal is approved, a formal letter will be submitted to the hospital of choice and to acquire support and agreement. Following this, a proper endorsement from the Head Nurse to the Director of Nursing will be forwarded. Necessary required forms will be completed and submitted for approval to the private Hospital in Indonesia. Once approved, online questionnaires survey will be distributed and consent will be obtained from all respondents. Respondents are informed that they will have all the rights to withdraw their participation in this research at any point during the research.

Data Analysis

The data will be coded into excel and then entered into SPSS V.16 for analysis. Responses were assigned codes in the form of numbers, which made it easy for keying in the responses into a computer format. Univariate analysis was done for socio-demographic characteristics of respondents and for areas that require only descriptive statistics; while a bivariate analysis will be performed to find associations or relationships between socio-demographic characteristics and level of stress(Statistics Solutions, 2020).

Ethical Approval

This research got approval from Kilinik Pratama Kalisuren Medical Centre (No:021/SK-KMC/VII/2022) dated 4th May 2022.

RESULTS

Descriptive Statistics Table 1: Demographic Variables

Demography Variables				
		n	%	
Gender	Male	14	26.9	
	Female	38	73.1	
	Total	52	100.0	
Age	25-30	14	26.9	
	31-36	38	73.1	
	Total	52	100.0	
Nursing	Diploma in Nursing	19	36.5	
Qualifications	Bachelor in Nursing	31	59.6	
	Master in Nursing	2	3.8	
	Total	52	100.0	
Years in	1-5 years	19	36.5	
Nursing	6-10 years	15	28.8	
Service	11-16 years	18	34.6	
	Total	52	100.0	

Table 1 is showing the frequency (n) and the percentage (%) of respondents' demographic data. Gender, age, nursing qualifications and number of years in nursing service details are gathered. 73.1% (n38) of the respondents are female and 26.9% (n14) respondents are male. 14 respondents (26.9%) ranging from 25-30 years old and 38 respondents (73.1%) ranging from 31-36 years old. No respondents noted for the age range from 37-41 years old and 42 years old and above. The majority of respondents had Bachelor in Nursing qualification with 59.6% (n31), followed by Diploma in Nursing with 36.5% (n19). Respondents with Master in Nursing are only 3.8% (n2) and no respondents noted holding a PhD in Nursing or equivalent. 36.5% respondents (*n*19) have worked with ICU background between 1-5 years, 28.8% of respondents (n15) have worked in ICU between 6-10 years and 34.6% respondents (n18) have 11-16 years of experience working with ICU background.

Table 2: Mean and Standard Deviation

Descriptive Statistics				
	p	Mean	Std. Deviation	
Improving Nurses' Job	≤0.05	7.4808	2.62335	
Satisfaction				
Nurses' retention in the	≤0.05	14.1346	2.77262	
nursing profession				
Intention of nurses to stay	≤0.05	7.0000	1.9800	

Standard deviation is being measured to check how far is the result from the mean, on average (Geert, n.d). Referring to Table 2, intention to stay is very likely to be

within 2 standards deviations. It has a lower standard deviation when compared to job satisfaction and nurses' retention. It indicates that the value of intention to stay in nursing profession is closer to the mean, while job satisfaction and nurses retention to the nursing profession almost certain within a few standards deviation. The question of 'The program is beneficial for newly hired staff, indicated by SPSS that if this question is removed, it may increase the reliability test output to a small increase of 0.903. The question of 'The program facilitated transition into practice to be easier' indicated that if this question is removed from the questionnaires the reliability test output will be 0.909. There is one question which is "My mentor maximizes the learning opportunity", indicated by SPSS that even if this question is removed, the reliability test result will remain the same value of 0.900. Therefore, if this research is repeated in future, then either these three questions must be removed or reconstructed.

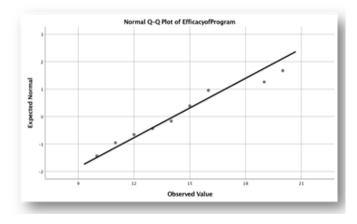


Figure 1: Q-Q Plot for efficacy of Mentorship Program

The quantile-quantile (Q-Q) plot shown in figure 1 compares the distribution of three data sets in research. To match the significance value from the Kolmogorov-Smirnova and Shapiro-Wilk test of normality, the the Q-Q plot shows data is not normally distributed. Though data are not that far from normal, very few points fall on the line. The p value is low because of relatively due to large sample. Therefore, this this Q-Q plot shows under-dispersed data. Again, this result may be due to the huge sample from one single population.

		Levene Statistic	df1	df2	Sig.
	D 1 14		-		
Improving Nurses'	Based on Mean	4.476	5	46	0.002
Job Satisfaction	Based on Median	3.386	5	46	0.011
	Based on Median and with adjusted df	3.386	5	30.900	0.015
	Based on trimmed mean	4.686	5	46	0.002
Nurses' retention in	Based on Mean	4.765	5	46	0.001
the nursing	Based on Median	3.179	5	46	0.015
profession	Based on Median and with adjusted df	3.179	5	24.589	0.024
	Based on trimmed mean	4.687	5	46	0.002
Intention of nurses to stay	Based on Mean	1.879	5	46	0.116
	Based on Median	1.238	5	46	0.307
	Based on Median and with adjusted df	1.238	5	34.849	0.313
	Based on trimmed mean	1.778	5	46	0.136

Table 3: Test of Homogeneity of Variances

The null hypotheses for Levene's Test are that the groups we're comparing all have equal population variances (Geert, n.d). Following the rule of thumb, population variances are not equal if significance level p < 0.05. Referring to table 3, the values for the 'intention to stay' variable are all p > 0.05. Therefore, this means the requirement of homogeneity of variance has been met in this particular variable and I don't reject the null hypotheses of equal population variances.

However, the variables for 'efficacy of program' and job satisfaction are all showing p < 0.05. Hence, it can be concluded that these two variables do not achieve equal population variances.

Table 4: One Way ANOVA Test

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Improving Nurses' Job Satisfaction	Between Groups	165.005	5	33.001	6.686	0.000
	Within Groups	227.053	46	4.936		
Total		392.058	51			
Nurses' retention in the nursing profession	Between Groups	93.558	5	18.712	3.344	0.012
	Within Groups	257.423	46	5.596		
Total		350.981	51			
Intention of nurses to stay	Between Groups	45.563	5	9.113	2.714	0.031
	Within Groups	154.437	46	3.357		
Total		200.000	51			

The null hypotheses for one-way ANOVA Test are that all population means are equal (Geert, n.d). A general rule of thumb is that we reject the null hypotheses if p < 0.05. Referring to Table 9 above, we can conclude that there was statistically significant difference between groups as reported by the ANOVA test; p < 0.05. Finally, these research results provided us all the information necessary to answer the research questions.

DISCUSSION

The questionnaires were further divided into 3 more sections to match the research objectives. Section B consists of 10 descriptive questions to relate about the 'satisfaction of the mentorship program'. Question 1 from Section B is 'The goals and objectives are clearly defined'. This question was chosen because in order for a Mentorship program to reach its maximum potential, every party involved in the program should clearly understand what is the main purpose of this program. The result from the survey clearly represents the importance of clearly defined goals and objectives. 51.9% (n27) of the sample population strongly agreed and 46.1% (n24) of the population agreed that they have been informed regarding the main purpose of the mentorship program. No one from the sample had neutral idea or disagreement about the statement. As opposed by Leung et al., (2019), Healthcare organizations should distinctly set clear objectives of the mentorship program, clearly explain responsibilities of both mentor and mentees, to serve as a clear guide or path for all the parties involved in the process.

Question 2 from Section B is 'The role of mentor and mentee is clearly outlined'. This question was chosen to explore the characteristics of a good mentor and mentee to build a successful mentoring relationship. The hospital or healthcare organizations need to highlight the significance of a clear task description for all the parties involved in the Mentorship program. A mentor should be altruistic, well-experienced, willing to share knowledge and keen to guide a newly hired nurse. A mentee should be respectful to their mentors; of the all the input and time spent guiding and supervising mentees. More than half of sample population (n30)57.6% strongly agreed the significance of this statement and 42.3% (n22) of respondents agreed and no one from sample population disagreed. As supported by Gruber (2016), A mentorship program without proper strategy will often lead to the allocation of unqualified mentors and unclear designation of mentor and mentee responsibilities.

Question number 3 from Section B is "the program

is very beneficial for newly hired staff'. The Intensive Care Unit had the research setting, is recruiting both graduated nurses who were trained in the kingdom itself as well as experienced nurses from other countries. These newly hired nurses may have already gained experience in previous hospitals. Despite whichever these newly hired nurses were recruited from, it is imperative for all nurses to be oriented in the current hospital setting. However, according to Benner (2015), for newly hired nurses to develop new necessary skills to safely provide a high-quality nursing care to patients, mentorship can enhance and nurture these skills. This question was chosen because a mentor is considered a 'senior' in the department, thus becoming a very important resource for junior nurses to know about all the protocols and guidelines in a new environment. This statement has shown a good percentage of 73% of nurses who were strongly agreed and 23% who agreed. However, the result has shown a small amount of 3.84% from the population who had neutral opinion.

Question number 4 from Section B is "The content of the competencies is relevant to my learning needs". This question was chosen because a properly planned Mentorship Program in collaboration with good mentoring skills, may improve overall effectiveness of the program and may actually support nurses' learning needs during the initial stage of their nursing career. Throughout the Mentorship program in ICU, there are series of competencies that newly hired nurses need to complete and submit upon completion of the program. The purpose of these competencies is to help newly hired nurses to achieve a high level of competency gradually during the competency period. The majority of my respondents strongly agreed (n30, 57.6%) and agreed (n29, 55.7%) with this statement. Frederick (2014) further supported the idea that mentorship improves nursing proficiency, and as self-confidence increases, new nurses adjust to their roles more effectively, developing new skills and knowledge and becoming prepared to work with others. Benner (2015) in her "Novice to Expert Model", highlighted to stages of competencies during mentorship program for novice nurses to reach the 'expert' level of skills acquisition, with the guidance from a skillful and knowledgeable mentor. This process could be a lengthy route and nurses may lose interest along the process. This is reflected in data collection; 3 nurses (5.76%) of 52 respondents had a neutral opinion.

Question number 5 from Section B is "The program

facilitated my practice to be easier". This question was chosen because, when a newly hired nurse enters a new working environment as a novice or a beginner level, their lack of adaptation to the stress level in critical care nursing may contribute to high nurse's turnover rate. Various topics related to building nurse's willpower were discussed during the Nursing Orientation in order to help simplify the nurses' transition into practice. Prominently, it has been proven that the use of a mentor can assist newly hired nurses to connect the knowledge gained in the classroom and clinical environment to the Intensive Care Unit. Numerous studies have mutual agreement that one of the most effective ways to facilitate the transition of newly hired nurses into practice is through Mentorship program (Horner, 2017; Szalmasagi, 2018; Mariani, 2012; Schroyer et al., 2016 & Zhang et al., 2019). This is reflected in data collection; 67.3% (n35) agreed and 32.6% (n17) strongly agreed with this statement.

Question number 6 from Section B is "My mentor maximizes the learning opportunities for me in the unit". Frederick (2014) describes expert mentors will be able to guide novice nurses, demonstrates caring practices that creates compassionate, supportive, and therapeutic environments for patients. This question was chosen because one of the most important tasks for a mentor is to make sure a junior nurse get involves with the unit routine, practice as many skills and learns as much procedures as they can, under supervision during the Mentorship program. Various scholars support the importance of selection of skillful mentors to be paired with newly hired nurses, to reach the maximum potential of positive effect from Mentorship Program (Horner, 2017; Szalmasagi, 2018; Mariani, 2012; Schrover et al., 2016 & Zhang et al., 2019). However, for this statement, n2 (3.84%) of population disagreed and n8 (15.38%) of population had chosen neutral opinion regarding this statement. Nevertheless, Intensive Care Unit can be a very demanding unit; and mentors as senior nurses often take responsibilities as a charge nurse, otherwise will be allocated to handle critical cases, thus making them occupied with a lot of responsibilities during the shift. According to Straus et al., (2013), one of the key challenges of a mentor and mentee is lack of time.

Question number 7 from Section B is "My mentor developed an effective relationship with me based on mutual trust and respect". Good mentoring skills are proposed to bring positive effect on mentorship program (Horner, 2017; Szalmasagi, 2018; Mariani, 2012; Schroyer et al., 2016 & Zhang et al., 2019). This statement was chosen because one of the good mentoring skills a mentor should carry out is the duty of a role model; a senior nurse looked by junior nurses as an example to be imitated. As per Gruber (2016), a mentor is frequently assumed of as a more knowledgeable person sharing information, advice, knowledge, or training with a novice. However, as an effort to make the process of mentoring more successful, mutual trust and respect should be held in common from both mentor and mentee. The result of data collection is showing 73% (n37) of strongly agreed nurses and 61.5% (n32) agreed. Conversely, there is one single nurse (1.92%) who disagreed and four nurses (7.69%) who had neutral opinion regarding this statement. According to Frederick (2014), there is no denying of somewhat a resistance from a mentor to develop mentoring relationship with the mentee, especially due to workload, responsibilities and time constraints.

Question number 8 from Section B is "My mentor engaged with me in a meaningful way to assess my level of knowledge". This question was chosen because the other good mentoring skills a mentor should carry out is good communication skills. Communication techniques that mentor who are role models can use with mentees include reflection, debriefing and providing constructive feedback (Frederick, 2014). Referring to questionnaires, the number of nurses who had neutral opinion about this statement is higher than those nurses who strongly agreed. Among the 17 nurses (32.6%) had neutral opinion and only 15 nurses (28.84%) strongly agreed, while 30 nurses (57.6%) agreed that their mentor engaged with them in a meaningful way to assess their level of knowledge. These communication techniques are extremely imperative for a mentor to be able to correct advice and provide feedback to the mentee. Aside from that, Gruber (2016) affirmed that the role of a mentor is often engaged to assist a person to achieve certain objectives, goals and to accomplish certain tasks. In conjunction to this, mentees' level of knowledge can be accessed via the competency book. The purpose of the competency booklet is to assist both mentor and mentee with a clear set of goals and tasks to be completed during the competency period.

CONCLUSION

The identified improved nurses' job satisfaction through mentorship program had a total results of 7.4808 \pm 2.62335, (*p*=0.0012). The identified nurses'

retention through mentorship program in the nursing profession had a total result of 14.1346±2.77262, (p=0.005). The identified intention of nurses' to stay through mentorship program had a total result of 7.00 ± 1.98 , (p=0.02). The worldwide nursing shortage contributes to the ever-increasing demand for nurses in healthcare organization globally. In order to meet this demand, healthcare industries have been focusing more on measures to improve nurses' job satisfaction and therefore, improve nurses' retention in nursing profession. However, the transition phase from a student nurse to a full-time professional nurse is usually a reality shock to newly graduated nurses, moreover during this pandemic health crisis of Coronavirus disease. It is extremely important to mentor and support the newly hired nurses during this phase, as it is indeed a demanding and tough chapter during their nursing career. Vice versa, it is also an imperative measure for healthcare organizations to properly train their senior nurses to attain professional skills in mentoring. Good mentoring skills is learned to be an important feature as a successful role model for newly hired nurses.

Mentorship program focused on facilitating the movement of newly graduated nurses into employment. There are positive outcomes towards nurses' retention and job satisfaction following a successful mentorship program. The results discovered that not only newly hired nurses' benefits from this program, but also the mentors and the healthcare organizations. In addition, it promotes career advancement for both mentor and mentee. Excellent mentors can discover the potential advantages and limitations of their mentees and promote their professional development. Trainees should be openminded to receive feedback and actively listen during the reflection session.

Finally, it can be concluded that mentorship program have revealed a promising accomplishment in facilitating the transition of newly hired nurses into employment, thus improving nurses' retention and job satisfaction.

REFERENCES

- Benner, P. (2015). Curricular and pedagogical implications for the Carnegie study, educating nurses: A call for radical transformation. *Asian Nursing Research*, 9 (2015), 1-6. https://doi.org/10.1016/j.anr.2015.02.001
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1-4. https://doi.org/10.11648/j.ajtas.20160501.11
- Frederick, D. (2014). Bullying, mentoring, and patient care. AORN journal, 99(5), 587-593. https://doi.org/10.1016/j.aorn.2013.10.023
- Glen, S. (n.d). "Cronbach's Alpha: simple definition, use and interpretation". *Elementary Statistics for The Rest of us*. Retrieved from https://www.statisticshowto.com/cronbachs-alpha-spss/
- Gruber, M. (2016). The value of mentoring in nursing: an honor and a gift. *Oncology Nursing Forum*. 43(4), 420-422. https://doi.org/10.1188/16.ONF.420-422
- Horner, D. (2017). Mentoring: Positively influencing job satisfaction and retention of new hire nurse practitioners. *Plastic Surgical Nursing*. 37 (1), 7-22. https://doi.org/10.1097/PSN.000000000000169
- Leung, P. P. L., Wu, C. H., Kwong, C. K., & Ching, W. K. (2019). Nursing shortage in the public healthcare system: an exploratory study of Hong Kong. *Enterprise Information Systems*, 1–19. https://doi.org/10.1080/17517575.2019.1569264
- Mariani, B. (2012). The effect of mentoring on career satisfaction of registered nurses and intent to stay in the nursing profession. *Nursing Research and Practice*. 2012, 1-9. https://doi.org/168278. 10.1155/2012/168278
- Schroyer, C., Zellers, R. & Abraham, S. (2016). Increasing registered nurse retention using mentors in critical care services. *The Health Care Manager*, 39 (2), 85-99. https://doi.org/10.1097/HCM.0000000000293
- Straus, S. E., Johnson, M. O., Marquez, C., & Feldman, M. D. (2013). Characteristics of successful and failed mentoring relationships: a qualitative study across two academic health centers. *Academic Medicine: Journal of the Association* of American Medical Colleges, 88(1), 82. https://doi.org/10.1097/ACM.0b013e31827647a0

- Szalmasagi, J. (2018). Efficacy of a mentoring program on nurse retention and transition into practice. *International Journal of Studies in Nursing*, *3*(2), 31-39. https://doi.org/10.20849/ijsn.v3i2.378
- Van Patten, R. R. & Bartone, A. S. (2019). The impact of mentorship, preceptors, and debriefing on the quality of program experiences. *Nurse Education in Practice*, *35* (2019), 63-68. https://doi.org/10.1016/j.nepr.2019.01.007
- Zhang, Y., Huang, X., Xu, S., Xu, C., Feng, X., & Jin, J. (2019). Can a one-on-one mentorship program reduce the turnover rate of new graduate nurses in china? A longitudinal study. *Nurse Education in Practice*, 40, 1-8. https://doi.org/10.1016/j.nepr.2019.08.010